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It is entitled:
Digital Public: Materializing the Space of Communication

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Digital Public

Materializing the Space of Communication

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A thesis submitted to the Graduate School of the University of Cincinnati in partial fulfillment of the requirements for the degree of Master of Architecture in the School of Architecture and Interior Design of the College of Design, Art, Architecture, and Planning.

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#Abstract

The act of communication has historically affected the way in which we perceive space in our physical surroundings. Digital means of communication and information sharing, however, have de-materialized real space, altering our sense of tactile reality. As a result, individuals have lost touch with society consequently becoming rooted in their digital communities. Manuel Castells refers to this digital phenomenon as the ‘space of flows’ in his book, The Rise of the Network Society. The ‘space of flows’ is an immaterial place that has transformed the patterns of societal structures. This thesis explores the potentials of materializing the ‘space of flows’ that is omnipresent, but lacks material, scale, and spatial formation. The project focuses a lens on social patterns, ultimately reintroducing communication to physical space, in public view. The response does not seek a resolute solution but rather a ground for experimentation. The project challenges the idea of being social by imposing a dialogue between local and global exchange, through both digital and analogue methods. The site is designed as a contested space that urges individuals to reclaim their territory through a synchronous and collective voice.
To my parents, Jerry and Kay Perez, who have always paved a path of opportunity and inspiration.

To Mollie Peskind, who pushed me through this masters thesis. Without you, I would not have finished.

Finally, to my Advisor and Chair, Aarati Kanekar, thank you for your guidance and patience through this endeavor.
“we are not dealing anymore with the technology of construction, but with the construction of technology.”

- Paul Virilio

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INTRODUCTION

First: A brief on the global social condition.
First

In the past decade, the social network, a network that reaches far beyond geographical boundaries, cultural differences, and language barriers, has altered the way in which our world communicates. Information now travels faster than we ever could have imagined before. The medium of digital information is universal, unlike any communication tool that came before it. With the click of a button, an idea, opinion, image, or video can instantly span global reaches, popping up on computers, televisions, and smartphones alike. This new social system has taken hold of almost every culture, worldwide, and has become essential in the way our societies function. We have become a digital public.

Businesses who do not adopt these new digital tools are quickly swallowed by the competitive global market. Consumers want information, goods, and services now, due to hasty expectations. Expediency is the new global focus, sometimes at the expense of quality. It is better to be first and good, than last and great. This highly capital, highly consumable structure in the global society has pervaded our everyday lives. We are now consumed by the ephemeral nature of first. People’s noses are buried in their devices, in the constant hunt to know what is going on the world around them. Ironically, they are missing what is happening right in front of them. Our other senses have been turned off, no longer dependent
upon the ears, the nose, or the skin. It is something Juhaani Pallasmaa touched upon in his book, *The Eyes of The Skin*. In his introductory notes, Pallasmaa describes the contemporary obsession with isolated vision, seeing what we want to see, and ignoring the other senses in the process. He writes, “The primacy of the tactile sense has become increasingly evident. The role of peripheral and unfocused vision in our lived experience of the world as well as in our experience of interiority in the spaces we inhabit, has also evoked my interest.” The tactile, olfactory, and auditory senses have been replaced by an ocular overload, with the lens focused on all things digital.

Still, others argue that digital mediums have shut off the senses altogether. Media theorists, Marshall and Eric McLuhan suggest that the pervasive nature of mobile media devices have enveloped our every sense. We no longer see what is occurring right in front of us.

“The world we live in is an unfocused and hyper-disjointed projection of reality. What is real is no longer real. The abbreviated axioms our societies now follow are the basis of our understanding of the world. Despite the internet’s reputation for misinformation and trolling, it is still the most trusted lifeline for the current generation and for generations to come. It has blurred the lines of culture and self-awareness. People can now speak freely behind an avatar, without the burdens of public chastisement or disapproval. This has, in many ways, disintegrated the fabric of communication in the traditional sense of the word. Conversations can now be exchanged in 140 characters or less, and be passed along to millions at one time. The idea of face-to-face conversation is an antediluvian practice, reserved, solely, for close acquaintances. It is believed that the average 18-29 year old American will send, on average, 88 text messages per day. The digital medium has become the preferred method of communication, and will continue to do so as social media networks continue to evolve. But why is this a problem? People communicate more frequently with one another and without the limitations of space and time. While it is true that information is spread at a much more rapid pace, it is also very apparent that our public places are eroding under the pressure of the technical realm. The forum, piazza, and city square are a dying collective. The public sphere has become sequestered. The influence of social media has encouraged people to selectively choose who

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and what to talk about. This has lead to isolation amongst individuals in public places. It may be considered socially awkward to approach a stranger and initiate a conversation, in this day and age. “The point of urbanity is precisely to enforce the daily cheek by jowl encounter with the different and the other.”

Richard Sennetts definition of urbanity seems to have been lost in the chaos of tweets, instgrams, and facebook posts that happen all around the world.

Maybe this is not a major issue; after all, everyone is doing it. But long term I believe people will look back on this obsession with mass media and wish they could have back the time they lost. This thesis explores the potentials of using this hyper media as a way to make architecture. Architecture has the power to reimagine the idea of public space and can adopt the digital mediums that come with the culture it aims to serve. The public forum is the perfect space to animate everyday happenings, that as of late, only seem to occur online. The new public square can be, and should be, a test bed for new public ideas and spatial practices.

In the project that follows this research, I exam the methods of employing social media structures as generators of what we consider to be public space. Using information generated by the public, the new social square will adapt and respond to social pressures both locally and globally. The aim is to produce a dialogue between the local and global condition that encourages real-time interaction between the local inhabitants and the global population. It encourages a rematerialization of communication that has now fallen silent in the realm of invisible networks.

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VIRTUAL PLACE

Present: How does social media effect our perception of physicality?
The Wired Network

In 1963, a computer scientist by the name of J.C.R. Licklider outlined a brand new concept for an Intergalactic Computer Network. This network would act as a computer communication network that would first be tested between three terminals; System Development Corporation (Santa Monica, CA), Project Genie (University of California Berkley, Berkley, CA), and Multics (Massachusetts Institute of Technology, Cambridge, MA). In collaboration with software built by Advanced Research Projects Agency (ARPA), the company Licklider worked for, the first communication between computers was sent, October 1963. This system was labeled ARPANET and was essentially one of the first formal Internet networks.

2. Savio, Jessica. “Browsing history: A heritage site is being set up in Boedler Hall 3420, the room the first Internet message originated in.” Daily Bruin.
3. First system to use ‘packet-switching’ a technology still used today by Internet providers.
1 exabyte
= “all words ever spoken”
- UC Berkley

2 bytes
crashed ARPAnet in 1969

766 exabytes
exist online today

1 exabyte = 1,000,000,000,000,000,000 bytes

Figure 1.1  Map of ARPAnet, 1969-1970
ARPAnet originally linked west-coast schools, UC Santa Barbara, UCLA, and Stanford. Within a year of its creation, 13 schools had been connected into the Internet.

Figure 1.2  Map of ARPAnet, 1969-1970

Figure 1.3  Data Comparison, Then and Now
Around 1995, the Internet saw its first real spike in activity due to the launch of Internet service providers; CompuServe, America Online, and Prodigy. These ISP’s made the Internet available to every household via dialup connections. We all remember that discordant dial tone as we waited to connect to the world. By 1996, 40 million people were using the Internet globally, 30 million in the US. That is 2.5 times greater than the users in 1995. Since 1995 the Internet population has grown exponentially.5

While computer networking played a major role in the changes in which we communicate, one cannot forget the advancements in mobile telephony. Until the late 1980’s early 1990’s, the world primarily communicated through hardwired connections.

5 The Internet population as of March 2013 is approximately 2.75 billion. That is about 172 times greater than the Internet population in 95’. - Ibid
Telephones were predominately used through land-line applications. Computers were connected to an ISP server or directly to one another through local area networks (LAN). The Internet occurred at the office, or for some fortunate users, in their home office. Telephone calls were made in the kitchen, pay-phones, or at work. The world was wired but tethered to their technology. People outside of their home or office pre-1992 were cooperative, relying on face-to-face communication to obtain information. This was a time when people did not walk with their nose buried in the screen of their personal device, fearing the dreaded, “battery is below 10%” warning.
Cutting The Cord – The Birth of Wireless

Since the birth of the telegraph, which was first demonstrated by Guglielmo Marconi in 1896, human beings have been aware of wireless communication. The introduction of the wireless telegraph lead to the birth of the radio. In 1914 the first voice communication over radio was transmitted and by 1920 mobile receivers were being installed in every police car in Detroit. By the late 1940’s almost every police station had migrated to radio FM communication. While telephony was seeing major changes to wireless communication, digital information exchange was still grounded by the cord.

It was not until 1990 that the Institute of Electrical and Electronics Engineers (IEEE) introduced the first definition of Wireless Local Area Networks (WLAN) later known as WiFi. It was originally introduced for commercial use in cash registers, allowing stations to be set up anywhere within a store. Wireless networking up until this point was a big unknown to the consumer market. Questions

7. Ibid.
of security, speed, and even necessity had all been left unanswered. That is until a company called D-Link released the first wireless access point router for home use in 2001.9

This access point router used 802.11b technology that allowed users to connect their computers to the Internet and to one another remotely when the router was broadcasting signal throughout the home. This was a significant milestone in the history of Wireless Communication because it triggered a widespread adaptation to consumer WiFi enabled products. The world had cut the cord, and was not going to look back.

Avatars – Anthropomorphic Shifts

In 1985, LucasFilm Studio developed an online computer game titled Habitat.10 The game was introduced as a multi-player online virtual environment.” Players could engage with a virtual online world, but also with one another. LucasFilm allowed players to take on avatars that represented a humanoid quality of ‘the player.’ People began to take on an alter ego while playing the game because there were no real connections with their physical or real world identity. In later years, games like Second Life have allowed users the same freedoms with essentially the same game principles. While not everyone has played or even heard of Habitat, its influence on online socialization has had a lasting impression on contemporary Internet users.

In 1994 one of the first social media website was introduced to the world, under the domain, Geocities. The premise of Geocities was to allow users to create their own websites that grouped people together into one of six ‘cities’ based on like interests.11 While the majority of the websites were text based, some expressive users chose to upload their own picture, creating an online profile to the world.

Online ‘profiles’ spurred the creation of social media websites like Friendster (2002), MySpace (2003), and Facebook (2004). These newly adopted social media websites allowed users to express their ideas, pictures, and opinions with friends, family, even strangers if they weren’t afraid of privacy. But privacy became a major area of importance as predators increased with the rise of social media systems.

People began to block their information from the public when stories surfaced of people losing their identities based on information they shared online. Others were being bullied based on their beliefs or groups they belonged to. A large number of employers admitted that they did not hire potential candidates based on information they found about their applicant online on social media websites. The world became aware of the vast reach of the Internet, and some began to hide their true selves.

Avatars were adopted by many websites for the purpose of representing users and their actions, personalizing their contributions to the forum, and many represent different parts of their persona, beliefs, interests or social status in the forum. The typical dimension of these humanoid identifications is 80x80 to 100x100 pixels. Many online communities require users to register with their community and give the option to create their own custom avatar. But many websites in recent years have allowed unregistered users to contribute to their forums. News agencies began establishing ‘comment’ sections on articles that allowed anonymous users to post their opinion without any ties to their person. While the goal of avatars was never necessarily meant to hide the identity of the user, people today tend to abuse the power of their avatars on these forums. You can say anything you want behind the cloak of your digital avatar. This leads to an uncommon permissiveness, a guiltless ‘wild-west’ mentality.

Yet not every expressive voice is subject to permissive attitudes. The avatar has actually given many people a voice in the global community. Behind an Avatar, people are free to express their beliefs without the judgment of race, religion, or creed. This has lead to a global empowerment, because one voice can be heard among many, without any bias attached to physical characters. This has lead to a shift from the ‘animal’ body leaving only our minds that cannot be ostracized for physical biases, only the content of our ideas, and expressions. This has really allowed people to discover “who am I,” and allowed us to connect with more people than ever before.

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12 Ibid.  
14 Internet Rising. Film. Directed by Andrew Kenneth Martin. Canada: MetaFiction Inc. 2011.  
15 Ibid.
Collective – Swarm Theory and Circles

With physical characteristics removed from the world-view, people have opened up their minds and souls and poured them out over the Internet. Empowered by their voice, individuals have begun to speak out against opposing groups, and governments around the world. In 2012, during a conflict known as the Arab Spring, the Syrian government cut off its population from the Internet. Disabling the 4 major fiber optic lines that provide access to the World Wide Web, the Syrian government literally pulled the plug on its rebels to limit their communication during their civil war.16

The use of Social Media as a tool for radicalization was not isolated to the Syrian conflict of 2012. In the same year in Gaza, Israeli government issued a notice to its citizens that their tweet locations could help Hamas target their rockets.17 The Internet can be both a weapon for and against its users. Other groups, like Anonymous have used social media outlets and web forums to discuss their distaste with certain political agencies and agendas. Hackers in the group have used methods of cyber attack to let their voice be heard around the world. The keystroke has become more powerful than the

17 Ibid.
spear in some cases.

But not all social activity online is centered around radicalization or malice. As a whole, the Internet has been used for positive purpose. We have found power online. We have found acceptance online. We have developed places. People have found their communities online, a place where they belong. People love, live, even grieve based on the new social condition; online communities. We can rely on our avatar to shield us from the harsh judgments people may place upon us. This has lead to a sanctuary in the immaterial space.18

We, as a society, go to these circles routinely, sometimes more than to our physical realities. While these communities help feed our social appetites, they have lead to an ironic desocialization within our material world; a loss of sense of place. Manuel Castell’s argues, “Place is a locale whose form, function, and meaning are self-contained within the boundaries of physical contiguity.”19 I believe that people have found real tangible places online, through their cellphones, and other forms of digital socialization. While these places are not physical, we can be transposed to that place through the medium of interaction and information. Think what would happen if data networks were to shutdown. How impossible physical life as we know it would be.

18 A place that has no boundaries, materiality, or space.

People have become uncomfortable in public, and tend to hide behind their screens. Try walking around downtown without seeing someone with their nose buried in a smartphone or tablet. The dichotomy of these social networks and material space is fascinating, and this thesis project aims to use design as a buffer between this social condition.

![Figure 1.7 Shifting Awareness; Space and Place](image-url)
Liminality – Information Trans[form]ation

With the dawn of the internet and Wifi communication, the reality of space and place became even more ambiguous. Today, the internet has become a staple in everyday life, and it would be hard to imagine life without it. We use it routinely, over 2 hours per day, but never really consider the transformation that takes place during information exchange.20 Here is an example:

In the process of posting a tweet, two distinct transformations of information will occur. The first stage is the manifestation of the information in the authors mind. This idea exists in reality; the real world. It has no material or boundaries, but the extents of the idea are limitless. When the author begins to write down that idea, they synthesize the idea into 140 characters or fewer. 21 As soon as the tweet is posted, the idea has gone through its first transformation. It has left the material world, with real-time parameters, and has been published onto the websisphere which contains no parameters of time, space, or material.

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20 This statistic is not including the 1 hour spent on mobile devices for non-vocal communication. Combined, that is almost 20% of a normal day, assuming one gets at least 8 hours of sleep per night! “US Time Spent on Mobile to Overtake Desktop.” - eMarketer. http://www.emarketer.com/Article/US-Time-Spent-on-Mobile-Overtake-Desktop/1010095 (accessed February 28, 2014).
The information remains there after the author leaves the page, and will remain there, unattended until it is absorbed, edited, or deleted. It is not until another user reads the post, digests the information, and reacts to it, that the information will once again transform itself to the material world. It can insight emotion, trigger responses, even lead to actions. Subconsciously this is why we author posts online, for everyone to respond to, but rarely do we see their reactions to our ideas.

These transformational phases of information exchange greatly align with Victor Turners anthropological theory of liminality. The etymological root of the word, liminal, stems from the latin word limen, which means threshold. Turner defines his theories of liminality based on French ethnographer, Arnold van Gennep’s classification of rituals known as rites de passage, or rights of passage.22 According to van Gennep, the rites de passage can be defined by three principal stages; “preliminal rites (rites of separation), liminal rites (rites of transition), and postliminal rites (rites of incorporation).” 23

While the exchange of digital information was never covered by Victor Turner in his writings on liminality, he made evident that liminal states go far beyond typical rights of passages that we may associate ourselves with.

In his essay Betwixt and Between, Turner writes, “the term “state” may also be applied to ecological conditions, or to the physical, mental or emotional condition in which a person or group may be found at a particular time.”24

Turner’s most notable work on the subject was published in 1964, some 30 years before the dawn of the information age, so the links I make to his works are partial to some of the open endedness that lies within his terminologies and definitions.

While he died in 1983, it is my belief that Turner would be fascinated by the way in which information is exchanged today. The thresholds of liminal states are immaterial, but at the same time are very real things. They affect our everyday life whether we know it or not. This thesis aims to uncover a way of materializing this liminal rites de passage in a way that transforms and activates physical spaces and tangible places.

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24 Turner, Betwixt and Between. 4
REAL SPACE

Past: How has physical space been eroded by digital means of communication?
Forums Without Domains

In order to understand communications place in physical space, it is important to look back to models of public space in Ancient Greece and Rome. Around the 6th or 7th century BC, the Greek city of Athens made its first formal layout of public space. These spaces were meant to be used as meeting places for military showings, religious ceremonies, and political announcements. The space was located at the center of the city, and was known as the Agora.

The word Agora translates quite literally as a “gathering space” or “assembly.” As the space developed with socioeconomic influences, the agora became the central nervous system of the city, where life occurred. Merchants, politicians, militiam, and socialites would all congregate there to exchange goods and information, making it a destination for local inhabitants. The Roman Empire adopted this model when designing their Roman Forum.

Figure 2.8 Athenian Agora, A City Center

Originally designed as a mercantile center for businesses the Roman Forum took on many architectural characteristics of the places the Empire was conquering at the time. As a display of power and exuberance, the Empire would mimic architectural stylings of many places their sovereignty reached out to, many being Greek countries. As the Roman republic continued its conquest through Greece, the Forum took on a new purpose that more closely matched the Agora in Athens. It was a place for political assembly, military demonstration, administrative headquartering, and public gathering in general.

When people wanted or needed information, they went to the Forum. The information was limited however by schedules and time of assembly. Where today you can access information instantaneously and on your own schedule, the Roman and Greek styles of information exchange relied on face-to-face engagements. This required people to know when and where to meet ahead of time, in order to obtain the information they desired. Information had a place. Today, digital means of communication have made information omnipresent, and somewhat placeless. It can exist everywhere and nowhere at once, with the click of a button or swipe of a touch screen.
Structures of Communication and Social Patterning

Communication can be broken down into two fundamental temporal classifications; synchronous, and asynchronous communication. The way in which communication transpired in the past was primarily rooted in the synchronous format. This structure of communication occurs in real-time when two or more parties are present in relation to each other in a manner that enables them to instantaneously engage one another in a communicative act. This structure of communication was the underlying focus of the Greek Agora, and Roman Forum, traditionally speaking. People would rely on their presence in a space in order to communicate with others.

Today however, that structure of communication has been shadowed by digital dialogues that are rooted in asynchronous structures. Asynchronous communication, in contrast to synchronous communication, occurs when no party is present during the time of communication, and the communicative act is not typically instantaneous. Examples of this structure of communication would be online forums, emails, and letters. While asynchronous communication existed in the Greek and Roman Empires, ie: parchments, messengers, etc…, it’s place in society was not as predominant as in contemporary culture.

[synchronous]

face-to-face conversations
telephome conversation
instant message*
conference call
video conference
group online chat*

{asynchronous}

e-mail
blog post
facebook post
tweet
letters
instant message*
group online chat*
Today, connected countries will spend a majority of their time communicating through online media outlets that require their users to *post* something. The post has become a way of life to many social media users. Post something, and wait for a response or reaction. Even at work, the majority of conversation has turned into email correspondence. We as a society have become so far removed from synchronous, face-to-face, structure of communication, that we sometimes forget how to do it at all.

Real spaces have become confined by smart phones and anti-social people.3 Unlike Roman Forums and Greek Agoras, contemporary public places do not see face-to-face communication unless there is a prescribed event happening or meant to happen there. Most times, these spaces are occupied by those in *public isolation*; relying on their smartphone to communicate to the outside world to not feel as though they are isolated.

Dr. Tali Hatuka, head of the Laboratory of Contemporary Urban Design in Tel Aviv, has been researching the disparities between smartphone and non-smartphone carrying people in public spaces. Her survey research has shown that a majority of smartphone users have lost touch with public space, because they are so involved in their own personal bubbles. She writes, “The communication of strangers was always one of the key roles of public spaces, observing and exchanging with the other. Because smart phones are supplying so many of these services, this kind of exchange with the stranger is just diminished to almost zero.”4

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3 I realize that this is a very pessimistic view of society, but how many people do you see in public with their nose buried in their devices?

a message

is 7 percent verbal (words only)

is 38 percent vocal (tones and inflections)

is 55 percent nonverbal

- Albert Mehrabian
Post-Modernization and The Terrain

Vague

Our social patterns are not the only factors that have deteriorated our sense of place. During the turn of the 20th century the world of Architecture embraced a zeitgeist that the practice coined the modern movement. Honest materials, function of form, simplicity and clarity of form were among some of the common values. The unfortunate side effects of these collective values were the standardization of things among the architecture community. The result; everything began to look the same... This was especially true in the case of the modular home industry.5

Post-Modernism came about as a reaction to the international style of modernism, but in doing so, repeated the same problems. Designs became oversimplified and repeated which consequently created a mundane landscape of static, repetitive form. As architects, our over zealous attitude to dispel periods of designs past became a feature that clouded the design mind. Manuel Castells discusses postmodern designs as “the expression of time/space compression by capitalism...some of the best illustrations of an intellectual tradition that has used the forms of the built environment as one of the most signifying codes to read the basic structures of society’s dominant values.”6

5 Suburbia was born around this time.
6 Castells, Rise of the Network Society, 418
Robert A.M. Stern refers to these buildings as “political talismans.” The built form becomes a reflection of the values of our culture frozen in that time. The effects of modern and postmodern architecture left a snapshot of unanticipated homogeneity within our urban fabric. When everything looks the same, the city itself becomes a blank canvas, and icons or notable works become part of the class of terrain vague, the unexpected.

In tandem with the Postmodern movement, the Internet was also taking form. People were capable of ‘experiencing’ places outside of their own backyard. Culture was being amalgamated by the interrelation of overlapping online information sharing and mass capitalism. Globalization was taking shape.

8 It should be noted that I still firmly believe that the only real way to experience a place is through a lived experience. No one can truly understand place through images, they are merely snapshots frozen in time.
“In the contemporary city, the passages are now the airwaves, cables, and fibre optic systems that link together the inhabitants with each other and the world.”

- Graham Livesey

**Globalization – The Erosion of Real Space**

Prior to globalization brought about by technology, the idea of locality and place was rooted in real spaces. Public forums remained the source of information and communication amongst city inhabitants. This was the heart of communities; the place of spaces. Kevin Lynch writes, “urban movement and communication, perhaps, constitute the most essential functions of a city.”

Aside from concerts and demonstrations, rarely do we as a society assemble as a collective to communicate, face-to-face, with one another. As a result, online communities have taken the place of communal assemblies, which in turn has dematerializing real space. In his essay, *Passages: Explorations of The Contemporary City*, Graham Livesey writes, “Since the invention of the telegraph and the discovery of electricity in the nineteenth century, information has been dematerialized; hence its movement no longer relies on traditional spaces.”

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9 Tactile, tangible, material places.
11 Livesey, Passages: Explorations of the Contemporary City, 90.
This phenomenon has lead people to detach themselves, unwittingly, from their physical communities, and root themselves in their virtual ones instead. This trend may also be augmented in tandem by capitalism and job availability. People, in recent decades, have more commonly migrated towards larger capital cities that have established themselves in the global market. Statistics show that on average, only 57% of people live in the cities they were born in. A majority of the coastal city dwellers within the United States are not native to the state in which they live, typically required to move there for work related purposes. This, I surmise, is due to the process of globalization. Metropolitan areas, primarily cities then, are more susceptible to placelessness due to the lack of local/historical roots of its population.

The cultural lines of today are blurred. A strong sense of community and place is lost in the pervasive spirit of mass globalization. Even architecture has seen a systemic affect of capital growth. Chains have materialized everywhere around the world, offering a standardized product housed in a standardized roll out building. One can buy a BigMac Ⓡ sandwich from McDonalds, in 118 different countries around the world.

This overlapping of culture has lead to a blurred dystopia where sameness is accepted, and context and uniqueness are lost. What’s the point of getting to know your city, when everything is expected and like?

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13 In an interesting contrast, the Midwest has the highest number of local dwellers choosing not to leave their home states.
14
Savoir Faire - The City Known

While it is my belief that technology has deteriorated one’s perception of place, it has however made places known. What I mean by this is that the use of social media has taken the role of the Savoir Faire for local metropolitan incumbents. With the collective attitude and voices discussed in the Circles section of this essay, people began to realize that navigating the city could be a shared experience online. Websites like Four-square and Yelp! were established to let people know where to and not to go in a city based on their personal recommendation. Livesey refers to this as ‘invisible tech’ saying, “We have witnessed, during the last few decades, transformations in both urban structure and spatial perception brought on by the rapid growth of ‘invisible’ electronic technologies.”

No longer do we need to rely on the recommendations of those we know in a local community like in years past. This has broken down the perception of real space to people who occupy the city. Adam Greenfield, an urbanist who specializes in technology and communication looks at this ‘invisible’ intangible space as a potential for cities to grow upon in the future. He writes, “That which primarily conditions choice

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15 Savoir-Faire is a French term referring to someone’s ability to know how to adapt to a place, an aficionado of the local place.
16 Livesey, Passages: Explorations of the Contemporary City, 90
and action in the city is no longer physical, but resides in the invisible and intangible overlay of networked information that enfolds it.” Referring to the new “option-space” that will someday manifest itself in our built environment, he likens the future to a quote by Archigram in 1963: “When it is raining in Oxford Street the architecture is no more important than the rain, in fact the weather has probably more to do with the pulsation of the Living City at that given moment.” The happenings that go on in the city are often time more important to a city than the artifacts of the built environment that comprises it.

We as designers must adapt to the cultural shifts of socialization and urbanity. One advantage that I find architecture has over the realm of the digital social condition is its ability to be house real time assertions. Systems like Yelp! are archaic in a way because they do not provide real-time analytics of the place. It cannot tell you what is happening, and when. Often times, the information is outdated sometimes 4-5 years old. Society will someday need and respond to a system of physical hashtags that bring material to space and place.

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17 Adam Greenfield TED Talk
18 Archigram, Living City 1963
19 This to the chagrin of Architects
20 Yelp! is essentially an improvement to the phonebook, which has existed for decades.
OPTION SPACE

*Future*: How can architecture and information transform, engage, and activate space?
Rethinking Information – Social Paths

As social beings, we have been exchanging information with one another for centuries. Dating as far back as 4200 BCE, historians have found evidence of written symbols on walls that communicate ideas and beliefs of the past. As society became more advanced so too did the exchange of information. Prior to the advent of the telegraph and telephone, information exchange primarily occurred on the street. Streets, according to Joseph Rykwert, are “social institutions and it is their acceptance by the community that gives them [their] name and [their] function.” Forums and piazzas became some of the most important centers of the city for this reason. But in recent years technology has “dematerialized” this information, making communication invisible and not perceptible to the world outside of the conversation.¹

Graffiti is a contemporary social path. It serves as a symbol or message containing underlying political or social agendas. Some messages are legible, while others are understood only by their subcultures. Artists like Banksy have made it more mainstream.

People now rely on invisible networks to experience the city. Online forums have taken the place of the real world forum and individuals communicate in isolation. These invisible networks are being mapped however with data systems like FourSquare, Twitter, and other geolocational communication resources. The internet is now paving new digital streets that people use to navigate real tangible spaces. Today we track our movements digitally, something that is much older than the way we structure our socialization today.

"Track is the word that implies the most basic course along which movement may take place. To the uninitiated, whether they are members of an alien tribe or children excluded from a game, a track may even be invisible...but to those who are of its presence, the track will be evident."

What Rykwert is discussing here is the most primitive sense of the word, track. Aborigines used symbols as a way finding system around the harsh undifferentiated landscapes they inhabited. They may have been piles of sticks, stones, or clay, that to an outsider would have meant nothing. But to the tribes, these symbols were signs that would guide them from one point to another.

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▲ Figure 3.10  City Ownership Diagram
Levels 1-5 of the city belong to the pedestrian. It is down here that life happens, and the cheek by jowl interactions take place. 6+ belongs to the sky, the city has no ownership of this space beyond this point.
Todays social networking systems are not too far from this primitive concept. Hash-tags have become a symbol by which certain groups form a basis of meaning on twitter. A quick search of what’s ‘trending’ on Twitter today yields the following results:

“#gameinsight, #android, #androidgames, #rt, #wcw, #tpad, #tpadgames, #soydelaeopoca, #teamfollowback, #retweet, #qqcml5, #heartbreaker, #towiv, #iphone, #iphonegames, #sougotofollow, #np, #esvilable, #nowplaying, #off, #follow, #followback, #tbyp, #ftr, #f0l0factsaboutme, #love, #sonunkun, # Fif, #addseguidores, #twin, #qqcmlh, #oomf, #f1, #ff, #jobs, #pulserasrojas, #siguemeytesigo, #quran, #followme, #follow2befollowed”

It is apparent that, much like the aboriginal tribes, we communicate in code with one another, where alien readers will not necessarily understand what these characters mean. Digital information could go one step further to materialize these social symbols, to unite communities, and reengage us with one another on a synchronous basis of communication.

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4 www.hashtags.org/trending-on-twitter/ Accessed on October 9, 2013.
Live interaction is equally as important to a city as the digital flow of communication that occurs within it. Richard Sennett discusses the importance of organized disorder to the formation of place in his book *The Uses of Disorder*. “The point of urbanity is precisely to enforce the daily cheek by jowl encounter with the different and the other.” Sennett is discussing the importance of face to face dialogue with one another, and encourages people to engage with people that may possess values that are unfamiliar or different than their own. The problem with the way we interface online is that we engage in sequestered dialogue, only speaking with like-minded people. This does not allow us to be as socially engaging or ‘outgoing’ in a public setting, because in a way, we are out of practice with those types of situations. This has in many ways eroded urbanity in terms of community and place.

If we wish to rekindle the spirit of place in our urban environments it is paramount that this digital communication manifests into a material thing. While it is impossible to eliminate the prevalence of digital information exchange, designers must engage these systems, seamlessly integrating them into their designs. Our urban spaces must adapt to the global social condition. This thesis project explores the potentials of incorporating digital social systems into the public sphere. Such a project will examine the spatial effects digital information can have on the built environment, and a culture itself. The system will fuel a dialogue between local and global communities, by working under a condition of *territory* – a contested space that can be claimed by either group, by way of a common voice.

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6 Adam Greenfield, TED Talk.
Staging Locality - Site

In order to stage this experiment, I needed to choose a place that experienced issues of local identity, but also had heavy use of these digital mediums that are ubiquitous but detrimental to real space. Using social media as a platform, I began my search through major U.S. that struggle through these tendencies. A recent online survey hosted by Cincinnati Trade Lab asked local participants to answer “what’s the BEST part about living in Cincinnati?” Online contributors had overwhelmingly negative responses to the question. Here were a few:

“The best part about Cincinnati is that I can go somewhere else more fun”
“Living in Kentucky”
“Nothing thats why i moved”
“Nothin....n been here 3 yrs”

It is difficult to say why exactly many people do not identify with Cincinnati, but recent census data may suggest one of the contributing factors. A 2005-2010 census showed that a large portion of the population living in Cincinnati were people who were not born here. The data pointed out that a majority of these foreign residents have not, and most likely will not live here for an extended period of time.

A large portion of the population is young, working professionals who come and go with the demands of their industry.

It is difficult to feel a strong connection to a place that has a large peripatetic population, and has very few differentiators from other regional cities. Norberg-Schulz claims “many places offer poor qualities for identification, and people are not always open to or aware of their surroundings.”

Figure 3.13 Regional Map of CVG Airport (KY)
The arrival to the ‘Cincinnati’/Northern Kentucky airport is an unusual experience. Passengers traveling to Cincinnati fly into Kentucky and must drive back across the border to get to the city.

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8 Namely unique public spaces, proper infrastructure, and unique industry or trade.

Even though the population of Cincinnati is largely foreign to the region, there is a very unique commonality that the community shares. Cincinnati is the second most original city in the US in terms of trending information on Twitter. A study researching ‘trends’ on twitter shows Cincinnati second to LA in terms of geolocational origins of trending topics on Twitter. The research identifies the five most popular cities in the US were trending topics originate. At number 2, Cincinnati is an unexpected mouthpiece for the world. With this phenomenon present in the city, it was important to locate where these social media outlets were being used. Twitter and foursquare maps show that the three most common spots for social media use were the sport arenas, University of Cincinnati’s main campus, and downtown’s Fountain Square. The latter of the three caught my eye as the perfect place to host a global dialogue project that I am referring to as Archilware. This public square, historically, has been considered the center of the city, treated as a place for social gathering, political assemblies, and information exchange.

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11 Paul Brown Stadium & The Great American Ball Park
Figure 3.15  Cincinnati Twitter Activity Map

Figure 3.16  Cincinnati FourSquare Activity Map
Figure 3.17  Cincinnati Twitter Topos Map

Figure 3.18  Cincinnati Twitter Topos Matrix
Directly west of Government Square in Cincinnati’s Downtown Central Business District is Fountain Square. The plaza was established in 1871 and renovated in 1971 and 2005 by local firms 3CDC and BHDP. It has traditionally been a place of importance dating back to pre-historical Native American inhabitants. Prior to American settlement in the Queen City, an Indian mound stood where the present Fountain Square is sited today. It is difficult to say which tribe built the mound, as the Miami and Shawnee tribes were occupying the area at the time white settlers came to Cincinnati. However, neither tribe were known for their mound building. Whether the site was for burial or ritual purposes, it is clear that the area has always been rooted on some sort of event and has been center to life in the area.

Today the square attracts thousands of visitors annually, and the space plays host to a number of public events, including Halloween on the Square, the Winter Ice Rink, and Zinzinnati Oktoberfest, to name a few. The problem with the space however, is its use during non-event times. Because the square was designed to host a large number of people during concerts and festivals, the footprint remains open to accommodate views for these events that host large quantities of people. This is a successful use of space when occupied but becomes its demise when no one is there. And that is how it appears more often than not. A
The square remains empty during the day, seeing peak times around lunch and happy hour. This photo was taken around 2pm, and is a typical reflection of activity at the time.

vast open space with limited seating and shelter is not inviting to anyone, not just the population in Cincinnati. What makes these places engaging is life in the space. Without it, the plaza is just an empty shell. In order to revitalize this city center, an interactive media landscape will be introduced, that encourages dialogue between local and global agents by means of digital and analogue methods.

The square is located at the northeast corner of Vine Street and 5th Street. Approximately 175 ft by 230 ft in dimension, the square is flanked with commercial and city walkways on all four sides. To the east of the square is the Fifth Third Bank Tower, to the North is the Rock Bottom Brewery and Fifth Third Bank Office building. The south west portion of the site is indirectly bordered by the Carew Tower, and the US Bank Tower. All of these buildings will act to serve as the *display surface* for fountain square, reflecting the global conversation\(^\text{12}\) to the audience in fountain square, while also providing a glimpse to the surrounding neighborhoods. At the center of the Square sits the Tyler Davidson Fountain which is the ‘icon’ of the square. It is to remain where it is, and no alterations will be made.

\(^{12}\) Patterned social media, like *twitter*, *vnc*, *instagram*, etc.
Towards the west central part of the square is a small concert shell that has a stage for performances. During non-performance times, café style tables chairs and umbrellas are scattered around the empty square. This space is uninviting due to the temporary nature of the elements that occupy it. The stage was designed with the intention to be put up and broken down easily and regularly. Unfortunately, it has become a permanent fixture in this struggling public landscape. When not in use, the space suggests that something may go on there, but appears as though you are too early or have missed it. I propose to remove it all together, and allow for the transformable Archifware project to become the significant moment in the square.

The music stage is an eyesore on the site. Its temporary aesthetic leaves visitors wondering; “am I early, or did I miss it?”
Social Directive - Client Market

In the early 2000’s, a private nonprofit organization was approached by the city of Cincinnati to revitalize the plaza at Fountain Square. This nonprofit organization is well known throughout Cincinnati by its mellifluous name, 3CDC. The renovation of Fountain Square broke ground in 2005 and had a budget of $48.9 million. Since the projects completion in 2006, the plaza has been host to many of Cincinnati’s central events. Unfortunately, the square does not see as much user traffic as anticipated during non-event times. Some major concerns for the owner, the City of Cincinnati, and the square’s operation manager, 3CDC, are the pedestrian connectivity to the plaza from adjacent areas, bike share implementation, and non-event engagement. In 3CDC’s mission statement, they write, “To achieve its mission to strategically revitalize Cincinnati’s downtown urban core.” The Arch[ware] project takes into account the needs of the owner and manager, while providing a new direction for the center of Cincinnati.

Archi[Ware] - Program

As we embark on a vastly expansive hyper digital climate, designers must embrace the challenge of designing for the new medium. Inaction will inevitably lead to forgotten architecture, where sameness around us becomes the normative condition. Our physical presence in every day life will take a secondary role to the ever-growing envelope of our digital lives. We as designers need to reinforce the importance of here, and the richness life around us. Communication, being one of the most unique aspects of our everyday life has eroded as a result of these digital tendencies. The project I aimed to produce, reintroduces communication into the public sphere, materializing the space of communication in the process. Taking off from Bernard Tschumi’s quote in Architecture and Disjunction, “There is no architecture without everyday life, movement and action; and that it is the most dynamic aspects of their disjunctions that suggest a new definition of architecture.”15

This program is meant to act as a mirror of the global social condition. Its purpose is a theoretical response to the digital social climate we face within our society, and is not meant to act as a solution, but rather as materialized response.

The binary of the program is broken down into two perceptual categories; here and there. The site, which I refer to as here, is an adaptive public landscape that responds to social conditions that are happening around the world — there. There is brought here based on social trends happening in real time. To illustrate what I mean, I will provide a hypothetical situation:

DEC. 31, 2013  11:38:22 PM – Social media sources like Twitter are showing high traffic and trends in New York City. The Arch[ware] System\(^{16}\) picks up on this traffic and shifts its focus to NYC, transforming it’s landscape to respond to the social condition of that place. The public square transforms to mirror Time Square, the geolocation of the current global trend. The buildings here begin to digitally reflect the condition there in Time Square. In one hour here may transform again to be Chicago or St. Louis or Austin as the ball drops there...

This explanation of transformation and mirroring of here and there however is an over simplification of the project in order to provide an initial understanding of the design intent. In order to better articulate the program I will break it down into three categories that define what actually ‘happens’ to the mirrored public square: spatial perception and transformation, visual cognition, and participation quorums.

\(^{16}\) The name I have chosen to refer to the project.
Spatial Application of Information - Precedent Analysis

To really understand how information and technology can influence or define space, it is important to look at works that have successfully incorporated these methods in the past. Not only do these works demonstrate creative avenues for exploration in my own work, but also prove information’s legitimacy in the built environment. Through a documented precedent analysis, I found successful techniques and understandings of interactive architectural systems in tangible conditions. The following are a few projects with exemplary systems that Archi[ware] aims to achieve.
Living & Learning Residence Hall 6
Gallaudet University Washington, DC
Architect: LTL Architects
60,000 sf

The Gallaudet University Residence Hall is a unique building because of the strict set of design guidelines the university imposed upon the designer. Serving as a department for Deaf Studies, the dormitory was designed with the idea that people who occupied the space would receive no audible cues from their environment. A rigorous visual discipline was forced upon the designers to serve the deaf community. Many of the design guidelines remain unnoticed to those who can hear, but the building serves as an exceptional model for the deaf community. The most notable aspect of the project was the study of walking-conversation between deaf people. It is a delicately choreographed dance that would prove to be difficult to those who do not face the same obstacles. The deaf building users are able to navigate the space while signing to one another by easy to read coding systems throughout the building like colors, eye-level formal gestures, and open or rounded corners where walls come together. This coded system allows for implicit movement throughout the building which allows the deaf community to traverse through it comfortably and legibly.
The reason this project became so important to me, was because of the implicit nature the architecture promotes in this building. The way in which the body traverses through space is a very communicative act in itself. Architecture has the ability to provide formal legibility beyond signage. The Archi[ware] project intends to use formal language as a means of awareness. What I mean by this, is while architecture can provide legibility, it also can provide disjunction which can make people cognizant of their surroundings. If the terrain becomes uncertain or unsettling, people will instinctively become aware of their surroundings.
Wyly Theatre  
*Dallas, Texas*

*Architect: REX Architecture*  
575-seat “multi-form” theatre  
80,300 sf.

One of REX Architecture’s most recognizable works, the Wyly theatre goes above and beyond the typical performance space. While the building is an impressive feat in and of itself, the aspect of influence with the Wyly, is the Potter Rose Stage located at the heart of the building. REX Architects designed the space to be transformable, to cater to any performance condition. Using a series of operable moving floors, the theatre can be transformed into the most intimate of spaces, or expansive stages within hours. The configurations of the space do not limit it to any particular form or function.

The stage area utilizes a very revolutionary mobile staging system designed by SERAPID. The Wyly main stage transforms routinely using SERAPID’s LinkLift system that moves the stage in panels up and down, also allowing the panel plane to rotate where needed. This allows for an infinite array of configurations and spatial qualities in the main theatre itself. The transforming stage is complimented by Seating Wagons that move up, down, and also rotate as well. The main theatre can play host to large events or the most intimate of performances because of its transformability. This element of customization and transformability is important in public space, because all too often the space’s function is designed to accommodate the most extreme situations, typically large events. But when large events are not taking place, these spaces often feel desolate and uninviting.
Memorial de l’holocauste (Holocaust Memorial)
Berlin, Germany
Architect: Eisenman Architects
205,000 sf.

The Berlin Holocaust Museum is one of Peter Eisenman’s most publicly criticized works to date. Proposed in 1988, the memorial which honors the Jewish people that were murdered during the holocaust was not approved until 1999 by the Budenstag of Germany. Originally designed in collaboration with artist, Richard Serra, the design won the competition for commission in 1997. Serra left the project for personal and professional reasons before the construction phase of the design.

The memorial is made up of 2,711 monolithic but unique slabs that undulate along a grid. Each 5 sided slab has unique dimensions, some at ankle height, some towering over visitors. The field of slabs that often are associated with tombs or sarcophagi are meant to provoke emotion to the visitor who is to realize their representation of those murdered during the horrific time. The space is said to be hauntingly quiet and powerful. Visitors are able to meander through the grid of forms, sometimes capable of seeing their path beyond, sometimes enclosed on all sides by the massive figures. The space is disorienting and illusory, which was one of the objectives Eisenman Architects set out to achieve with the monumental design.

17 The Budenstag is the constitutional and legislative body in Germany.
What I find most fascinating about the design is the complexity situated within its simplicity. Nothing about the design is literal, which leaves room for many interpretations. The architecture, in this sense, becomes performative because it embodies so much meaning. The project is not understood simply through pictures or distant observation, but through lived experience. The body in space cannot be felt outside of the physical or temporal roots of reality. It is my goal to incorporate this element into the design of Archi[ware]. It is my belief that synchronous, real world communication has a powerful effect on public places which could be materialized to influence or challenge the spaces we take for granted.
‘Voyagers’ at NMM
Greenwich, England
Architect: Flightphase
Projected Media Surface – 150 sf

The voyagers installation in Britain’s National Maritime Museum is a simple but highly complex display of spatial technology. Using a system of 3D programs and calculations, the media of the maritime museum are projected onto a 26 facet object seamlessly. The interesting aspect of the design is the way in which the image responds to a ‘built’ environment, taking into account contour, depth, and field.

While the design of the installation is quite simple; interactive surfaces along a multifaceted linear form, the technology behind the project is incredible. Design group, Flightphase, teamed up with visual artists, The Light Surgeons, to produce this simple yet highly design. The design uses visuals projected onto a multifaceted plane. Because each panel is unique in shape and angle, complex calculations were carried out to simulate a smooth transition from one panel to the next. Text, images, and video move fluidly along the form seamlessly through automated, computer generated projection imagery.

While the scale of this project is quite small, I think it could be implemented at a larger scale. People tend to be attracted to engaging and interactive information systems but are disengaged with their built environment. Archi[ware] proposes to envelope the square with visual information projected onto the built surfaces that surround it. The square is flanked by numerous large, monolithic facades that would be ideal for visual information systems. Incorporating the same technology that the ‘Voyagers’ project masterfully utilizes will allow for seamless, screen-like, displays around the square that the tech-hungry population will be attuned to. In order to engage users, information must go beyond the screen. A screen is too predictable and unresponsive. This visual system will be complimented by a series of other interventions across the square.
Spatial Perception - Proxemic Transformation

In 1963, a cultural anthropologist by the name of Edward T. Hall coined the term Proxemics that referred to his research on the use of space and communication. In his research on nonverbal communication, haptics, and kinesics, Hall realized the potential in understanding personal space and the way in which social behaviors change based on proximity. In 1966 he published his diagram referred to as Reaction Bubbles which illustrated radii of personal space. See Figure 3.1.
In order to add to the sensation here being transformed into there, the design must force occupants to feel what is happening there. The physical terrain must transform mechanically to alter the squares landscape. The transformations that will occur will be spatial arrangements based on the spatial conditions the Arch[eware] System will be mirroring. In the case of Time Square during New Years Eve the digital square would take on tight clustering formations that force people to overlap each others’ personal space radius in order to augment the feeling of being there. But this is just one layer of the global mirror that this project aims to produce.
Visual Cognition – Global Reflection

In addition to the spatial transformations the square will take on, the project will incorporate visual aspects as well. In order to display the places and spaces that here will be mirroring, a reconstituting of existing building facades will need to be implemented. Using the existing buildings, the square will display digital images that reflect social media, and contextual imagery relating to there. These images that will be broadcast across the built landscape need to go beyond a screen however.

In order to be real the imagery needs to be adaptive and responsive. In his book *For An Architecture of Reality*, Michael Benedict refers to the ambiguity of reality in our built environment. He writes, “We live in a world made up of many worlds, which effects our ability to define ‘reality’. ”19 By bringing the world here and making the image responsive, like the haptic world, we may perceive this visual as an altered reality, similar to ones we experience online or on our mobile devices.

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Digital (Global) Takeover Condition
Participation – Global vs Local Quorums

In order to go beyond the image of the global dialogue, the project will need to include a measure of dialogue between the local and the global conversation. In order to do so, the system is divided into two binaries, local and global.

The global system is broken down into two parameters, geo-proxemics, and traffic volume. The number of voices (or tweets), determine the verticality of the shifting grid, while the geo-social proxemics factor determines the spacing between the moving pixels. Each country utilizes very different forms of spatial communication as noted by Edward T. Hall in his study of proxemics. In the U.S. for example, 3 ft between speakers is usually acceptable while in Chile 1ft is acceptable. These spatial arrangements have a powerful affect on how we perceive space, so the digital square aims to produce that global feel to the square, while interrupting the day to day life that is occurring locally.
In addition to the global condition, a local factor is applied to the system. The square is meant to be a contested space, a debate between the local and global conversation. All around the square, on the Fifth Third Facades, the global conversation will be displayed. While the local voice is quiet, the global digital will take over and influence the media transformations. If however the local population wishes to take the square back, they will be encouraged to form a quorum to outweigh the global conversation. Each local voice is assigned a scalar factor that can outweigh the global voice.

Interaction kiosks will be setup surrounding the square that allow the local individuals to take back fountain square. 1 voice at the square is equivalent to 1,000 global voices. Local individuals can also tweet their local voice with the hashtag #takebackthesquare but will only equate to 100 voices. Your physical presence in the space has a greater factor in the use of the space locally. Once controlled by the local population, the square will have a series of prefixed or custom configurations that the public can assign. This highly transformable space encourages the local population to participate in public space, animating it in the process.
Global Proxemic Scan

Times Square, New York City, NY
[-73.98,40.75, -73.97,40.76]
Cincinnati
[-84.52,39.09, -84.50,39.11]
Washington DC
[-77.05,38.91, -77.00,38.88]
LA Downtown
[-118.22,34.03, -118.27,34.07]
Chicago Downtown
[-87.61,41.86, -87.64,41.90]
Miami Downtown+Beach
[-80.23,25.81, -80.10,25.74]
Dallas Downtown
[-96.84,32.86, -96.74,32.75]
Seattle
[-122.36,47.63, -122.29,47.58]

London England
[-0.07,51.50, -0.14,51.52]
Paris France
[2.41,48.85,2.29,48.89]
Berlin Germany
[13.44,52.49,13.31,52.55]
Tokyo Japan
[139.67,35.63,139.80,35.72]
Johannesburg South Africa
[27.99, -26.22,28.08, -26.16]
Moscow Russia
[37.55,55.79,37.69,55.73]
Cairo Egypt
[31.18,30.07,31.24,30.02]
Tweet Proxemic Scan Diagram

Sample Proxemic Formation Index

northern europe pipeline

1.8 million tweets

#germanywinsworldcup

proxemic factor

spatial translation
GLOBAL TAKEOVER

Quorum Scales

1 local voice = 1,000 global voices

1 local tweet = 100 global voices

GLOBAL TAKEOVER
Quorum Scales

LOCAL TAKEOVER
No. 01 Solo Visiting

The solo visitor visits certain squares during hours that are typically considered to be ‘off-peak’ times. Typical uses include eating lunch, resting, and people watching. Though the visitor may often be alone, they tend to position themselves in an isolated, off-peak location amongst everyone else. Typical interactions are asynchronous, which would include social media, email, forums, blogs, etc. These users tend to be more comfortable when they have their own space.

No. 02 Parkour Park

The Parkour enthusiast is the adventurous, typically outgoing type. The sport pushes individuals to challenge themselves through a myriad of spatial boundaries. While the sport can typically be practiced alone, it is often practiced in group settings. Parkour relies heavily upon synchronous communication as strategies, analysis, and encouragement are voiced in tandem with the activity. While Parkour does rely on face-to-face communication, it does, however, require a lot of space between users to safely and effectively compete.

No. 03 Skateboard Park

Much like the Parkour enthusiast, the Skater is typically an adventurous, gregarious, and often identifies with a larger group. The Park skate park typically shares lanes, but has designated times for specific groups who share similar interests and styles. The skateboard park is a community hangout of sorts and thrives on synchronous communication. The skate park group does identify with a larger community synchronously by posting pictures and videos of the activity online for others to see.

No. 04 Dance Performance

The Dancer is unique to the style of dance they perform. They cannot be categorized into specific personality types. Depending on the style and intensity of the dance, personal space swings from being extremely close to having a great deal of space. The audience is extremely close to the dancer or communicating with one another. Non-verbal cues are choreographed amongst the dancers in synchrony harmony, so that the bodies move fluidly and orchestrated through the space.

No. 05 Group Reading

Outside of the center, the group reading is often understood from the audience’s perspective. It is noted that the spatial proximity towards the person next to you will be tighter than normal. The audience meets in groups of no more than 5 people. The audience must be close enough to the dancer to appreciate the story being told. During the reading, the audience is often quiet but will discuss the book after in a synchronous style of communication.

No. 06 Class Field Trip

The class trip is very similar to the group reading condition, but perhaps a bit more focused on presentations. In order to remain safe and organized, instructors rely on close-structured presentations and shared spaces within the classroom. The students understand that traveling in tighter formations is a rule, and don’t mind standing shoulder to shoulder at times with their peers (this changes based on the age of the student). Field trips rely heavily on asynchronous, real-time instruction.

Local User Configurations
No. 07  Conference + Meetings

Conferences and meetings are typically comprised of business professionals who rely on group communication to strategize and discuss ideas. Typically, meetings are held in closed rooms with limited space, allowing for smaller conversations among 2-4 people at a time. These meetings rely on asynchronous communication, where email, instant messaging, and telephone calls are the primary methods of communication, as participants may be located in different time zones.

No. 08  Small Sports

The type of sporting activities that could occur on a square are usually those that do not require a large space or that can be played by 2-4 people. Examples include Padel (a form of tennis), billiards, and some indoor sports like handball where the height of the court is adjustable to fit in a limited area.

No. 09  Gaming Tournament

The gaming tournament is typically an activity that many people are familiar with. The event is held at convention centers, internet cafes, or even individual homes, depending on the size of the event. The participants typically play against each other in a game where they must complete a set of tasks or objectives within a certain time frame. Each participant has their own space to compete in a virtual game, where the tournament is themed after. In order to reduce cheating during the games, the tournament divides the players with cards or partitions to ensure fair gameplay. Communication is asynchronous, and it can be by voice, text, or email, depending on the media of choice.

No. 10  Banquet

The banquet is typically a part of a larger event or community gathering, where the attendees are gathered to celebrate or commemorate something of importance. In terms of provision, the banquet area could be designed as a large conference hall with a slightly more open space to accommodate a larger audience. The social space is designed to encourage guests to mingle and socialize, with a slightly higher acceptance of others in their personal space because of the underlying community aspect. All the communication is asynchronous, typical of individual ideas or conversations, and there is no need for formal communication.

No. 11  Fashion Show

The fashion show is broken down into three categories: models, outfits, and spectators. All models are comfortable, being right next to their fellow colleagues, while spectators are seated in a more formal setting. The spectators have a common understanding that others want to be in close to the action as possible, so being adjacent to others is not uncomfortable. Some of the communication is synchronous physical signals, but most of the communication remains asynchronous, until after the show.

No. 12  Teased Event

Unlike movie theaters, the public televised event is a bit more informal to the viewers. Because of the large atmosphere, the viewing tends to vary a bit more space than at the theater. This usually includes a bit of a claim of space early in anticipation of the event, and prior to a buffer to be kept between their group and groups adjacent to them. Synchronous communication occurs throughout the event among the individual groups present.
No. 13 Art Gala

The typical viewer at an art gala understands the spatial parameters implied by the artist's intention for the art to be viewed. The communication is typically reserved for after or outside the event, ensuring that the art is not disturbed during the viewing of the art. The art is typically a hybrid of both synchronous + asynchronous communication as it relies on review and discussion to be successful. The tendency to be more synchronous or asynchronous is based upon the style of art being displayed.

No. 14 Happy Hour

Everyone leaves a happy hour. It is a time to socialize and socialize with their fellow men. The happy hour scene is typically thought of as a working professional下班后的召集点 and allows for a more comfortable environment. The happy hour scene is typically thought of as a working professional environment and allows for a more comfortable environment. All day, working professionals utilize asynchronous communications like email and instant messaging systems to correspond with other professionals. The happy hour tends on synchronous communication, typically the more lively the better.

No. 15 Festival

The festival is a unique activity, because it is typically an impromptu event that is planned well in advance. It is a very public centered event, so that it does not lend itself to shared space in more confined conditions of the space. The fen- tency to be more synchronous, more difficult it is to hear, as it is more advantageous to be close, even if this means sitting closer to other individuals. Vendors and consumers gather to talk, shop, and embrace their community.

No. 16 Religious Ceremony

Much like the group railing, the religious ceremony is broken down into two groups, the center and the audience. The audience tends to cluster closer together depending on the conditions of the space. The further away one is, the more difficult it is to hear, as it is more advantageous to be close, even if this means sitting closer to other individuals. Communication is synchronous but more proximal to their spontaneity, depending on the religious group.

No. 17 Market

The public market can be thought of as a tighter festival atmosphere. The market is meant to serve both the consumer and the vendor, but does not necessarily have space to correspond with other professionals. The market tends on asynchronous communication in order to be successful. Vendors and consumers gather to talk, shop, and embrace their community.

No. 18 Skating Rink

Already an annual favorite on Fountain Square, the ice skating rink serves as a community winter activity. The spatial dynamics of the square during this time are defined by the space's physical characteristics. Distance is kept between skaters due to the unpredictability of the skill levels of others on the ice. For safety, individuals will keep their distance from others, so as not to fall or collide while avoiding others. Communication is synchronous typically amongst partners, families, or groups.
Concerts are dependent upon the style of art that is being shown or its physical setting. A rock concert is more an orchestral show than a rock concert. The audience is in a series of fixed spaces, sometimes touching or connected in some way. The volume of music is so loud, synchronized communication is limited to cheering. A majority of the communication is asynchronous, texting, tweeting, and instgramming.

The protest is one of the highest activities on the presentence scale. When people are assembled in public spaces with displeasure or dissatisfaction, most aspects of personal space are violated. This allows everyone to see everyone. Protests are the only event at the site that is spoken for a common good. The communication is a hybrid of synchronicity and asynchronicity. People shout and hold their conversations in real time, while simultaneously posting their beliefs on social media outlets.

A news conference is a relatively unique concept in that they do not traditionally host crowds. Most news outlets allow spectators behind glass windows so that they may be silent. The lack of a direct face-to-face communication model (except perhaps to interrupt the broadcast) means that participants could engage synchronously during continentals and breaks. Presenters would be similar to a televised media event.

Similar to a protest or concert, the New Year’s Eve attendees do not notice as much of their personal space being invaded as they would in a visual public setting. This means that the personal space barriers and the audience to become more control of the “call dropping.” Synchronicity in communication is limited to cheering and brief exchanges in the crowd. Most communication, however, remains asynchronous, texting, tweeting, and instgramming.

Much like the protest, the vigil brings people together for a common good, to remember or celebrate someone or something. The focus is central, which means people tend to try to be as close as possible to the subject as possible. Because of this, the position of the body in space is very densely packed, and personal space barriers are broken down. Communication is typically synchronous and in various as a sign of respect to the subject. Asynchronous activities like photo sharing will often occur.

The career fair is an interesting dynamic space in terms of presenence. Most people rise to the height as individuals and meet businesses that are represented by individuals. While in a crowded space like this, communication is a mix of a crowd of individuals. Therefore, visitors tend to want to maintain their personal space as they would in any public setting. Almost all communication is synchronous or silence dialogue between employers and hopeful employees.
Food trucks were introduced to the design because of the way in which they closely relate to the program. Much like the Arch[ware] system, food trucks rely on social media and local participation to remain active and stable. The food trucks have a designated space along the southwest corner of the square to be used during local takeover conditions.
“The problem of the invisibility of the countless networks penetrating public and private space is ultimately insoluble. What can be done, however, is to remake them in a local and visible form, in such a way that they remain in the public eye and in the public consciousness. This strategy can be expressed in ‘tactical cartography’, using the tools of the network of waves (gps, Wi-fi, 3F, etc.).”

- Erick Kluitenbergh

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**Digital Futures**

Change is a difficult thing to handle. We are wired to stick to what is comfortable, and often times are resistant to things that impose challenges. As designers, however, we are responsible for facing those challenges, and introducing change to the world. While social media and digital communications have changed outside of the realm of architecture, their reaches go far beyond their digital screens. They have become a way of life, sometimes at the expense of day-to-day life. The world around us is no longer a material thing, it is a digital utopia enlivened by a digital public.

Architecture faces a slow but sure erosion, as the real world transitions into a digital medium. Architecture must face the challenge presented before it, head on. This starts with public places, which have been the first to become abandoned. It is our job to make visible, the invisible information that is consuming our societies and to reintroduce communication into public places.
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Compuserve Ad, 1982 - http://axelpfaender.tumblr.com


Habitat Promotional Video, Circa 1986 (Lucasfilm) - https://www.youtube.com/watch?v=VVPulhO3yjc

A message: Constructing a Conversation - Author

New York City Without Its Icons - Martin Cogley

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Tyler Davidson Fountain, 1971 - UC Libraries

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Cincinnati Social Collage – Author

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Living Learning Residence Hall 6, Ext. + Int. - LTL Architects

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Max Floor Seating Configuration - REX Architects

Seating Section – Ibid

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The Voyager installation in Britain’s National Maritime Museum – Flight Phase

LBJ ‘Close-Talker’ – Yoichi R. Okamoto / White House Photo Office

### Selected Readings


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