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Self VS. Digital Self

Glenn Allen Terpstra

Iowa State University

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Self vs. digital self

by

Glenn Allen Terpstra

A thesis submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

MASTER OF FINE ARTS

Major: Integrated Visual Arts

Program of Study Committee:
Kimberly Moss, Co-Major Professor
John Cunnally, Co-Major Professor
Christine Carr
Stephen Gilbert

Iowa State University
Ames, Iowa
2016

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DEDICATION

For those aiming at a moving target around the corner.

For those willing to embrace the space between.

For those who find time for laughter.

And for those who feel unseen.

JKT & KJT

Thank you for the endless smiles.
Stay funny, stay true.
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Laura A2RU
ABSTRACT

The aim of this study is to compare three different identity profiles that people make use of in order to observe new patterns of identity in our digital age. The first is a physical profile based on age and location, the second is a digital profile established with Facebook profile pictures, and the third is a collection of "junk mail" indicating an advertised profile. The purpose of these comparisons is to bring attention to the many elements of identity we have today. A visual installation of the information collected through this research will provide a unique experience where viewers are able to interact with works of art representing the many layers of self. The intention of this artwork is for the viewer to question how they might be perceived or at least consider identity in a rapidly changing and interconnected world. This experiment in data rendering will bring together the sciences and arts in order to discuss the significance visuals have in information conveyance.

Furthermore, identity is an increasingly grey area with blurring lines attempting to define who a person is. Utilizing data collection in order to produce a work of art integrates concepts of information design with artistic expression. By changing the ways in which we observe data, new concepts of understanding that data may be achieved. An art gallery is intended to share information by providing cultural experiences to viewers. The same gallery could potentially be used as a platform for public discussion on data findings. This research will explore the concept of a data based art gallery experience by displaying the results of the study integrated with fine art practices.
INTRODUCTION: IDENTITY IN THE DIGITAL AGE

Identity consists of physical realities and abstract thoughts interacting with a constantly changing world. Our world divides into endless components of culture defined by those living within that culture. The summarization of one's identity cannot simply be a name, age, or even an archetype of generation. It must grow with the individual, collecting multiplying factors, through life experiences along the way. The impact of these events are seen in both the individual and how that individual addresses society.

This research aims to gather, organize, and compare identity information associated with various persons, in order to find characteristic profile patterns, unique to each individual. Once determined, these identifying patterns become the subject of comparison through the viewing mechanism known as the panopticon, so that those multiple profiles may be experienced at the same time. Self Versus Digital Self, is an installation that represents a virtual and physical panopticon experience, and is the primary medium for the expression of this research. The Installation consists of six individual profile patterns arranged in a circle with a central viewing area. Each profile is comprised of three Intaglio prints, collaged advertising mail, and projected images gathered from Facebook. The process starts with intaglio printing plates made from an acrylic sheet. These plates contain precise and measurable information, relating specifically to one of the six individuals, cut with a laser cutter. Each plate is then rendered further by hand and presented in a set of three unique prints per individual that hang side by side from the ceiling. These prints function as a canvas for projected content relating to the digital profile of that person. On the back of one print per subject is a collage of “junk mail” alluding to the identity society believes fit that particular profile.
By manipulating information presentation methods, the resulting images show new patterns of identity that could otherwise go unnoticed.

Images in modern times have evolved simultaneously with technology, and more recently the internet, causing a shift in how we understand images today in contrast to how they were regarded and seen in the past. Walter Benjamin’s *Art in the Age of Mechanical Reproduction* suggests that the camera brought about the loss of aura, because art could be reproduced and shared throughout the world, changing the experience of the art. This shift in how images and original art is perceived encourages image exploration in a society already fixated on image consumption. In place of the void created by the loss of aura, Benjamin suggests “The camera introduces us to unconscious optics as does psychoanalysis to unconscious impulses” (Benjamin, p. 237). Because of the camera, we now have the ability to see things that were otherwise invisible to the human eye, and therefore not fully understood.

Determining a person’s worth, or how that person compares with others amidst an increasingly connected world, has become a daily challenge. As a result of maintaining multiple social media identities at all hours of the day, there is a need for reflection on what we have chosen to represent us digitally. If there are not checks and balances for the identity we presented to the world, over time, the image that was intended moves far from reality. “Aim small, miss small. Aim for a button you hit a shirt, aim for a shirt, you miss by feet,” is a proverb that can be applied to digital identities. Controlling the content presented by an online profile adds longevity to the use of this identity, because a more concise theme or pattern is revealed over time, a viewer has a better idea of what to expect from this profile.
The increasing use of image as message, seen with shared content across the internet, gives a new and endless life to images. The camera phone and internet allow for a new relationship with imaging to emerge. Because we now have access to a camera at all times, and the ability to immediately share images, our understanding and expectations of images are shifting. In the process of producing an online identity, content is created, edited, and reviewed by the user. This suggests that aura is not dead, but rather that we are experiencing a shift in understanding aura, as it can now remain with an image in the original place of existence. The printing press allowed for information to be shared with the masses, photography changed how we understood and see images, and more recently the internet reduces the scope of the world and changed how we understand time. These major inventions forced drastic changes for humanity in the past, and today we face new transformations created by smartphones, and the instant content they provide. People behind online identities are responsible for uploading and sharing content. Over time these profiles generate thematic trends in what, and how, information is shared. Impressions of these trends are a digital fingerprint or identifying element to that online presence. A digital profile could be completely interlaced with a physical person or be part of multiple online or digital selves. These identities could either be connected, or completely separated from one another, and act as a compartmentalized extension to the physical self.
PART I: IDENTITY TODAY AND THE MANY IDEAS OF “ME”

SELF VS. DIGITAL SELF

This research aims to collect a variety of information, from six participating individuals, in order to compare multiple layers of self-identifying content. The definition of identity from the Oxford Dictionary is the fact of being who or what a person or thing is (Oxford University Press, 2016). Physical attributes such as fingerprints, blood type, eye color and structure, age, and sex are things we cannot change, and are part of how we are identified. The essence of self is seen through more abstract elements such as tattoos, opinions, actions, education, and use of time. This research is intended to provide evidence of this self-essence in each of the participating subjects, and propose that aura is not dead, but transformed with the digital age.

The internet has allowed for a new medium of expression, where the fidelity of an individual's uniqueness, may resonate with others of like mind. The small world phenomenon suggests that any one person may be connected to another through a maximum of six steps. Proposed in the 1920s by Frigyes Karinthy, six degrees of separation is a post-World War I theory exploring the interconnectedness of people throughout the world. The theory was a point of interest for social psychologist Stanley Milgram in the 1960’s. Advances in technology have caused changes in how humans interact with images and information today. “81% of adults between the ages of 18 and 29 are wireless internet users. By comparison, 63% of 30 to 49 year-olds and 34% of those ages 50 and up access the internet wirelessly” (Lenhart, Purcell, Smith, and Zickuhr, p. 4). Technology opens the door of exploration and grows until there is a birth of new technology.
Self-perception is affected by advancement of technology, where the social media users voluntarily allow digital profiles to document interactions the user makes over time. Until this information is used against the profile creator, the user will continue to share information with the all-seeing internet. The digital self is in many ways, the best parts of our identity. Moments, or highlights, of physical existence become showcased building blocks to the digital persona. This identity is cared for and cultivated to reach those who are, by nature, most similar. Magazine subscriptions are replaced by YouTube subscriptions, while the function remains the same, and comprises content consumption.

How a digital profile interacts online is self-referential, in that the profile is built with shared content, because content consumed is an identifying element of that profile. This collection of information is an identity, as well as content for others to consume. Globalization and social media have produced an intoxicating environment for humans throughout the world to interact in new ways. Some results from a study conducted by Wight and Hinson found that of the participants, “many (72%) believe social media complement traditional news media, and an even higher number (89%) think blogs and social media influence coverage in traditional news media. Most (84%) believe blogs and social media have made communications more instantaneous because they encourage organizations to respond more quickly to criticism” (Wright and Hinson p. 18). Social media, and a shrinking world, generate the expectation of immediacy in both communication and content exchange.

Unlike a physical person, a digital profile continues to interact with others, even when the owner of that profile is away from a computer. “Overwinding--the effort to squish really big timescales into much smaller or nonexistent ones. It’s the effort to make
the now responsible for the sorts of effects that actually take real time to occur—just like overwinding a watch in the hope that it will gather up more potential energy and run longer than it can” (Rushkoff, p.136). Amazing as it is to reach anyone in the world, all participants are reachable at any time of the day online. The expectations to maintain a social or digital profile, or to stay abreast of incoming email, connects with an expectation of instantaneous feedback. This places stressful demands on the physical self. “Viewing profile pictures of attractive people elicits more negative emotions than viewing photos of less attractive people, and more photo-related activity on Facebook (e.g., posting pictures, viewing friends’ photos) is related to body image disturbances in teen girls” (Meier & Gray, 2013). Social media is not slowing down, and this is why it is crucial to explore the connections between physical identities and digital identities, before we lose sight of who we are.

A. Physical-self

In order to better understand the role of a digital identity, an investigation of physical elements that make up a physical identity is needed. Identifying traits go beyond the physical attributes an individual possesses, and include environmental profiles such as location, age and purchasing records. This research looks at the physical traits of participant’s eyes and fingerprints in order to generate symbols unique to each subject's profile. Information about tattoos, geographic location, comfort with body image have also been collected through a survey that each participant was required to fill out. There are many layers of identity that come together in order to represent an individual’s
physical self. This variation among individuals represents diversity and constitutes the comparative elements in this research.

From a credit score to registering for a mailing list, profiles are generated based on the physical actions of individuals. This identity is curated by the infrastructure of consumer society. Largely algorithmic, consumer information of an individual is shared across various profile pools, in the same sense shopping websites suggest products based on previous purchases. “The ATM was possible only because banks created a means for identifying their customers digitally… With the advent of a digital identity infrastructure, banks no longer needed humans in the loop to verify the customer’s identity” (Hurreimann, p. 10). Actions taken in the physical world are reflected in the digital world, because of the integration of digital identities with physical daily activities.

B. Digital-self

Creating an online identity and the amount of online interaction that identity has are a choice for each individual. A digital profile organizes various components of the self through the structures of online platforms. Because of this, social media acts as a standardizing mechanism based on information, requiring a certain amount of information to participate on that social media platform. An identity is a collection of information that can be compared with the information of other identities, recognized in the patterns that humans naturally seek out patterns.

How online profiles interact with others becomes part of the identity of that profile. Actions are recorded and content is suggested for an online profile based on experiences and relations with other individuals in the past. “Whitewalling” is a term that
refers to deleting past social media posts, that no longer fit the intended image, in order to control and manage a digital identity. The nature of the internet holds bits of information on endless amounts of servers throughout the world, and is the reason for digital permanence. Deleting a post or thread does not mean it is gone, but rather it is no longer visible. This is possible because deleted content, was recorded at one point and still exists beneath the visible internet. This is a fundamental principle to the idea that a digital profile may live forever.

It is important to ask how one’s digital profile presents itself to the world, and what impact that has on both digital and physical identities. Because of the anonymity the internet allows for, a digital identity may be completely separate from the physical person responsible for creating it. The ability to connect with anyone in the world, and present whatever face the user creates, a veil of secrecy that divides the digital persona from the physical self could exist. This allows for content interactions to occur that would otherwise never have the opportunity due to geographic limitations. Because of the anonymity possible with online identities there is a weight given to the screen name chosen to represent a profile. The ability to be who you want online does not stop at actuality but rather encourages multiple identities to be created. These identities may be generated for any number of uses, such as a bogus email account used for promotional offers rather than an personal email account being bogged down with spam.

C. Multi-self

Because we can have any number of profiles, it is important to question digital profile practices, as each profile acts as a compartmentalizing component of identity.
Having multiple email accounts is just one way to keep structures in our lives separate.

“Adults are increasingly fragmenting their social networking experience as a majority of those who use social networking sites – 52% – say they have two or more different profiles. That is up from 42% who had multiple profiles in May 2008” (Lenhart, p.3). This divide becomes more drastic with the number of social media platforms available for use.

A divide between work and home life is a product of multiple identities, and the degree of difference between the two rests on the individual. Why and how things are divided is up to the profile creator, but the point is, we already try to control our world through organization. “Our current “network society” is a product of the digital revolution and some major socio-cultural changes. One of these is the rise of the “Me-centered society,” marked by an increased focus on individual growth and a decline in community understood in terms of space, work, family, and ascription in general” (Castells, p. 12). If the physical world is not providing adequate stimulus of content, one could reach to endless groups throughout the world and find connections online.

Having multiple identities caters to the passive observer, watching the conversations or content of others, without directly being involved. Reddit, a social news and media based website, shares content from across the internet, but what makes up the structure is the comments made by readers. The thread of an individual’s interaction with content online is as much content for consumption as the initial post itself.
PART II: IDENTITY FOREVER AND LIVING THROUGH OTHERS

A SHIFT IN AURA

Mechanical reproduction of images changed how we perceive the world around us as the internet has changed how we interact and consume that world. The action of removing an object from context changes the understanding of that object. The aura of a work of art, or distinctive identifying essence of time and place of the original, is lost when multiple images of the same place exist. An image becomes an entirely new object detached from the original object when reproduced. If mechanical reproduction is responsible for the loss of aura, then it is possible that the aura connected to the original can be reborn with the internet.

Digital environments allow for rapid reproduction of imagery and the ability for people to share these images throughout the world. Aura is connected to the original creation in time and place. With the internet, an image may exist within its own aura. Generated by on online identity, the purpose of an image is to be shared. The introduction of an image to the internet is a moment of creation and it’s recreated each time it is shared. The aura of the digital image is shared through endless cycles of communication, just as it is possible for the physical image to retain its aura while in its original place, for an undetermined amount of time.

A. Aura

An original work of art exists in a particular time and place, but with the coming of the ability to accurately reproduce a copy of this work, there is a change in how the original is perceived. A viewer no longer needs to see an original work in the original
location but may experience the work through the copy or reproduction. Because of this detachment from the original, a copy lacks the essence or aura the original has. However, the copy may take on an aura of its own. The presence of original authorship is decreased by every copy or reproduction and again shifts the perception of the viewer further from the original time and place.

B. Loss of Aura

Aura is described by the Oxford Dictionary as the distinctive atmosphere or quality that seems to surround and be generated by a person, thing, or place (Oxford University Press, 2016). Elements that traditionally comprise a work of art such as scale, medium, use of materials, and content of the time, shift when the work is copied through mechanical reproduction or photography. The work is now disseminated throughout the world and this dissemination removes the original from the intended context. Each iteration of the work allows for it to exist in a new environment, taking on new connotative associations in the process. This shift in association changes how a work of art is understood.

Exploited for pure consumption, mechanical reproduction of images embraces capitalism, in that an image is given a value measured in the form of currency. An original work has the ability to preserve the authority of being the original. Benjamin suggests that a mechanical reproduction cannot have the same sense of authority for two reasons. “First, process reproduction is more independent of the original than manual reproduction… Secondly, technical reproductions can put the copy of the original into situations which would be out of reach for the original itself. Above all, it enables the
original to meet the beholder halfway, be it in the form of a photograph or a photographic record" (Benjamin, p. 222). Reproduction of art creates a visual consumption market and completely alters how we interact with visual content. Instead of having to visit a museum or specific sites to view art, we can share that information with immediacy and ease through photography. By taking an image away from the original location, photography expands the knowledge of that image or environment, but the understanding of the original becomes watered down.

The Mona Lisa is a prime example of how large populations of people throughout the world are familiar with the painting by Leonardo DaVinci but have a skewed sense of its aura. Few have seen the actual painting, and those who do are most likely separated from the painting by inches of security glass. When people see the physical painting, the general reaction is to the size of the painting, previously thinking it would be bigger. As a consumer culture, the world has observed the Mona Lisa on billboards, ties, handbags, sketchbooks, buses, and as memes on the internet. Such saturation of the image causes familiarity with the content, but all relations occur out of context from the original. The aura of the original is lost through the reproduction and mass consumption of the famous and worldly painting.

When an image is created in a digital environment, not only does the image stay in its original environment of creation, it retains the quality or atmosphere of existence known as aura. This is possible because when an image is uploaded to a server there is no tangible physical location, the object is data existing in several places at once. The original image, from the moment of its creation, is stored on multiple servers. Therefore, the reproduction of the content does not undermine the original, which is already multiple
in its existence. This causes a shift in our understanding of aura and changes how viewers interact with imagery.

Without losing aura the image is able to exist in the original environment and remain culturally relevant for people who are sharing the image across the internet. This environment of the internet is where the digital-self interacts and documents exchange with the digital image or content. Each unique profile that reproduces an image allows for that image to continue existing in time and space. Because the original image may be altered by each profile that interacts with it, there is evolution as well as devolution of original content. The digital identity responsible for this change to the original has in fact created a new *original* object in relation to its environment. This altered image should not be directly compared its first appearance in the sense of aura because the fundamental code or digital data of the image has been changed.

C. Three Components of Aura

If the components of aura are time, location, and originality, our social media structures allow for us to be objects of consumption as well as the consumer. The internet changes how information and experience are documented. Time and the significance of now impacts our perception of aura today. Social media compresses our understanding of time and allows time to be a measurable component when relating to posted content. Social media has caused a shift in aura from relating to a singular original to the essence of many. We generate posts or share content relevant to us (originality) in a digital environment (location), and placed in a timeline as documentation (time). Whether sharing original content or sharing content that someone else has uploaded, the
relationship of that content to the poster is the essence of creation. It could be said there is an aura for a digital profile that becomes more evident over time based on what content the digital profile shares.

“The Technique of reproduction detaches the reproduced object from the domain of tradition. By making many reproductions it substitutes a plurality of copies for a unique existence” (Benjamin, p. 223). Uploading an image to a digital interface embraces the nature of the multiple spread across many servers. This suggests that purely by existing, an online image is produced for the purpose of plurality, not the uniqueness of one. Furthermore, the digital age has forced a change in how we interpret aura. “During long periods of history, the mode of human sense perception changes with humanity’s entire mode of existence. The manner in which human sense perception is organized, the medium in which it is accomplished, is determined not only by nature but historical circumstances as well” (p. 224).

The chosen platform to share this information is a reflection of the poster. Because the post exists in time, the birth of that content is identifiable and able to be quickly referenced. As far as consumption of self, we are the creator or artist (we create the content and decide what to show), editor or the curator (we decide where and how the content exists), and we are the consumer or the viewer (we review and look through our own content). Users of social media create content that generates an aura, which can be referenced and reviewed through time.
D. Rebirth of Self Forever

A digital profile documents the interactions of a profile over time in a digital space. Content is collected over time, and how this information is shared, gives an atmospheric feeling to the world of data that is social media. Our understanding of time has shifted with the instantaneous sharing of information and how we consume digital content. Digital identities allow for interactions of individuals throughout the world and changes how we digest information. Because of the 24-hour availability a digital identity has, constant connection has skewed how we interact with time. Douglas Rushkoff discusses in his book *Present Shock* how time is made of the ticks, or *chronos*, and the tocks, or the spaces between the ticks known as the *kairos*:

“Digital time ignores nearly every feature of *kairos*, but in doing so offer us the opportunity to recognize *kairos* by its very absence. Clocks initially disconnected us from organic time by creating a metaphor to replace it. Digital time is one step further removed, replacing what it was we meant by “time” altogether. It’s a progression akin to what postmodern philosopher Jean Baudrillard called the “precession of the simulacra.” There is the real world, then there are metaphors and maps we use to represent that world, and then there is yet another level of activity that can occur on those maps--utterly disconnected from the original” (Rushkoff, p. 112).

Not that long ago making a phone call too late in the evening was considered odd and out of place. Today an email or social media direct message may occur at any time of the
day, and wait for a response. A digital self can have a direct impact on the physical self. Positive or negative impacts are relative to the individual because content is unique to one’s perspective of the world. This generates the need to share geophysical relation of any particular topic with the indistinguishable and changing internet. Posting content to no one in particular and everyone at the same time, is evidence of digital activity is locked in digital time to be reviewed by anyone at any time in the future. By documenting our physical existence in the digital form, it allows us to live beyond our finite lifetime through the collection of our past experiences.

Interconnectedness of digital identities is captured through posts and shared content online. Human experience is the content being shared online, where consumption by others is proof of value or truth to the connections between profiles they represent. In turn, this consumption of digital self allows humans to live beyond physical existence, and are more likely to have an impact on future ideas and issues. The concept of a meme comes to mind because an object becomes a communication device intended to be referential. A meme can express elements beyond what are actually being shared, and encourages connections to endless layers of interpretation and understanding of cultural structures. The meme lives and changes as others continue to repost the content. Profiles or digital identities are shared with the sense of now and is why we must question the security and safety of identity when sharing content with the world.
PANOPTICON

A. Origin of the Machine

*Figure 1* shows a timeline of four industrial revolution movements interestingly aligned with the use of the word panopticon over time. The use of the word panopticon was at an all-time high in the 1840’s and occurs around the same time industrial manufacturing was taking hold in the 1820’s through the 1840’s. The dramatic drop in the use of the word falls in time with the 1848 publication of *The Communist Manifesto* by Karl Marx and Friedrich Engels, indicating a division of class in the capitalist model. We also see a connection between the *fourth industrial movement* through the use of cyber-physical systems and a rise in the use of *panopticon*.

*Figure 1*: Industrial revolution timeline compared to panopticon word use
The idea of a panopticon was proposed in the late 1700’s by English philosopher Jeremy Bentham. Originally intended as a prison system, inmates were organized around the periphery of the circular structure, with a centrally located guard tower, able to view all inmates at once. Inmates or subjects did not know if they were being watched because of one-way glass windows and concealed access points to the tower.

Psychologist Colin Ellard’s suggests that “Many prisons, for example, can produce that same combination of feelings: anxiety, loneliness, and vulnerability. Jeremy Bentham, in his essay Panopticon, describes what he characterizes as an optimal design for a prison. The Panopticon design is one in which the prisoner is perpetually visible to his keepers, yet they are invisible to him” (Ellard, p. 3). The construction of an actual panopticon prison did not occur until 1816, but it’s concept is an indication of the interest in the omnipresence, and structures of control during this time.

B. Digital Panopticon

The connection to the digital revolution and the panopticon may seem evident to some, but the true capacity of a digital panopticon, should be intimidating. “Individuation does not mean isolation, or the end of community. Instead, social relationships are being reconstructed on the basis of individual interests, values, and projects. Community is formed through individuals’ quests for like-minded people in a process that combines online interaction with offline interaction, cyberspace, and the local space” (Costells, p. 13). Internet 2.0 focuses on social media rather than commerce, and has caused a shift in culture, both digitally and physically. The ability to share our cultures around the world opens the opportunity for hybrid-cultures to identify by. Where once communications
took time to cross a great distance, today instantaneous networks allow for immediacy. Because information online is being transferred digitally, it may be observed in real time or imprinted on a server and reviewed later by someone other than the intended recipient.

The structures of social media encourage the sharing of information, which is documented in the context of a timeline, for others to review. This shared information is a personal identifying element of the digital self. In theory this identity aligns with someone in the physical world, but because of the ability to have multiple online identities, there is a layer of uncertainty to who someone may actually be.

The digital panopticon involves many layers including the content one shares online; and this profile grows with the design of the identity presented to the digital world. The ability for a government or hacker to investigate content we assume is private, dictates how and what content we share. Knowing that technology comes with the loss of privacy should act as a social guide in how we choose to present ourselves digitally. The only way to avoid the digital panopticon is by actively refusing to participate in digital environments.

C. Dictation by Social Interaction

The reality of geographic location is no longer relevant to the thought of connecting with like minds. Humans adapt to those around them and these same impressions can be found in digital environments.

Behavioral mimicry is an example of a strategic behavior filter. Research in communication and social psychology has shown that people automatically mimic
each other’s speech patterns and posture (Cappella & Panalp, 1981; Giles & Claire, 1979; LaFrance, 1982) …Thus, we might expect that an avatar that mimics the user may be judged to be more likeable or persuasive… These studies in TSI [transformed social interaction] show that subtle changes in an avatar’s appearance or behavior can influence how other users interact with the transformed avatar” (Yee, Bailenson, and Ducheneaut, p. 287).

Internet culture has created endless subdivisions of interests along with multiple ways to interact with content. A social media site could focus on images such as Instagram or comment threads by users of Reddit, while Facebook aims to capture the complete interconnectedness of individuals and Twitter limits how many characters may be used.

The structures of social media dictate how content is shared and therefore, affects the reception of this content and potentially alters context of the original post. Because social media communications predominantly occur in real time, there exists a history of what information was shared. It is interesting to note current developments of pure content exchange in the use of Snapchat, where information is shared and deleted or expires after a short period of time. This indicates the significance of experience and consumption of digital self by others recorded in the form of “likes.”

D. Grounds for the Multi-self

Determining how one uses social media is reliant on how that individual wants to be perceived, not just with what content is shared, but specifically to what sites they use. “We seek out social approval and positive feedback in the form of comments and likes.
Reflecting upon my own social media usage (e.g., the-text-that-shall-not-be-named) and observing the online behavior of others” (Schacter, p. 4). The interconnectedness of social media has allowed for unique tailoring of the image to be presented as the digital self. There is nothing stopping someone from having an endless number of profile accounts for any number of reasons. What this does allow for is the existence of the multi-self, or many personalities or identities that may be related or connected to one individual. How these identities interact is unique to their purpose and they retain the ability to keep digital social structures separated. This multi-self, when studied as one profile could lead to a better understanding of the physical self that is responsible for each profile.
PART III: THE MANY LAYERS OF SELF

INFINITE REFINE-ME-NT

Having control of a digital identity allows a user to edit content they have previously shared and show connections to other veins of content they find interesting or worth sharing. Social media profiles record events and shared content displayed in a timeline. Content recorded and shared online could be considered cultural capital, as it generates an impression of identity for the profile to be consumed. Connections made by sharing content is evidence for the existence of a digital self. Digital identities are required in order to interact with some content online and, over time, personality archetypes seen in psychology could also exist with online identities. “In addition to observations of one’s own behavior, it has also been demonstrated that observations of one’s own appearance can lead to changes in behavior” (Yee, Bailenson and Ducheneaut, p. 290). Categorizing types of people is not new and likely not to change when applied to a digitally connected world.

The endless forms of suggested content an online identity is faced with, expresses how categorization of digital profiles is integrated with the online experience. A product that has been searched for or purchased online in the past, becomes the launching point of advertising for that profile. In turn, this alters how a user experiences content on the internet. People who have purchased product A are twenty percent more likely to purchase product C than product B. Therefore, all those who purchased product A should receive advertising for product C not product B. Understanding these connections and applying them to the structure of the internet is known as, “web analytics.” Continued
collections of information like this over time allows those with access to this data insight to an identity behind the digital profile.

The modus operandi, a particular way or method of doing something characteristic of an individual, may be applied to a digital profile. From content used to how that content is shared defines the digital-self responsible. The pattern of keyboard use, known as keystroke logging, is able to identify a user with the accuracy of a fingerprint. “Keyloggers are known variously as tracking software, computer activity monitoring software, keystroke monitoring systems, keystroke recorders, keystroke loggers, keyboard sniffers, and snoopware. Although the main purpose of keyloggers is to monitor a user’s keyboard actions, they now have capabilities that extend beyond that function” (Sagiroglu and Canbek, p. 2). Fundamental requirements of interacting in the digital world are still affected by physical components of our natural self that we cannot control, such as how one navigates an interface. In this way, an online identity is connected to a physical identity regardless of attempts to guise true identity. This connection has an impact or impression on the digital world it connects with.

A. Forever Imprinting

The act of reposting content to the internet shows the interconnectedness digital profiles have in the digital age. Establishing new networks of digital content affects, and is affected by, the content around it. Just as people take on traits from others when time is spent together, digital identities take on posting trends or appearance of other digital identities. “The more deindividuated people are, the less likely they are to focus their attention inward on internal beliefs and standards, the more likely they are to focus their
attention outward on situational cues, and the more likely external cues will influence their behavior” (Yee, Bailenson and Ducheneaut, p. 292). Because of the complexity of the internet and web interactions, along with the immediacy of sharing content, it is hard to determine how online elements truly affect the user in the physical world.

Digital environments have allowed for the pandemic of cyberbullying, where threats and harassment of an individual occur around-the-clock. The 24-hour access of digital infrastructure consumes time and potentially destroys qualities in the physical life. “Other researchers have elaborated that people have multiple layers of the self that include both one’s individual identity and social identities… When made anonymous, deindividuation increases an individual’s conformity to his or her social identity rather than his or her individual identity. This has been referred to as the Social Identity Model of Deindividuation Effects” (p. 292). As there are cultural norms in our daily physical world, we must acknowledge there is a lack of singularity to cultural norms online. The ease in hiding behind a screenname, or false identity, produces a more reactive and outspoken nature of communication happening online.

Some people post all and everything that happens in their physical life online, while others methodically observe and share content less frequently. Such drastic differences in social media use, does not mean there is a divide between online profile types, as much as it indicates there is a spectrum of interaction with the technology these profile types are a part of. Those more active users online have a larger number of digital connections, while those who remain passive viewers tend to have fewer but more deliberate connections. Because of the increasing amount of connections through social media, there is a shrinking degree of separation between any given individual in the
These connections will continue to decrease as the number of social media users increases over time.

B. Cultural Capital

Connections of the internet allow for insight into how other people live and is used for more than just sharing memes of cats. Cultural capital is broken into three components: The first is embodied cultural capital, where the environment and actions of those around you are imprinted or have become a part of you. Secondly, there is objectified cultural capital, where actual physical elements are owned, such as a work of art. Finally, institutionalized cultural capital, where the degrees obtained through academia represent the canons of knowledge an individual possess. All three of these cultural capital values represent the overall cultural stock of an individual, and what cultures they have invested in. Cats shared online is an interesting social phenomenon, when in reality, the internet has allowed for us to realize the commonly ridiculous nature of a cat.

Cultural capital directly influenced how one interacts with social media and the internet. At the same time, the internet has developed its own culture, that is not confined by geographic locations or those who speak the same language.

“Relationships are the means through which people gain understanding of common values and establish trust. And agency is the degree of the individual's control or influence over the things that matter to the community and themselves. In this sense, community—or the larger notion of groups that share some cultural
experience is not restricted to people living within geographic or political boundaries” (Davis, p. 191).

The culture of a digital environment is self-referential, because layers of content are linked between individual profiles. This established network encourages the exchange and hybridization of cultures based on connections.

It could be said two profiles that have been linked now share cultural capital presented in the form of content. Mass consumption of content through reappropriation, or use of imagery on the internet, obscures the depth of cultural value being shared. This in turn provides the grounds for cultural hybridization because the digital representation of a culture is made for a universal audience. By existing and choosing to participate in the digital arena, this culture is open to consumption and appropriation by others throughout the world.

C. Digital Over Physical

A digital identity has the potential to live forever where in the physical world we are faced with death. Traditionally genetic codes are passed on to offspring and offer a family history that lives forever, or through a lineage. An online identity is remembered for how it interacted in a particular time in a digital environment. The difference is an online identity may remain dormant for decades and still have the potential to influence, inspire, and generate new concepts or thoughts [insert Rick Astley music video here]. This tends not to happen decades after the death of a person in the physical world.

Facebook has a helpful guide as part of their support features that discusses the various
components to a memorialized Facebook account. A legacy account member can be appointed and decisions made about what should happen to a Facebook profile by a user before they actually pass away.

As digital identities continue to integrate with our physical lives, and through advancements in human computer synthesis, humanity will be faced with interesting questions about the definition being human. The uncanny valley is a sudden drop in human comfortability with a simulation of human behavior the closer the object comes to imitating the real thing. Figure__ plots this drop in comfort with the appearance of zombies, corpses, and prosthetic limbs as it closely relates to perception and reaction to the appearance of actual humans. The chart climbs again as the illusion of reality becomes indecipherable from reality. This means that as artificial intelligence and avatars in the digital world become closer to an immersive experience. The difference between humans and machines will become harder to distinguish, since a user of a digital profile could become emotionally connected to a virtual environment.

Interactions on social media platforms are becoming ubiquitous with smartphones. As this device has become the object that stays close to the physical self all day and night, it should be considered through the lens of the Uncanny Valley. The first and most apparent aspect of humanness is in appearance. It can mean just the body, just the face, or just the eyes. It can vary from vaguely human to indistinguishable from human” (Shedroff and Noessel, p. 185). Smartphones are the portals for our physical selves and our digital selves to interact, and have been designed in ways that are similar to how human interactions occur in the physical world.
As technologies and artificial intelligence continue to develop it is important to remember the psychological impacts humans experience when something attempts to imitate human life or behavior. “Three quarters (75%) of teens and 93% of adults ages 18 to 29 now have a cell phone. In the past five years, cell phone ownership has become mainstream among even the youngest teens. Fully 58% of 12 year olds now own a cell phone” (Lenhart, Purcell, Smith, and Zickuhr, p.4). It is critical to analyze the impact a digital identity, in a digital community, has on a developing mind in the physical world.

D. Singularity of Self

Ray Kurzweil suggests the singularity of humans and machines is inevitable and the next logical step forward for humanity. Based on Kurzweil’s analysis of human memory capacity, “...it is reasonable to expect the hardware that can emulate human-brain functionality to be available for approximately one thousand dollars by around
Digital interfacing until recently focused on replicating the ways in which we did things in the physical world.

Program elements from older concepts are still used as symbols, such as a floppy disc icon used to represent the act of saving a document. A bridge of familiarity is offered to new users of a program when a symbol like this is used. The new user is able to quickly make the connection of the disc symbol with the concept of saving. Now that floppy discs have become a thing of the past, let alone disc drives, younger computer users might not recognize the reference to an older process of saving or burning a disc. Cloud computing, or the act of storing information online rather than on a physical hard drive, is changing how we interface with content as well as collaborate on projects. Shared cloud storage breaks the barrier geography once had on collaboration, and is changing the ways humans store and access information.

“There are those who save and those who wished they saved” is a concept that I was taught in the digital arts world that is beginning to fade. Programs are creating caches of saved content on a continuous basis, where the user is able to determine how far back they need to go rather than intentionally saving periodically. This nature of file creation is changing how we think of documenting information. The floppy disc save symbol is fading before our eyes.

CLOSER CONNECTIONS

A. Degrees of Separation

In 1967, Stanley Milgram’s research entitled, “The Small World Problem,” investigated how many steps it would take to deliver a letter to someone the original
sender did not know. This was done by using the connections people had and resulted in an average of six steps between the sender and receiver. Since the increased use of social media the steps between individuals has dropped significantly, with Facebook observing 3.5 degrees of separation between any two Facebook users. “Each person in the world (at least among the 1.59 billion people active on Facebook) is connected to every other person by an average of three and a half other people” (Edunov, Diuk, Filiz, Bhagat, and Burke, p. 2). Closer connections are beneficial in many ways such as networking for career advancement, or selling older things within a community. Facebook Marketplace allows users to make connections in a buy/sell community, based on their location, rather than spending the time and effort that goes into a garage/yard sale. Having a lower degree of separation makes content shared on social media sites, like Facebook, more available to friends of friends.

With closer connections comes modifications to how content is handled and to what degree one wishes to share that content (Public, Just Friends, or Direct Message). Changes in how we manage privacy of content has developed in stride with a growing Facebook user population. This suggests varying degrees in how people use the social media outlet. The more one uses a social media site, the more they are integrated with the interconnectedness the service offers. This history of online presence is documented in real time, and is recorded as a timeline of interactions between people and content.

B. Seeking Approval from Strangers

Becoming viral in the social media world is the new fifteen minutes of fame but could last for a much shorter amount of time. “The sheer volume of available videos
makes it difficult for users to decide what to watch or, perhaps, if to watch. As a result, people have come to rely on their social networks to provide viewing choices. They are more likely to watch videos that are distributed from person to person across social networking sites, blogs, emails and instant messaging” (Braxton Interian, Vaver, and Wattenhofer, p. 242). The ability to reach wide ranges of media outlets through cleverly worded social media posts represents the shift in media dictation. Rather than news networks being the source of top down information dissemination, people who were once the consumer are now the reporters. Facebook’s live stream component to their interface tends not to be censored, and provides immediate and on the spot relay of information traditional reporting methods cannot achieve.

There are endless reasons for why someone chooses to record events in real time and share it with the world. The undertone of this content relies on the number of likes and approval by others. “Cheng et al. (2007) note the differences in length, lifespan and content of YouTube videos compared to traditional media. They conclude that the social networking aspect of the site is a key driving force of its success, and they also note that linking, rating and favoriting make videos popular in a very organic fashion” (p. 243). Establishing a strong basis of followers makes an individual or profile alluring to the capitalistic nature of advertising. Cewebrities, or celebrities of the web, can make thousands of dollars in income based on how many views a YouTube video gets through sponsored support. The prospect of being paid for creating content, that would be created regardless, is presented as an attractive career option.
C. An Introvert’s Social Outlet

The internet and social media have provided an environment that aids those with anxiety of social interactions. Online you present the side of yourself you want people to see. Because of this, someone who may seem quiet or not very socially active could in reality be known by thousands of people under a different name they use on social media. Having a space or outlet for these inner personalities while remaining a screen away from physical contact adds a layer of security for these users. At the same time, this screen may be used to attack and criticize these personalities. The line between physical and digital environments is blurring and exposing new layers of humanity in the process.

D. Fidelity of Self

How one uses social media, and what content they produce or share, suggests profile tendencies over time. Fidelity of self, in this case, refers to the degree of exactness with which something is copied or reproduced. In creating an online identity, the user determines the feel and authenticity to the profile they are maintaining. How real an online identity is, becomes evident over time. With all the actions of this profile recorded in the timeline, inconsistencies can easily be pointed out when the content is reviewed. Users of social media tend to focus on the most current stream of information the social media provides. However, the timeline of this information adds an additional component to identity of the online profile.

Looking through Facebook profile pictures shows the evolution and changes a profile makes over time, in order to better fit the ideal persona, the profile user is trying to present. Content of a profile may be deleted if it no longer adheres to the identity that
is desired by the individual, refining the fidelity of self in the process. Online photo albums are captured in the moment, thanks to smartphones with cameras, and have since replaced physical photo albums used for more ceremonial images. “In a series of two studies, it was found that the attractiveness or height of participants’ avatars had a significant impact on how they interacted with a confederate… Together, these two studies showed that even small changes to our avatars can lead to immediate and significant changes in how we behave and interact with other people in a virtual environment.” (Yee, Bailenson, and Ducheneaut, p. 194). The fidelity of a digital identity acknowledges the time component of an online profile and should be considered when consuming content posted by this profile.

E. Unique Like Everyone Else

Innate elements of self, such as genetics, determine unique physical attributes of an individual, while layers of life experience mold that individual’s uniqueness. The contexts of geographic location, culture, and societal structures heavily influence an individual’s perception of the world. As the world progresses towards a completely interconnected network, geographic limitations will have less impact on the ability to share culture. The internet has given us the capacity to observe and partake in ways of life previously closed off due to geography.

Sharing of culture across the internet creates a path, where in one direction an individual outwardly explores other cultures. The inward direction is more locally minded, and looks to elements found in local culture, which may be represented online. This path is responsible for polarizing views of individual experiences, and in turn
highlights identifying similarities of the “other.” Being able to identify another human as different justifies and acknowledges that the person viewing the other person does, in fact, exist. This reflection on the physical presence of others and attempt to prove actuality, or consciousness, is known as phenomenology. The idea of the other is prominent in the digital world, and in particular, social media.

Because consumption of another’s content is a driving force behind social media, it is significant to have a unique identity. “Social media users have an expectation that the content they create will continue to have a sustained use value—that is, they are producing things that they intend to consume and share indefinitely” (Rey, p. 412). Social media has given us a platform to reflect on the moments and elements that have made up our lives so far, and allows for introspection through comparison (of then and now, of here or there, of them or me, etc.). Why and how we document and interact in the digital world of social media is drastically different for each individual for a variety of reasons. The groups one follows or is a member of online replicate social clubs that previously required a weekly meeting time and were regionally or location based. “Internet users are willing, even eager, to participate in activities that profit companies, so long as nothing interferes with their ability to do whatever it is that they want to be doing. In short, social media provides evidence that people are rather tolerant of exploitation so long as whatever activity they are involved in is not particularly alienating” (p. 416). The resulting nature of social media is to stand out in your own unique way just as everyone else is attempting the same.
DATA PROFILES AS ART

A. Art Space to Data Space

Identity is an increasingly grey area with blurring lines attempting to define who a person is. Utilizing data collection in order to produce a work of art integrates concepts of information design with artistic expression. By changing the ways in which we observe data, new concepts of understanding that data may be achieved. An art gallery is intended to share information by providing cultural experiences to viewers. The same gallery could potentially be used as a platform for public discussion on data findings. This research explores the concept of a data based art gallery experience by displaying study results as an integrated art experience.

The integration of humanity and digital interfaces causes an increase in the amount of recorded data available about that humanity. Supercomputers are needed to understand the complexity of the data that is being collected today. Because virtual reality (VR) interfaces are becoming more affordable to larger populations through the use of smart phones, it is important to abstractly think about what that interface could be. Most attempts of three-dimensional illusions throughout history are short lived because the magic quickly fades with experience. VR platforms have the potential to break this gimmick for the first time. This is because the device used for the VR is able to respond to actual movement and location inputs. It is important to better understand what can be achieved in a VR space rather than repeat the design attempts from the past.

This research proposes that art galleries could be used to explore possibilities of VR and spatial experience. By focusing on three layers of self and identity in the digital
age, physical-self, digital-self, and societal-self, artwork is produced with the intention of being installed as a large data visualization experience.

B. The Installation

Layers of comparison are achieved through intaglio prints, junk mail collage and projection mapping of Facebook profile images of each respective subject. For this installation there are six subjects analyzed through a set of three prints per subject (18 prints in total). These prints are 22” X 30” and are hung from the ceiling to create a circumference of art that is not attached to a wall. The significance of the prints floating in space activates the back of the print and as viewers walk by the prints react and swing. The motion of the prints indicates the effects a presence has on these subjects. Six individuals were chosen for this research and installation to represent the six degrees of separation and how that number is shrinking because of social media.

Facebook profile pictures from each participant are projected on the hanging prints in reverse chronology and represent the time of existence their digital profile has been active. The Facebook images have been blurred in order to maintain anonymity of the participating subjects. On the back side of the prints is collaged junk mail from the respective subject collected over a two-week period. The types of junk mail and how much was collected is different for each individual, and should be thought of as a comparison point between the individuals, rather than across the singular subject’s print series. The names and address were intentionally removed from the junk mail to maintain the identity security of the participants.
Projectors sit on pedestals at a height of 48”, and are arranged as a panopticonic circle in the center of the hanging prints. This is done so that viewers are able to interrupt the digital content being projected on the prints from a central point. This also allows for the feeling of control or being controlled in comparing the different subjects. When viewing the back side of the prints, the projected content is able to be seen through the paper, the intaglio print obscures the light, and the junk mail is illuminated with a subtle glow. The junk mail is located in the 4.5” white border around the printed plate that is 14”X16”. When looking at the backside of the print the viewer is able to focus on the three layers of identity as one piece. Contrastingly when viewed from the front you are only able to view two of the three layers. The panopticon is thought of as a controlling structure, and in the context of this installation is a point of power viewers are unable to reach, because the ring of projectors prevents this. When projected content is obscured by a passing viewer, those on the outside of the hanging prints are able to see shadows interplay with the multiple layers. The shadows caused by viewers symbolizes the impact individuals have on each other.

This installation is about the several layers of identity in a digital era, and provides a new and alternative method in viewing large volumes of data at once. The panopticon is the premise of our digital future, where our physical activities and presence are recorded in a diversity of ways, 24 hours a day. A piece of advice given to me by a network security specialist is that, “by accepting technology you forego privacy,” and is something I keep in mind with every internet and digital action I make. If we do not take time to reflect on who we are as individuals in the physical world, we run the risk of losing our identity to the digital profile that represents us.
C. Layers of Content

There are three components of data analysis in this study for each participant. The first component, or layer, is personal content collected with a survey, the second layer is "junk mail" collected in person by the principal investigator (PI), and the third layer is digital images from Facebook profile pictures. The survey information focuses on physical identity of the participant. This helps determine what, where, and how visual content is arranged within the picture plane of each artwork. The "junk mail" represents an advertising profile of each individual and is physically integrated to the artwork in the form of collage. Finally, digital images from Facebook profile pictures are projected on top of each print to create a third layer of identity. These images are presented in the order they were posted online, by each participant, to show the timeline of the digital identity. Each image collected from Facebook is blurred-out, and is included in a video sequence rather than a still image, in order to protect the identity of each participant. All three of these components are combined into one visual set of information for each individual. These sets are then arranged in a circle, so that a viewer may stand in the inner circle, and have the ability to visually compare six separate identity profiles at once.

1. The Printed Plate

The intaglio printing process is one of the oldest printing methods dating back to the 15th century. The process begins by cutting grooves and etching textures and lines into a ⅛” piece of copper with a flat surface and beveled edges. This plate is then coated with ink, allowing the ink to fill each of these cut away grooves. The ink is then delicately whipped away from the plate so that the flat surfaces of the copper plate may once again shine. Ink remains in the grooves, and depending how deep the groove is,
determines how much ink will be printed. A polishing action is used to remove ink from the flat surfaces of the plate without pulling ink from the grooves. The ink is very strong and able to resist completely being removed in one stroke, so it takes several passes, in many directions in order to have a cleanly wiped plate. The act of not completely removing the ink from the flat sections of the plate produces tonal qualities and gradients based on how the ink was removed. In addition to the crisp and clean lines that have been cut into the plate, the print takes on unique effects of lighting and depth with an expressive wipe. Without a clean wipe the print is considered a monoprint and unique because the exact wiping pattern could not be reproduced. With the clean wipe the print becomes part of an edition.

Once the plate is ready to print, it is registered on the printing press, and a dampened sheet of paper is placed on top of the plate on the press. By using paper that has been soaking in water, it is able to pick up incredible details of the plate as well as encourage the ink in the grooves of the plate to cleanly be pulled out. As the plate goes through the press, the pressure of the press creates an embossment of the beveled edges and where grooves are cut. This results in the ink being raised above the pressed paper and gives a subtle positive and negative dimensionality between the ink and the paper.

This research uses the intaglio printing process for two reasons. The first reason is this impression the plate makes on the paper is parallel to how people are impressed upon and how fingerprints are left behind. The second reason is through the use of digital technology to produce plates made of acrylic sheets rather than copper. These plates are one-seventh of the price of a copper plate, and because of the digital interface of laser cutters and vector based Adobe Illustrator, precise and measurable plates may be made.
Because of the exactness and precision of the digital component, the art form is reborn in the age of technology. The combination of a traditional process with emerging technology symbolizes the change in purpose of physical content in a digitized world. The idea of tangible things is disappearing and being replaced by digital representations of social media and virtual realities. These digital representations are attempting to replicate physical experiences, and by being in a time of immersion environments it is critical that we appreciate the differences in order to better understand the synthesis of the two spheres.

Specifically, in this research, Adobe Illustrator documents have been generated for each subject. These documents integrate symbol sets unique to each subject with a grid structure as the basis for comparison across all subjects included in this study.

<table>
<thead>
<tr>
<th>Zodiac</th>
<th>Eye</th>
<th>Tattoo</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Weight</td>
<td>Latitude, Body comfort</td>
</tr>
<tr>
<td>Y</td>
<td>age</td>
<td>Longitude, # of tattoos</td>
</tr>
</tbody>
</table>

**Figure 3: X and Y Values in Changing Scale in Intaglio Prints**

This grid is not a typical X-axis Y-axis grid, in that the variables change based on the content being observed. This grid offers three sets of values for both the X and Y axes; the first is height and weight, the second is latitude and longitude, and the third is comfort in physical appearance and number of tattoos. The grid determines how content within
the picture is organized, and the scales relating to the consistent line spacing change depending on which symbol is being observed.

**ZODIAC:** Astrological symbols are used to represent the respective time of year any subject is born. The location of the symbol corresponds to the subject’s height and weight. The decision to not specifically give the date of birth (DOB) helps to maintain identity security for each subject, as well as abstracting the chronologic chunking naturally associated with an age or DOB. Something so exacting as text, or in this case a DOB, brings connotative weight because a viewer has preconceived contextual associations with the text. By reading the word *tree*, a visual image may form in the mind of the reader made of previous tree experiences. Environments where trees exist, the time of year the tree exists in, sounds and feelings associated with that tree come to life through the written word as they are generated by the reader. By providing an image of a tree, there is an exactness to this tree. No questioning of what time of day, year, or experience of this tree, it is right here for us to consume and refer to. This image of a tree is now a symbol where the rendering of the tree adds an additional layer of information for the viewer to consider. If this image of the tree is rendered as a silhouette, it takes on the feeling of flatness, but maintains layers of descriptive components such as being deciduous.

Within the context of this artistic series, the zodiac symbols are flat shapes with little hand rendering. The ink has completely been wiped from them, so when printed, they show the white of the paper, and pop against the contrasting, tonal rendering that
surrounds them. The clean wipe gives the zodiac symbols a sense of solidity, and the illusion of being on top of the other elements in the print. The symbol acts as a brand or identifying label placed on the other symbols used to define the subject.

Height and weight of an individual is significant enough information for a government issued driver’s license to require them and are regular measurements when visiting a doctor. Height and weight are used in profiling an individual's physical presence not only in official documentation, but in daily life. In a conversation between two people regarding a third person not present, the descriptive components of scale may be used to exactly confirm the individual the first two people are talking about. *Big Jim or Small Jim*, is an example of how we describe people by the physical traits of height and weight, and the reason for being used as a measure of profile in this art series:

By abstracting our understanding of exactness given to information conveyance in the past, we are able to observe new patterns within the information, and make connections that otherwise could be missed or take longer to discover. The zodiac signs are intended to begin this abstraction of information. Not including an exact DOB and embracing the looseness of the zodiac symbols, there is an activation of thinking, because of an abstract starting point. Digesting data information in an art gallery becomes more about the experience than the same information found in pages of data sets. If all information is given to the viewer in the form of numbers and figures, there is less room for exploration of that information.

By providing information as experience, there can be an activation of the intrinsic human need for exploration. A natural instinct of humans is to quickly observe patterns for a variety of situation-based reasons. We look at symmetry in human form as beautiful,
and identify front facing eyes in nature as predators or threatening. By presenting layering patterns of information that change as they are being viewed, an experience of comparison is generated. This installation transforms an art space into an environment, rich with content for viewers to naturally explore, and allows a viewer to identify patterns of information throughout the space. This experience sparks inferences and connections that a two-dimensional chart simply cannot.

**EYE:** For this artistic series, the eye is a symbol with many dimensions. The eye symbol of each print is based on the respective subject’s actual eye, but has been artistically rendered in order to secure the identity of the participant. If the participant is right hand dominant, the right eye is used, if the participant is left handed, the left eye is used. Where the eye is positioned is based on the subject’s actual geographic location within the United States. It is important to mention the latitude and longitude scales of the grid in the artistic prints, are limited to the directional borders of the contiguous United States, as it contains where the six participating subjects reside. Since all subjects are from the mid-west (in this case Minnesota, Iowa, and South Dakota), the location of the eye symbol is west of the 90° latitude and above the 40° N longitude mark.

Sizing of the eye is one of the core components of information determined by the vector-based plane of an Adobe Illustrator document. The size of the eye in each print is based on how far this person has traveled from their birthplace. If a subject was born in a town 100 miles away from where they live currently, the size of the pupil in the eye symbol would be 100 pixels in diameter. Subject 6 lives in a town over 500 miles from where they were born and has a substantially larger eye symbol in their print. By contrast,
Subject 4 has traveled under 20 miles from their birthplace, giving them an eye size that correlates with a smaller distance of travel (Figure 5). Illustrator and the laser cutter work together in producing not only the measurable grid that all symbol locations are based on, but measurable size comparisons of symbols, such as the eye.

![Figure 4: Eye size comparison between two subjects, where the larger the eye, the further this individual has traveled from home](image)

Integrating new production methods with a traditional printing process, shows the potential digital interface offers to older art practices. Validity of information presented in the print can be attributed to the exactness of the computer-generated scales of comparison. The laser cutter allows for consistency in size and marks on an acrylic sheet, and determines the starting points for the hand rendering process. The machine cut lines are guides for the artistic exploration of the subject’s identity, and through these renderings the eye becomes a stylized symbol rather than a precise representation of an
eye. Like the abstractness of the zodiac sign, the eye allows for exploration in rendering the eye as a symbol, rather than an exact identifying element. The detailed rendering of each eye represents long hours of hand carving and reflection on the identity of each subject well connecting back to the traditional intaglio printing practice.

Throughout history the human eye has been thought of as a window to the soul. I find fascinating connections to the light consuming pupils of an eye, and the intrinsic unknown of a black hole. Using the eye as part of this art series symbol set connects to the idea of light consumption, the types of light that are consumed (natural, manmade, digital screens), the uniqueness of an individual's eye, the all seeing eye of the panopticon with the feeling of being watched, and the current state of a digital panopticon integration with our way of life. Cameras are the gargoyles of our modern city constantly keeping watch and give the people a feeling of security.

At the same time the iPhone is responsible for over 25% of the images on the internet and is the most used camera in the world. The lens in our pocket is always near and quick to access. Often times the device becomes a lens through which physical environments are experienced. An example of how cameras change our experience of physical existence can be seen by going to a music concert and watching people record the concert with a digital device. Digital recordings and live streams of experiences that were once location based are now broadcast to the world through social media, and can activate instant discussions on the topic or event.

The camera and digital platforms used to share captured content we experience today allow for interconnections of immediacy. Considering the increasing number of images uploaded to the internet and how images are integrated to the interfaces of mobile
devices, it is hard to determine what impact this hyper-exposure to imagery will have on humans. Digital devices are the portals used to interact with digital environments and record the ways an individual interacts in our physical world. The eye symbol represents an identity of each subject, and by including an eye on two of the three prints per subject, a face is formed. Viewers identify the two front facing eyes as threatening, and add to the feeling of being watched, as the viewer moves throughout the panopticon structure.

**TATTOO:** Adding pigments to skin in the form of tattoos is nothing new to the human culture. Current times are seeing the acceptance of inked skin in the workplace as an increasing amount of jobs available in the United States are in the service industry. These positions work long hours for little pay and are the brunt of most complaints by patrons or consumers. A customer service position has the job of defusing upset customers, where the mantra of *the customer is always right* is the rhetoric of customer satisfaction. The negative weight associated with resolving customer problems, as an extension of company protocol, a customer service representative could have a tattoo in order to express identifying layers the individual cannot verbalize at work. The point is that tattoos represent an individuality that bodies are not able to on their own, and are marks of uniqueness in a world of other unique humans.

This artistic series uses the subject’s favorite tattoo as a symbolic element for their respective series of three prints. Since the tattoo is based on a picture of the actual tattoo, there is evidence of the body curvature through distortion of the image, and the bleeding of the ink beneath the skin that happens over time. Since a tattoo is a body modification that is rather difficult to remove without some remnant of evidence, it
indicates an additional layers of self-perception each subject experiences. The location of the tattoo on the grid structure of the print is determined by number of tattoos they have and comfort with body their own body image. The X-axis is a scale 1 through 5, where one on the left is comfortable with their body image and five on the right is extremely uncomfortable with their body image. Because this study investigates the many layers of identity, it is important to include self-interpretative content. Identifying symbols like tattoos that subjects chose to permanently mark their bodies with, could provide insight to their personality or inner identifying elements. This study had one subject that did not have a tattoo and as a result this comparison was not included in their profile portrayal.

FINGERPRINTS: The intaglio printing method is used in this exploration of identity because of the physical dimensionality the process gives to the paper and ink. Fingerprints are made of peaks and valleys much like the groves of an intaglio printing plate. The ink of a fingerprint is actually oils produced by the body, rather than printing ink, but leaves an impression or imprint on anything a finger touches. The evidence of this fingerprint, or a person’s presence, may be sampled by dusting the print with chalk or a powder. A fingerprint is unique to an individual and works well as a symbol for comparison of identity in this research.

In order to maintain the security of each participating subject’s identity, fingerprints have been artistically rendered in a way that is loosely based on the actual fingerprints rather than direct copies of the prints. The number of fingerprints presented with each profile indicates the number of members in the subject’s family. For this study, participants had a range of four family members to six family members. The Y-axis
allows for a relative age comparison of the family members starting with father and mother as the left two fingerprints. Sharing the number of family members adds an additional layer of context to understand the subject. Right handed fingerprints were used if the subject is right-handed just as left-handed fingerprints are used for those who are left hand-dominant. In order to prevent overlapping of symbols in the overall display of profile information, the position of fingerprints may be adjusted on the Y-axis in order to produce a balanced composition between the other elements in the print. The fingerprints still use the Y-axis for comparison between one another, but are not fixed to the position they are placed on the grid, within the picture.

2. The Aura Plate

In the arrangement of the three hanging prints for each subject, the center print is considered an aura print. This image is inked on a flat sheet of acrylic that has no engraved lines, but creates a beveled impression when run through the printing press. The center image is intended to be an essence of the individual, based on the subject’s favorite song and the last song they listened to. The color choice is based on their favorite colors and the energy of their favorite song. This song also influenced how ink is applied to the plate, attempting to replicate physical patterns based on the sound elements. Picking a favorite song is a challenging request and the impulse response allows for interesting insight to the individual.

The last song listened to by each subject is responsible for how the ink that has been added to the acrylic plate is removed. By including two different songs in the creation of the aura plate there is an intrinsic dimensionality created between the additive
and subtractive methods. These aura plates are a quick response to the songs and a reflection on the individual subject. Salt is also applied to the inked plate in an energy that matched the music. This results in spots of white from the paper to pop through the ink across the print.

The energy-based aura print is centrally located in the set of three prints per subject. When viewed from the inside circle, the aura print allows for a break between the cleanly wiped engraved profile plate to the left and the expressively wiped engraved profile plate to the right. When reading the series left to right, there is a sense of deconstructed elements building to produce a synthesized profile for each subject. The method of mixing inks directly on the printing plate goes against the tradition of edition-based printmaking, and embraces the monoprint or artist proof. These prints are as unique as are the subjects they represent and cannot be reproduced.

The center mono print of each subject in the installation of Self VS Digital Self, gives the viewer a burst of color in contrast to the sterile and analytical nature of the outside engraved prints. These center prints act as anchor points of comparison between the subjects, as the projected content adds even more dimensionality and life to the energy-based prints. The opacity of the printmaking ink has the ability to block light depending on how thick it has been applied. The aura prints have a broad range of opacities to the inks, resulting in dimensional interplay with the projected content when viewed from the outer periphery. The colors of the ink in the aura prints shift as different projected images fill the space and allow for a radiant glow of color when illuminated with purely white light. This effect projects the essence of an aura.
3. Projected Content

The rate of image production will continue to grow with the use of the internet. For every profile created, there is the potential of an image to be used as representation of that profile in the digital world. Profile images on social media platforms are used as an identifying symbol for the profile itself. The timeline of that profile captures moments of interaction the user has with the social media site. Facebook is twelve years old and is one of the dominant social media platforms throughout the world. The social media giant has 1.79 billion active users to-date and continues to show steady growth with 350 million images uploaded per day. It is estimated that over 250 billion images have been uploaded to Facebook. Images and content shared online come from the people that use the site. This puts content popularity in the hands of the consumers rather than traditional news outlets need for timeslot viewership and top down dissemination.

The images a user chooses to present as a profile image on their social media profile is intended to quickly describe their identity, or personality, in a fast paced digital environment. How often a profile image changes and why are drastically different for each user. When two people first meet in the physical world and then become friends on Facebook, there is an instinctive curiosity about this new person’s profile, and the digital screen allows for the perfect environment to consume this individual’s information. Clicking through image after image, a viewer is taking a trip through time, where every click is a jump into history. Digital profiles naturally document a profile’s chronology, making it easy to investigate that profile at any point in time since creation of the profile.

Layers of information are presented with a profile image, and when observed as a sequence of images that document the history of a digital profile, there is a visual
montage of this profile’s existence. Clicking through images at a rapid pace is a learned behavior in response to the incredible amounts of content that makes up digital social interfaces. A user clicking through images of another profile acts as the director of the montage, controlling the pace of image consumption.

This artistic investigation highlights the concept of mass image consumption by using Facebook profile images of each subject projected onto the printed works of the installation. The images have been blurred out in order to maintain the security of the subject’s identity. When the images are presented in a sequence there is no way for an image to be un-blurred through modern reverse imaging techniques. These protocols have been established in conjunction with the Iowa State University Institutional Review Board in order to protect the identity of participating subjects.

The blurred sequences of Facebook profile images represent the digital profile of the subject. Patterns emerge from the respective subject’s projections, along with the comparison of projected patterns between subjects. The number of profile images uploaded by participants of this study have a range of 25 images to 178 images. Because of the different amounts of images documenting the lifespan of each digital profile, the video sequences of each subject is of a unique length before repeating. The aura generated by the video sequence reveal patterns in how the subject represents themselves online. Though the images are blurred it is still possible to identify a single face versus two faces, a landscape versus a full body image. Limited iconic identification within an image, such as facial features, text, or sense of environment, and the repeating pattern of profile images, creates soft washes of tonal color that animate the physical intaglio prints being projected on. A disconnect between the intaglio print and the projected content
would occur if the projected images were crisp and in focus. A viewer of the installation would see the two components as separate elements rather than the integrated image that is intended.

The projected image sequences of the digital profile illuminate the work that would otherwise be in a cold and dark environment. By projecting on the hanging prints from a ring of projectors placed at 48” high, viewers have the ability to obscure the projected content if desired. The hanging prints take on a sense of floating in the space where the projected profile images are able to be seen, both on the front and back of the hanging prints. Light photons are required to capture an image photographically and the projectors throwing light in the dark space ideally symbolizes the actions required in image creation.

When experiencing the space where these images hang, the presence of the viewer affect how the images are projected. As someone passes the hanging prints, they move slightly. This allows for the projected content, that has been mapped specifically to the dimensions of hanging prints, to shoot past the profiles and illuminate the outer circumference of the panopticon that is otherwise dark. The interactive nature of shadows is seen on both sides of the prints and acknowledges the influence the viewer’s presence has on each subject’s identity profile. Viewer consumption has an impact on an image and the profile that generated it. The images captured in our physical lives provide the content that makes up our digital-self or digital identity. The connection between who we are online and who we are in the physical world could pose security issues or increase the chances of identity theft. This artistic installation is intended to make viewers consider how they use social media and what levels of information they are willing to share.
4. Junk Mail

What is often referred to as junk mail is actually called advertised mail and is responsible for over 40% of the United States Postal Service revenue. There are a variety of reasons why a person gets the advertised mail they do, ranging from mailing lists based on previous purchases and political campaigns, to credit cards and banking offers. Ad mail is intended to appeal to a wide range of consumers, and ad companies can plan their advertising approach based on regional, geographic, or other demographics. Advertising markets based on residency are rather general and have a message that could apply to many, such as a grocery store’s coupons or events happening in a local environment. Sale specific mailers are more targeted than a general mass advertising and are based on decisions the receiver has made in the past. A purchase from Old Navy, and signing up for their mailing list, is likely to get your name on a mailing list for the parent company Gap Inc. or a sister company Banana Republic.

Marketed profiles of individuals are constantly being generated and may be observed through the advertised mail intended for any given resident. What is often considered junk mail is actually a profile of what society thinks would appeal to an individual. In this artistic exploration, junk mail was collected from each participating subject for a period of two weeks and is on the back of print C (Figure 4).

The density of junk mail on the back of the print indicates the amount of advertised mail this individual receives, and is applied as a border around the intaglio
print. When viewed from the outside ring of the installation (Figure 5 and 6) the projected content illuminates the hanging intaglio prints. Projecting images on the front of the print, allows for the print to be backlit, when viewed from the outside cells of the panopticon.

![Figure 4: Subject 5 Side B (outside)](image)

Only when on the outside periphery of the circular installation can a viewer observe the three levels of identity at once. From the intimate position of the outside ring, the viewer has a closer connection to the singular subject being viewed. By contrast, the inside perspective allows for the viewing of multiple subjects but the junk mail profile is not visible. From the positions of power, it is impossible to fully understand the depths of
an individual. This is represented by inner and outer rings of power, experienced in the installation of the art series *Self VS Digital Self*.

**Collaging junk mail to the backside of an intaglio print activates the multidimensionality of the physical paper.** Including the back of a print and bringing the art off the wall draws attention to the presence of the paper. When the projected content is viewed from the outside ring of the installation, the printed images combine with the projected content. Junk mail forms a border around the impressed intaglio print C. The decision to limit junk mail on one of the three prints came as a response to the amount of junk mail collected from each individual and the deconstructive nature of the artistic installation. Subjects have drastically different amounts of junk mail from a two-week time period. What each individual considers junk mail to be varies, additionally describing a layer of identity for each subject.
Xerox transfer process was used to transfer junk mail pigments to the intaglio prints. The junk mail was first scanned in an attempt to print it directly on the paper used for the intaglio printing process. The results of that process were very flat and forced alterations to the paper that were not favorable. Therefore, the junk mail is first printed as a mirrored image by a toner based printer for each participating subject. Then the printed pages are arranged on the back of the already printed intaglio print and finally a sheet of Rives BFK paper that has been dampened with Xylene, is burnished with a spoon on the back of the printed junk mail. Rubbing the spoon on the back of the damp BFK paper forces the chemicals through the paper the junk mail images are printed on. As a result, pigments are released from the paper, which allow for them to be absorbed by the intaglio print paper. This process adds a layer of chance as well as character to the junk mail, something that was lacking when printed directly on the backs of the intaglio print. The dappled effect of the transfer process hints at subtle references presented in the junk mail and prevents an exactness in reading any one piece of junk mail. Choosing to not give all the information of the junk mail represents the abstract and uncertain notion of advertised profiling and how societies profile the individual.

Closing Statements and Results

The growing interconnectedness of individuals throughout the world is a result of the internet and social media. Mechanical reproduction forced a change in how humans understood and consumed imagery in the early 20th century. The digital revolution is bringing a change of equal or greater significance to the 21st century. Technology uncovers new understandings of humans and will force us to question the definition of
being human. It is important to reflect on the physical self in order to better understand the digital self. In a world that requires the multi-self in order to navigate the saturation of content on the internet, we must investigate the ramifications of encouraging multiple online profiles.

This research is an investigation of identity in the digital age and is intended to compare several layers of identifying information. Large volumes of information, collected from six participating individuals are the focus of an art installation titled *Self VS Digital Self*. By presenting a series of artworks comprised of identity-related symbols, in a space not traditionally thought of as an art gallery, viewers will be able to enter a space where experience is the purpose.

Intaglio prints with precise and measurable visual symbols represent each subject’s physical presence, and hang off the wall, so that viewers may experience both sides of the printed material. Projected images from Facebook wash over the printed material and illuminate the dark space the work hangs in. A ring of projectors is located in the middle of the space and creates a central point of power or authority. When on the inside of the hanging prints, all six subjects may be observed at once. This is done so that viewers have the ability to experience an alternate perspective of the digital panopticon they are part of. The light play in the space symbolizes knowledge or information, and when viewers pass in front of a projector, they obscure information about the subject who is being projected. Blocking of light by a viewer along with a print moving in response to a viewer walking by represents the impact that viewing and consuming of content have on an individual.
Social media has become integrated with daily life and smartphones have become the window to manage our digital identities. With great technology comes the need for responsibility in its use. We must understand the many layers of self when interacting with a world that has the potential to be anything. The designers of the future will be the ones pushing what the future can be, and are not just replicating things of the past.

Looking at how mechanical reproduction (the camera) changed human understanding of time, we are faced with a parallel situation today; one where the internet replaces mechanical reproduction and the camera allowing for instantaneous connections and an omni-recorded. The synthesis of humans and machines is near and therefore we need to better understand humans in a digital environment so we don’t forget how to be human. Forever begins now.
REFERENCES

WORKS CITED


VOCABULARY


IMAGES


APPENDIX A: SURVEY

Title: Self V.S. Digital Self Survey

Thank you for choosing to participate in this artistic exploration of self and identity. Please answer the questions below and feel free to leave unanswered questions if you desire. Return this document to the Principle Investigator Glenn Terpstra.

Name: ________________________________

When were you born? __________________

Where were you born? __________________

Where do you live now? _______________

What is the height and weight on your I.D. ________________

With a rating of 1 through 5 how do you feel about your weight? Where 1 being satisfied and 5 feeling overweight. Circle one: [ 1  2  3  4  5 ]

What is your favorite song? __________________

What was the last song you listened to? __________________

What is your eye color? __________________

Do you have any tattoos ___ if so, what are they of? __________________

Do you have any distinguishable scars? __________________

Have you ever broken a bone? __ If so what and when? __________________

How would you consider your state of health? ______________

How many social media profiles do you use? ______________
APPENDIX B: INSTALLATION

Reliable Street Art Space, 4625 Reliable Street, Ames, Iowa before installation.

Installation of hanging print series and a panopticon ring of projectors.
Looking at side B of Subject 5 with projector illumination.

Detail of Subject 6 side A, print A, viewed from the inner ring of hanging prints.
APPENDIX C: SYMBOL GUIDE 8” X10”

READING THE SYMBOLS

Use this guide to better understand the arrangement of content within the grid structures. The X, Y values of the grid changes depending on what symbol is being viewed.

<table>
<thead>
<tr>
<th>Symbols</th>
<th>Meaning</th>
<th>X Y Values</th>
</tr>
</thead>
</table>
| ![Eye](image) | Eye size is based on the distance between place of birth and where the subject lives today. | X = Latitude  
Y = Longitude |
| ![Zodiac](image) | Zodiac sign represents the general time the subject was born. | X = Weight  
Y = Height |
| ![Tattoos](image) | Tattoos are a choice and visibly represent inner identifying elements. (1 = Comfortable 5 = Uncomfortable) | X = 1-5 Body image comfort  
Y = # of tattoos |
| ![Fingerprint](image) | The number of fingerprints represent the number of people in the family of the subject. They are arranged on the Y-Axis according to individual age differences of family members. |
| ![Junk Mail](image) | Collaged junk mail was collected over a two week period by each subject and identify an advertised profile of the subject. |
| ![Center Print](image) | The central print of each individual is a gestural response to both the favorite song and last song listened to by the subject. Color choice is based on subject’s favorite color. |
APPENDIX D: POSTER 11” X 17”

SELF

VS

DIGITAL SELF

AN EXPLORATION OF IDENTITY
NOVEMBER 14 - 20
3-6PM
RELIABLE STREET
4625 RELIABLE STREET, AMES, IA

RECEPTION
SATURDAY
NOV. 19
6-8 PM
Self VS Digital Self

In a world that changes at increasing rates, it is important to not only look at the data it produces, but how we observe and approach that data. Interconnected layers of our globalized environment are constantly pushing and pulling in ways we do not see. Social media has changed how we communicate with others and tends to focus on the immediacy of now. If we do not take time to reflect on who we are as individuals in the physical world we run the risk of losing our identity to the digital profile that represents us.

The “panopticon” is a viewing mechanism found in institutional structures, such as prisons, that provides maximum observation with minimum effort. In the panopticon structure there is a central viewing tower intended to see all compartments or cells at once. The late 17th century concept is a structure of control and authority where subjects are unaware of whether or not they are being watched. The use of the word “panopticon” has steadily increased since the creation of the internet and is beginning to reach levels not seen since the end of the first industrial revolution in the 1840’s.

The digital panopticon is not one structure but rather integrated into the many digital structures we use daily. A piece of advice given to me by a network security specialist is that, “by accepting technology you forego privacy,” and is something I keep in mind with every internet and digital action I make. After observing how people use digital profiles today I wanted to create a series of artistic profiles that document the many layers of identity. In doing so I have produced a new mechanism for viewing large data in the form of an artistic installation.

Information of six individuals was collected for this study through a survey. This information takes the form of various symbols such as the eye, astrological birth sign, fingerprints, and tattoos. The location and relation of these symbols is determined by a grid structure that changes based on which symbol is being observed. All identifying content has been removed in order to maintain the privacy of each subject. Interact with these six profiles and explore the variety of ways one may be observed and how your observation affects these profiles.

--Glenn Terpstra
APPENDIX F: IRB APPROVAL

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Date: 12/9/2016
To: Glenn Terpstra
916 South Dakota Ave.
Ames, IA 50014

CC: Dr. Kimberly Moss
378 College of Design

From: Office for Responsible Research

Title: Self V.S. Digital Self

IRB ID: 16-490

Approval Date: 12/9/2016
Date for Continuing Review: 12/8/2018

Submission Type: New
Review Type: Expedited

The project referenced above has received approval from the Institutional Review Board (IRB) at Iowa State University according to the dates shown above. Please refer to the IRB ID number shown above in all correspondence regarding this study.

To ensure compliance with federal regulations (45 CFR 46 & 21 CFR 56), please be sure to:

- Use only the approved study materials in your research, including the recruitment materials and informed consent documents that have the IRB approval stamp.
- Retain signed informed consent documents for 3 years after the close of the study, when documented consent is required.
- Obtain IRB approval prior to implementing any changes to the study by submitting a Modification Form for Non-Exempt Research or Amendment for Personnel Changes form, as necessary.
- Immediately inform the IRB of (1) all serious and/or unexpected adverse experiences involving risks to subjects or others; and (2) any other unanticipated problems involving risks to subjects or others.
- Stop all research activity if IRB approval lapses, unless continuation is necessary to prevent harm to research participants. Research activity can resume once IRB approval is reestablished.
- Complete a new continuing review form at least three to four weeks prior to the date for continuing review as noted above to provide sufficient time for the IRB to review and approve continuation of the study. We will send a courtesy reminder as this date approaches.

Please be aware that IRB approval means that you have met the requirements of federal regulations and ISU policies governing human subjects research. Approval from other entities may also be needed. For example, access to data from private records (e.g., student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. IRB approval in no way implies or guarantees that permission from these other entities will be granted.

Upon completion of the project, please submit a Project Closure Form to the Office for Responsible Research, 202 Kingland, to officially close the project.

Please don’t hesitate to contact us if you have questions or concerns at 515-294-4566 or IRB@iastate.edu.