Surveillance, Spectacle

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How, and to what extent has a vision centric attitude influenced the constructed environment in which design interventions are held to the optic reasoning?

Accepting that sight is not purely innocent but rather compliant as a tool of surveillance and spectacle, this study looks to examine different methods and uses of the gaze. To demonstrate this binary relationship of vision, examples from various disciplines where the eye is represented through different mediums are studied and related to one another. The ultimate intention is to apply these defined strategies within an urban context.

scope, optics, vision, gaze, eyes, seeing, visibility, view, scopophilia, power, survey, spectacular, cinema, photography, voyeurism, glass, mirror, riot, revolt, stage set, theater, path, panopticon, armature
### Research Framework

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**Introduction**
Perhaps the most scripted way of seeing is fully characterized by the field of cinema. The development of film grows out of moving images where experimentations with illustrations and multiple freeze frame photographs can be traced back to Eadward Muybridge, E.J. Marey, and Thomas Edison. Through the development of tropes and scopes, optical illusions are created and the eyes begin to see motion images. Cinema, a spectacular event, owes its origins to the evolution of these devices and photography.

The other variation of these devices of spectacle are surveillance tools. These devices transform the audience from mere spectators to observers or surveyors. It is no longer about passively absorbing moving images but the observer now has implications of actions that follow visual contact. The sight lines out of a military bunker most likely suggests gun fire to follow. The periscope of a submarine skims the surface while the commander may project its torpedo at the subject. The bomb sight of a plane is a detail of a high degree of fine tuned calibration through sight which leads to the pulling of a lever and opening of the bomb bay doors, leading to the release of a barrage of explosives.

This first section aims to establish the binary condition of vision at the small scale device where there are two distinct characteristics - surveillance and spectacle.
"Their fundamental characteristic is that they are not yet cinema, thus nascent, imperfectly designed forms. Obviously there is a connection between cinema and these machines of the 1830s, but it is often a dialectical relation of inversion and opposition, in which features of these earlier devices were negated or concealed."


**Zoetrope.** Separate frame of illustrations or photographs are placed on the interior wall while the spectator peers through the slits to see the images in motion.
“The entire life of societies in which modern conditions of production reign announces itself as an immense accumulation of spectacles. Everything that was directly lived has moved away into a representation.”

Martin Jay, Downcast eyes the denigration of vision in twentieth-century French thought. [Berkeley: University of California Press, 1993], 381.

Eadward Muybridge discovered, a moving image is just numerous frames broken down. With praxinoscopes and zoetropes, the circular form and their rotation is one method of bringing motion to literally create moving images in the most primitive form possible.

Praxinoscope. An alternate form of the zoetrope, this device uses central mirrors to reflect the images, allowing for the spectator to be positioned at a different level.
Similar to Edison’s kinetograph, the earlier Polyrama Panoptique was a very personal experience of viewing an event through a fraction of time. The creation of a dark space that the eyes peer through establishes an intimate viewing experience reserved for the elites of the time.

For the spectator, this initiated a sense of power where they were able to control the mode of image that was presented: day or night mode.

Polyrama Panoptique. Vision is channeled through and encapsulated by a black box with interior control of lighting. By adjusting the direction that lighting penetrates the box, the image appears differently.

The viewer here is an interiorized spectator.
“Retinal afterimages do not simply dissipate uniformly, but go through a number of positive and negative states before vanishing.”

Jonathan, Crary. Techniques of the observer: on vision and modernity in the nineteenth century. 110.

Initially, these small scopes were used as scientific experiments that documented the frames per second that it took for the eyes to become incapable of differentiating every single field. They quickly transformed into popular entertainment gadgets in the 1820s.

**Thaumascope.** The smallest and one of the earliest methods of creating visual illusions. Through rapid rotation of the central piece, the front image and back image collapse into one.
“The stereoscope spectator sees neither the identity of a copy nor the coherence guaranteed by the frame of a window. Rather, what appears is the technical reconstitution of an already reproduced world fragmented into two nonidentical models, models that precede any experience of their subsequent perception as unified or tangible.

Jonathan, Crary. Techniques of the observer: on vision and modernity in the nineteenth century. 128.

Like the thaumascope, the stereoscope also became a form of entertainment where slides of single photographs were created captivate spectators.

**Stereoscope.** These devices take advantage of eyes’ flaws of judging distance when the same image is presented to each eye independently. By adjusting the distance of the image to the eyes, different three dimensional effects are created.
“Metropolis” created at the peak of German Expressionism, utilized many highly calibrated camera tricks to create the exciting science-fiction film. This was a method that developed out of necessity, during the production process, the film significantly expanded beyond the budget. Building 1:1 sets for shots became unfeasible, resulting in Fritz Lang depending on trick filming to reduce costs.

But even with these trick shots weren’t able to save the production company, UFA, from going under after the release of “Metropolis”.

**Schuffton Shot.** A central reflective medium collapses a small backdrop painting onto a 1:1 film set that is filled with actual actors. From the camera’s positioning, the image and the actors appear to be a singular seamless image.
“Like most reproductive acts, this process has profound implications for the original building, involving not only the appropriation of architecture by photography, but also the turning of a photographic image into an icon.”


The mobility of hand held cameras allow reproduction to occur at a rapid rate, meaning what the eye sees in a particular moment of time can be recreated in a two dimensional form and presented again later. This began to stretch the boundary and image of architecture as the influence of a particular space or event lives much longer than the original.

“The camera is a tool for idlers, who use a machine to do their seeing for them.”

James, Palms, and Jardot Maurice. Le Corbusier: creation is a patient search. [New York: Praeger, 1960], 37.

Collodion Camera. An advancement of the dagguerrotype camera, this device also combines properties of the camera obscura to allow for mobile photography.

“The logical distinction between what is imaginary and what is real tends to disappear. Every image is to be seen as an object and every object as an image. Hence photography ranks high in the order of surrealist creativity because it produces an image that is a reality of nature, namely a hallucination that is also a fact.”

**Arrowslit.** These openings are typically carved into the fortress walls for defense measures.

The arrowslit acts as a dual function aperture. It allows for the archer to survey the landscape for possible threats while being able to angle and pitch the bow and arrow at targets.
The ideas and geometry behind the telescope became fully developed in 1609 when Galileo Galilei based his designs on news from the Netherlands about a viewing instrument that provided military possibilities."


The scopic qualities of the periscope are derived from the contributions that Galileo concluded with his early experiments on telescopics. It is one of the earliest apparatuses to extend the visual performative aspects of the eyes to extents that proved the contemporary beliefs of the time to be erroneous.

**Periscope.** This allows the surveyor to be at a distorted angle and a distance away from the subject being observed.
In 1944, the Nazis built the Atlantic Wall in anticipation of the Allied landing on the beaches of France. They outfitted the landscape with 15,000 concrete structures that included firing units, light howitzers, antiaircraft guns, antitank guns, mine throwers, command posts and kitchens.

“The buildings are no longer just receptacles but binnacles, which is what distinguishes them from ordinary architecture and what gives them this anthropomorphic character. There is here a close relationship between the function of the arm and that of the eye.”


At the peak of modernism in Paris, Auguste Perret and Le Corbusier had a little verbal scuffle over the importance of window proportion and orientation. Pierre Jeanneret claims that human vision operates in the horizontal field only. Panning occurs left and right, not up and down as the vertical window would suggest.

“Through the long horizontal slot of the German Bunker... which replicated the very horizon which it surveyed, German scouts witnessed a three dimensional war emerging from the flatness: battleships slipping from the centerline of the horizon into the lower half of the optical field and aircraft slipping into the upper half.”


**Machine Gunner Bunker.** Protects the surveyor and gunner while the sight lines are able to transform directly into lines of fire. This threat and defensive measure allows for the gunner to calibrate a line of fire in a horizontal raking motion.

“The reinforced concrete and steel envelope is too tight under the arms... Slowed down in his physical activity but attentive, anxious over the catastrophic probabilities of his environment, the visitor in this perilous place is beset with a singular heavi- ness; in fact he is already in the grips of that cadaveric rigidity from which the shelter was designed to protect him.”

Paul, Virilio. Bunker Archeology. 16.
“Hence the major effect of the Panopticon: to induce the inmate to a state of conscious and permanent visibility that assures the automatic functioning of power. So to arrange things that the surveillance is permanent in its effects, even if it is discontinuous in its action; that the perfection of power should tend to render its actual exercise unnecessary; that this architectural apparatus should be a machine for creating and sustaining a power relation independent of the person who exercises it; in short, that the inmates should be caught up in a power situation of which they are themselves the bearers.”


“Benign laboratory of human desires and deterrents, a system for testing a central utilitarian principle that calculations of pleasure and pain, unique to each individual, govern all human interaction.”


“Foucault relentlessly emphasizes the ways in which human subjects become objects of observation... But he neglects the new forms by which vision itself became a kind of discipline or mode of work.”

Jonathan, Crary. Techniques of the observer: on vision and modernity in the nineteenth century. 16.

Panopticon. As a general idea, this apparatus embodies the eye of power within the central guard tower with concealed openings while the prisoners are left fully exposed on the perimeter ring. This allows the veiled guards to monitor and discipline through the power of vision and not physical contact.

“Panopticon conceived as a merciless joke, device for suspending the autonomy of its charges for the voyeuristic gratification of the Inspector, a role Bentham too eagerly offered to fill himself.”

The nation is at war. There isn’t time for ceremony and parade. This isn’t a war of flags and marching. It is a war of finding the target in the cross hairs of the bombsight and setting the release... It is a technical job, a surgeon’s job.”


“Mindful of the secret trust about to be placed in me by my Commander in Chief, the President of the United States, by whose direction I have been chosen for bombardier training... And mindful of the fact that I am to become guardian of one of my country’s most priceless military assets, the American bomb sight... I do here, in the presence of Almighty god, swear by the Bombardier’s code of Honor to keep inviolate the secrecy of any and all confidential information revealed to me, and further to uphold the honor and integrity of the Army Air Forces, if need be, with my life itself.”

James Alter. From campus to combat a college boy becomes a WWII Army flier. [Lanham: Garrett County Press, 2011], 53.

While the RAF were more inclined for night time bombing when the lights of the city would guide their bombers in, the US Army developed day light precision bombing that mainly targeted the production facilities of the Axis.

**Norden Bomb Sight.** A tachometer sight that takes into consideration wind speed, aircraft speed, bomb weight, distance from target and altitude. Initially developed by US Navy during WWII, this valuable device survived to be used in action in Korea and Vietnam.

“The bomb sight became a symbol of responsibility... Never left unguarded for a moment, taken out of its safe only by a bombardier on mission and he never leaves it. He is not only responsible for its safety but also its secrecy.”

John Steinbeck. Bombs away; the story of a bomber team, 50.
The sniper in the warfare is often part of an elite division that is glamorized. In Soviet Russia, the sniper named Vasily Zaitsev was an icon for Stalin's propaganda division. His abilities to scope out German officers on the Eastern Front was a symbol of hope and raised moral for the regular infantrymen. During a five week period at the battle of Stalingrad, Zaitsev was noted for 225 kills—eleven of which were enemy snipers. His duel with the snipers would sometimes last for days where relocation and distraction were as much of the strategy as visual calibration through the scope.

“Our society is not one of spectacle but of surveillance... We are neither in the amphitheater, no on the stage, but in the panoptic machine, invested by its effects of power, which we bring to ourselves since we are part of its mechanism.”

Martin, Jay. Downcast eyes the denigration of vision in twentieth-century French thought., 381.

**Range Finder Scope.** Mounted onto firearms or surveying tools, this scope extends the eyes capabilities to see far away subjects. Similar to the bomb sight, it also accounts for factors that could derail an honest shot such as wind speed and distance.

Although the direct fire line of a gun suggest direct line of vision but the complexities of war time situations typically suggests a constant meandering and seeking out for kills. The range finder scope acts a tool that not only projects vision into the distance but also precisely accounts for factors beyond the naked recognition of the human senses.
Following the earlier section on vision devices, this segment elaborates on the method of channeling the eyes’ gaze in a larger scale.

The stage set of Teatro Olimpico in Vicenza, Italy is one of Andrea Palladio’s last projects with Vicenzo Scammozzi. The original intentions called for the streets of Thebes, Greece to be mimicked within the interior setting of the theater with an urban facade acting as the mask to the forced perspectives in the back. Ultimately, this space for performance is of spectacle and the mimicked streets are skewed to adequately fulfill the trompe l’oeil effect.

"It happens often that the architect wishes to show both the exterior and the interior of an edifice, for which purpose a sure and quick device is to have first rendered the entire ground-plan of the edifice in perspective and the actually drawn from those parts of the elevation."

Sebastiano, Serlio. The First Book of Architecture. [Vinetia: Per Cornelio de Nicolini da Sabbio a instantia d’e Marchio Sessa, 1551], 104.
The interior theater contains 3 major trompe l’oiels mimicking the streets of Thebes while an exterior facade modeled after the Doges palace in Venice masks the forced perspectives.
Width of visual cone, peripheral vision and optimal average between focal cone and maximum periphery

Directionality of major forced perspectives in relation to the optimal visual cone
The stage floor of the forced perspective is angled upwards at 18 degrees to be able to include a deeper street scene.

Major transition portals that act as apertures to the forced perspective stages.
The buildings within the forced perspective project from the artificial vanishing point.

An exterior facade is mimicked, acting as a partial mask to the contents behind and completes the *scaenae frons* of the theater.
The mask poses a limitation to the viewer which actually helps to celebrate the trompe l’oeil effects.

Without the use of the forced perspective, the desired effects of the trompe l’oeil would require up to three times the depth of space.
This section aims to experiment with properties studied from the first two sections in a material form. While the previous studies involved specific techniques that channel gaze, these iterations aim to collapse variations of those methods with a set of physical materials.

The properties in all the experiments contain a reticle, similar to the opening of the bomb sight which positions the eye at a specific moment while a wood base holds all the pieces together, the subject on view are blue figures.

An initial thought to this experimentation is that while mirror intuitively can reflect an image of the subject at different angles, perhaps glass also has the same properties where at certain angles they could actually contain a reflected image. Also, with each reflection in either mirror or glass, the images are perhaps distorted through multiple overlaying effects. This is partially inspired by Charles Baudelaire’s literature, *The Eyes of the Poor*, that discusses the double exposure effect of single pane cafe windows on the boulevards of Paris. (To be discussed later)
[1] Reticle

[2] Base

[3] Subjects

The sight line is direct, the simplest of the iterations. The reticle is placed on axis with the subject that is flanked by glass.

Maintaining the direct sight line, a pair of mirrors are embedded in the axis to duplicate the subject.

The subject disappears and is only presented in the reflections and refractions through the different media.

The 2 subjects are out on the periphery, brought together with their angled reflection. This iteration embeds the element from E1, where 2 panels of glass are inserted to enclose the reflection through the medium’s refractive qualities.
[Direct + Reflect]
[Indirect + Reflect]
[Duo-indirect + Duo-reflect]
Network and Mobilization are terms used in respect to a singular or a group of spectators/observers. While most of the studies have been analyzing vision in a singular and more or less static method, this section explores different modes of seeing that involves a larger system of perspectives and dynamic positioning.

*The Truman Show* is an example of a network of cameras that switch back and forth to follow the oblivious main character, Truman. It acts as a method of surveillance itself that would eventually bring psychological effects to the main character, similar to the type of non-physical disciplining methods that Foucault describes of the Panopticon.

The film begins to introduce the idea of voyeurism where the viewer is concealed from the subject being watched. This is an idea that is carried over to the interactive theater, *Sleep No More*. The traditional audience is given a mask and the freedom to wander and experience the show based on their own discretion on positioning.

*The Truman Show* and *Sleep No More* provide the spectators/observers a dynamic viewing experience where seeing is no longer a static situation.
Seahaven is a fictional film set based on the New Urbanist town, Seaside, Florida. The semi-hemisphere dome encloses the entire set with all the technical lighting equipment, hidden cameras and special effects gadgets needed for the day to day story creation.

The stills are taken from the moments where the hidden cameras are emphasized in the film. The thrill in being able to watch Truman is also derived from the eye contact that he makes with the audience.

“The Panopticon presented in The Truman Show, is actually a hybrid between centrally controlled surveillance of the modernist utopia and voyeurism... The public that watches the Truman Television show is hungry for images of life and starved for real social relationships.”


Peter Weir’s film depicted a culture of spectators at a time when reality television shows were beginning to be popularized. He depicts the audience’s drive to see as a detrimental force that eventually led to the destruction of the show itself. But this form of spectatorship is only possible through the network established by Christoph, the director who plays God in the film. This per-determined network of viewing equipment propels a constant surveillance of Truman.
Hidden cameras within Seahaven form a network of constant surveillance for a voyeuristic satisfaction of the external audience.

Voyeur: one obtaining sexual gratification from observing unsuspecting individuals who are partly undressed, naked, or engaged in sexual acts.


“Leontis comes upon some dead bodies at the place of execution. He feels a ‘desire’ to ‘see’ [ie look at] them, but he also feels a dread and abhorrence of them... In Plato’s tale the corpses arouse the voyeurism of the viewer (i.e., his eagerness and desire to look) and are thus themselves to blame for being looked at.”

Still taken from Director Danny Boyle’s “Sunshine”. On a journey to spark the sun, Captain Kaneda sacrifices his life to save the space ship. In his last moments, he finally peers through his space suit to see the flames of the sun.

Sometimes the slit that permits this secretive type of seeing is just a mask that veils the observer. It hides the identity, allowing for a freedom that could translate to excitement or intrigue.

Still from Director Sergio Leone’s “Once Upon a Time in America”. This Peepin’ Tom derives excitement out of spying on a girl dancing and changing through the walls of the washroom.

“I read it in Cahiers du Cinema. ‘A filmmaker is like a Peepin’ Tom.’ A voyeur. It’s as if the camera is a keyhole to your parents’ bedroom. And you spy on them, and you’re disgusted. You feel guilty but you can’t... you can’t look away. It makes films like crimes and directors like criminals. It should be illegal.’”

The Dreamers. DVD. Directed by Bernardo Bertolucci. [Beverly Hills, Calif.: Twentieth Century Fox Home Entertainment, 2003.]

Collage with a still from Alfred Hitchcock’s “Rear Window”. A man with a broken leg surveys his neighbors from his living room chair and eventually reveals a murderer’s crime.
To see the actual scenes, the viewer must peer through stage props, viewers or actors themselves. The lack of traditional audience-stage-actor relationship allows for a different experience every time.

“The word path is not used by chance. Nowadays it is the imaginary path followed by the eye and the varying perception of an object that depend on how it appears to the eye. Nowadays it may also be the path followed by the mind across a multiplicity of phenomena, far apart in time and space, gathered in a certain sequence into a single meaningful concept; and these diverse impressions pass in front of an immobile spectator.”


“The city is a discourse and this discourse is truly a language: the city speaks to its inhabitants, we speak our city, the city where we are, simply by living in it, by wandering through it, by looking at it.”


“I imagine that I am walking or driving on the roads drawn out on my cartoon. It’s a kinetic process. As you walk there, turn here, through a little passage there, out into an open space here, meet a tall building there, a gable end here, a group of houses there.”


Freedom of movement also allows for a freedom in what is to be investigated. The furniture and rooms themselves play a large role in the meandering (derive-like) movement of the audience.
Isolated down to just an instance of the path and the actors encountered along it. The movement of the audience and scenes encountered becomes more psychographic in logic.
This section studies the development of Paris as an object overtime. From the medieval roots to the modernization of Haussmann and the violent events that take place after his Grand Boulevards are placed.

These boulevards, as urban armatures are composed of vectors (the actual paved streets and landscaping) while the monuments (ending nodes) visually anchor these boulevards and allow them to connect from one to another.

As an object of vision, Paris’s boulevards possess two distinct characteristics. The first, belongs to surveillance since the original purpose to their realization was for crowd control and quick infiltration of barricades. The second, is a by product of the first where the monuments (nodes) on the boulevards become sought after objects of spectacle. Thus, they became the major driver to the tourism industry—an effect that even Haussmann noticed when he was looking for new sources of financing for his exuberant projects.

The events that led to the creation of these urban armatures are similar to the same types of events that continued to happen after their creation. Paris, a hostile object is constantly a ground for protests and violence between the ruling class and the lower classes. The creation of barricades became a metaphor for all protesters after the turbulent times before 1850. In May 68, the slogan sous le pave, la plage was adopted by the students and workers, meaning that by removing the cobblestones and pitching them against the protesters, they will find freedom. Perhaps it is not a coincidence, that the cobblestones they talk about are the same ones that Haussmann paved his urban armatures out of authoritative intentions.
The major rebellions before Napoleon III rose to power and prior to George Eugene Haussmann becoming the Prefect of Seine. The major centers of conflict happen around the center, slightly closer towards the zone of the working class.
The Grand Boulevard project began under Prefect Ramбuteau but it wasn’t until Napoleon III and Haussmann did it become a complete project. Massive city blocks were demolished to make way for Paris’s modernization.
With a newly configured urban fabric, military barracks were also configured alongside major boulevards. This guaranteed the immediate repression for future revolts, protests, rebellions and revolutions.
Haussmann treated selective parts of Paris as highly prized trophies where the boulevards acted as the actual trophy case and the prized winnings are the monuments that represent the 2nd Empire’s power.
Two different types of urban attitudes are initiated. The authoritative plan (Versailles) and the organic psychogeographic plan. The two are constantly in conflict with one another, especially under Haussmann’s control.
The relationship between the boulevards (as vectors) and monuments (as end nodes) create a direct binary condition where there are 2 distinctly regulated sight lines.
Alfred de Musset, "The space in question is not large. A rifle shot would carry from one end of it to the other..." These vectors are a military implantation on Paris.
The binary sight lines also have a dual significance to the monuments. Acting as end nodes to the boulevards of surveillance and crowd control, they also become the spectacular objects that drive the tourism industry.
The concentration of the barracks during the June 1848 uprisings. The city was strongly divided between the East and West, a condition based upon the working class district.
Using the pre-Napoleon III revolts as precedent, the Communards establish barricades primarily in the Eastern Quarters. The barricades are placed on the boulevards with intentions of segmenting the Versailles Army’s forces. The Communard positioning of the barricades are more scattered than the earlier rebellions.
The cobble stones of the boulevards were stripped and stacked as barricade material. The Communards established the barricades in a manner that expected the Versailles Army to directly storm and fall into their established line of fire. The literal use of the cobblestones for the barricades would inspire the slogan sous le pave, la plage that would be primarily used for the events of May ‘68.

“Theatricality and spectacle could be turned to account by both sides, and as the Empire weakened, the center of gravity of spectacle shifted not only toward commodification but also toward political opposition.”


“Paris had to be first subdued by gunfire and then conquered by social remodeling. The emperor occupied his capital by the purposeful and forceful intrusion of the state. The bourgeoisie never forgave the bohemian adventurer the massacre on the boulevards.”


“The Communards abstained from destruction, they proved themselves still beholden to the “old world,” its “ideology, language, customs and tastes.” The nondestruction of the Bank of France or the Notre Dame cathedral was a symptom of the continued grip of “the myth of property and theft” : The Paris Commune was defeated less by force of arms than by force of habit.”


Adolphe Thiers, the same man who had constructed the defenses of Paris led the retaking of Paris from the Communards. His decisions as a veteran General were merciless and swift. Upon the dismantling of the last barricades in the Latin Quarters, members who were associated with the Communards were executed in masses.

“All space is occupied by the enemy. We are living under the permanent curfew. Not just the cops–the geometry.”


“A weapon awaits us in the alley, and a booby trap awaits us behind the doors. This is because the enemy interprets space in a traditional, classical manner...Not only do I not want to fall into his traps, I want to surprise him! I need to emerge from an unexpected place.” -Aviv Kokhavi


The cobble stones of the boulevards were stripped and stacked as barricade material. The Communards established the barricades in a manner that expected the Versailles Army to directly storm and fall into their established line of fire. The literal use of the cobblestones for the barricades would inspire the slogan sous le pave, la plage that would be primarily used for the events of May ’68.
With the Prussians in the Northeast waiting to occupy the city, the Communards are out flanked by the Versailles Army that infiltrated from the Southwest.
While the two parties did forcefully clash with one another, the Versailles Army incorporated a more guerrilla tactic to weaken the barricades. They sometimes blasted through party walls within the fabric to reach the barricades from flanking angles.
Although Paris has been defined merely as visual vectors and end nodes, this section aims to discuss some of the alternate conditions that exist within the urban armatures.

The arcades condition in Paris is a representation of urban life through the petite bourgeoisie’s intention of creating a collective environment that is both needed and desired. Mostly built before the modernization of Paris, they cater towards the flaneur where he is sheltered from the streets with open sewers. The arcades, unlike the forceful boulevards, are organically created out of necessity.

In the case of the Pompidou Center, although driven by a multi-purpose plan for flexible programmatic needs, the process of construction perpetuate the attitude that the planners of Paris have continued since Haussmann. Demolition of the Plateau du Beaubourg allowed for the building to be a generator of revenue. Unlike the Grand Projects, it doesn’t appear to be an elitist construction. The architects’ original ideas were of an open environment that caters towards the masses.

Jean Nouvel’s Cartier headquarters and Arab Institute are alternates that focus more on the buildings’ symbolization within the city, based upon the relationships of vertical planes, materials, observer and context. The Fondation Cartier is a set of reflective screens that capture and collapse images of the city while Institute du Monde Arab is a screen that can be peered through to view the city.
Of the arcades that remain after the Bouelvard Project, Passage des Panoramas remains the most popular. Built in 1799, it stands as one of the oldest arcades. The iron and glass roof encloses 48 stalls within one of the richest neighborhoods of Paris.

“The flaneur and the dandy, swept along in the crowd, intoxicated by it, yet somehow apart from it...These were the moments that Baudelaire relished, though not without anxiety. The prostitute, the rag picker, the impoverished and obsolete old clown, a worthy old man in rags, the beautiful mysterious, all become vital characters in an urban drama.”

David Harvey, Paris, capital of modernity. [New York: Routledge, 2003], 223.

“This poetry is no hymn to the homeland; rather, the gaze of the allegorist, as it falls on the city, is the gaze of the alienated man. It is the gaze of the flaneur, whose way of life still conceals behind a mitigating nimbus the coming desolation of the big-city dweller. The flaneur still stands out he threshold -of the metropolis as of the middle class. Neither has him in its power yet. In neither is he at home. He seeks refuge in the crowd.”


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“travels through the city, providing a detached and aestheticized view of differences of social class, the increasingly hectic urban life, and a new interconnectedness of people and places. The advent of cinema itself has enabled ‘a new mode of flanerie’, a wandering around the city and a new ability to conceive of it as a spectacle and a source of sensory experience.”

At 130 meters long and 3.2 meters wide, the Arcade provides an intimate walking experience for the flaneurie of Paris.
While the path is usually linear, the elements within the enclosed environment allows for dynamic movement where the image of the flaneur is constantly reflected and collapsed onto the images of objects for sale. Signage also begins to play a large part for the arcades where they signify different types of consummable goods that play a part the indoor path.

“The anamnestic intoxication in which the flaneur goes about the city not only feeds on the sensory data taking shape before his eyes but often possesses itself of abstract knowledge —indeed, of dead facts—as something experienced and lived through.”

Walter Benjamin, and Rolf Tiedemann. The Arcades Project., 417.

“Dialectic of flanerie: on one side, the man who feels himself viewed by all and sundry as a true suspect and, on the other side, the man who is utterly undiscoverable, the hidden man. Presumably, it is this dialectic that is developed in ‘The Man of the Crowd’.”

Walter Benjamin, and Rolf Tiedemann. The Arcades Project., 420.

“The passages were a vision of the city as one great threshold—between public and private, outside and inside, past and present, stultifying dreariness.”


“19th Century Parisian arcade allowed unimpeded access to infinite commodities, and unimpeded movement across the city, combined with the dissolution of the distinction between interior and exterior... the same forces forged the arcades and the separation between home and work. The separation of home and work is what allowed the 19th-century interior its distinct character, as purveyor of illusion, literally cushioning its inhabitants from the unmediated forces of capitalist exploitation.”

The Pompidou Center, one of the largest cultural centers in Paris was well received by the public when it opened post-May ’68. The idea to these cultural centers is that they contain bits of characteristics that represent the culture they are situated in.
The process towards constructing the Pompidou is similar to the Boulevards, where the entire Plateau du Beaubourg was razed to make way for gentrification.
The attitude in the demolition of 1971 was quite similar to Le Corbusier’s intentions for the area when he proposed Le Plan Voisin in 1922. The demolition artiste spirit as witnessed with Haussmann was an inspiring attitude for Le Corbusier.
Along with Plateau du Beaubourg, the Les Halles area was also flattened. The center of Paris was being renovated to bring in a cultural center that would further cater to the global tourism industry as a generator of capital.
Taking programs that represent French Culture, Piano and Rogers use an exo-skeletal frame/system (a metaphor for transparency) to house these activities within an open plan factory environment.
Beaubourg was imagined as a monument that would be open and functionally would cater towards masses of people based upon their needs. Piano and Rogers were inspired by Jean Prouve’s Maison du Peuple in Clichy which had an interior that would transform for different events.
“the idea of transparency] It’s something extraordinary that expresses the play of light, with something that appears and disappears, but at the same time, you get the impression that it also involves a subtle form of censorship. This search for ‘transparency’ with which our era is fascinated is at the very least ambivalent in its relation to power.”


“What interests me in the evolution of architecture right now is the relation between matter and light, which can become something highly strategic... matter and light exposed by the transparency or opacity of glass.”

Jean Baudrillard, and Jean Nouvel. The singular objects of architecture., 61.

Jean Nouvel rejects the notions of glass as only having the singular property of transparency. He is much more interested in using glass’s myriad of reflective properties to render it as an opaque or translucent material.

**Fondation Cartier.** A private institution for a watch and jewelry maker, this art center and headquarter is built only of steel and glass. It uses the materials as an expressive opportunity to showcase the diverse effects of glass.

“a theater in the city, we might imagine the subject(s)-citizens of the city-partaking of the city as dramatic performance, but one to be viewed only from a distance. For as these same subjects approach the building, they also approach their own image.”

Situated next to a corner building of the 2nd Empire, the Fondation Cartier maintains a similar height with the first glass screen but beyond the screen, the building is a figure of its own. It is a node that confuses visibility by the collapsing of images.
Institute du Monde Arab. This building was initiated as a symbol of friendship between France and the Arab countries. Dually funded by the league of Arab nations and the French government, it is an educational institute situated across the river from the Cathedral of Notre Dame. Although positioned at the heart of Paris, it is not a monument to glorify the French State, neither is it a French institution.

“If the event of the Cartier is understood as evaporation of the building in favor of a representation of the city, the event of the IMA is creation of a third cultural condition, formed by the continuous and often volatile juxtaposition of Arabic and Western cultures through different devices through the building...Nouvel iconoclastically embedded a cultural referent in modernism’s sacred precinct, putting to rest any presumptions of objectivity.”


The southern rainscreen is an optic device, geared and configured to limit the amount of lighting that penetrates the interior while the insides of the building is a visual array of cross reflections upon every plane. The walls, columns, floors and ceilings continue the refraction of light that makes it appear as a kaleidoscope. All images or cultures, are collapsed and collaged together.
The sun shading devices act as a screen with oculi that act as peep holes into the city. The Institute du Monde Arab acts as a node that allows for vision to project outward.
As a necessary component to the scheduling of this curriculum, this framework of collected visual objects comes to a temporary end in order to discuss a design project that could test the ideas discussed. So far, this collection has grown from small devices to an entire network of urban planning. Within each section of a specific scale, different characteristics of vision are discussed that can be cross referenced to other parts of the framework. Although not always explicitly discussed in every section, the binary visual relationship between surveillance and spectacle is the central focus of the study.

Although, these two characteristics are typically portrayed as distinctly different ideas, there are some conditions when the gaze of the eye possesses connotations that begin to blur surveillance and spectacle. The voyeur sits in the middle of this gradient with the gaze of pleasure and control. Typically hidden behind a mask, the viewer is empowered through the concealment of identity. The voyeuristic type of looking borderlines innocent thrill and perverse excitement.

Even within the Panopticon, a highly efficient and dreadful disciplinary machine based upon the idea that the inspector embodies surveillance, contains a sense of voyeurism. This inspector who is hidden behind the blinds of the guard tower, conditions the prisoners to decent behavior while the inmates will never be sure what that hidden man is actually doing within the guard tower. A slightly perverse attitude that Joe Day recognized in Jeremy Bentham’s original proposal. Surveillance and Spectacle, as methods are blurred into a naughty form within this apparatus that symbolizes the power of the observer.

Beyond composing spaces for the naked eye to peer through, material selection could alter or help to fine tune the method of vision. Glass, as a property, is not entirely transparent. The ability for the medium to hold an image breaks the singularity of direct sight lines. This is paralleled with the revolutions on the straight binary urban armature of Paris where the Versailles army’s tactic was of a less direct path of infiltration through the urban fabric where movement refracted and penetrated from one party wall to another. This guerrilla style urban warfare appeared recently within the Israeli-Palestinian conflicts where paratroopers would blow through the living room walls of the Palestinians as a method of out flanking the enemies hiding in the normative spaces of combat.
How to physically manifest vision as both a method of surveillance and spectacle?

So far, vision has been defined as a multipurpose tool for all occasions from optical illusions to urban militarization. To utilize it for a job, a siting near events of tension or rupture would be quite a suitable subject for the binary relationship of this tool.

Paris, a city with a perpetuated identity crisis will remain the environment of study for the project. The chosen site is relevant to the analysis of the urban armatures. Its contested sites provide an opportunity for the design to simultaneously work with and react against the current conflicts.

The exact location chosen is the medieval Rue Montorgueil with an origin that dates back to the rule of the Merovingians and Carolingian of 253 AD. It wasn’t until the beginnings of Les Halles regional market, situated directly south, did Rue Montorgueil begin to flourish as an extension to the stalls. Cafes, farmer stands, and restaurants owned by the petite bourgeoisie began to line the street as a mirrored reflection of the everyday needs of the surrounding communes.

Today, the physical form of the street remains the same while the consumers have changed after the removal of the 2nd Empire food halls in 1971. The original Parisians are now mingled within the masses of global visitors looking for the traditional and romanticized city of lights.

Directly North is Rue Etienne-Marcel, one of the Haussmann boulevards that opened in 1858 that links the Place des Victoires to Boulevard de Sebastopol on an East to West axis. The street itself is 119 meters long and 6.5 meters wide. A smaller street, Rue Mauconseil, branches in from the Northeast while a small arcade creates a connection to Rue Montmartre, situated a block west.
“Haussmann’s evident desire was to transform Paris into a bourgeois city, not least by ridding the capital of a part of its industrial base and proletariat... His huge and purposeful cuts into the urban body and the commercialization of the boulevards forced the working poor and the destitute out of Old Paris. Simultaneously, Les Halles implanted an enclave of the old popular culture in the very center of the new city.”


“They seemed like some satiated beast, embodying Paris itself, grown enormously fat, and silently supporting the Empire... Les Halles were the shopkeeper’s belly, the belly of respectable petite-bourgeois people, bursting with the contentment and well-being, shining in the sun, and declaring that everything was for the best, since respectable people had never before grown so wonderfully fat.”


“The old market halls were threatened with gentrification and were at last torn down in 1971. Part and parcel of “the fall of Paris,” the destruction of Les Halles would be one of the themes of Debord’s more elegiac retrospection, his 1978 film In girum imus nocte et consumimur igni.”

Soyoung Yoon. “Cinema against the Permanent Curfew of Geometry: Guy Debord’s sur le passage de quelques personnes a travers une assez courte unite de temps” 52.

Returning to Paris for the birth of his son, Claude Monet accidentally strolled by Rue Montorgueil and found a celebration for the end of the Exposition. He is taken by the liveliness of the street and decided to paint it from the top floor of an apartment building.

Only a couple streets adjacent to Boulevard de Sebastopol, Rue Montorgueil sits close to the divide of East and West Paris. It currently remains a mostly pedestrian street with the exception of service and emergency vehicles.
[South end that leads to Forum des Halles]

[Italian establishments begin to blend in with the traditional Parisian store fronts.]

[Similar to the Arcades, this street provides an environment suitable for the flaneur’s gazing activities]

[The 6.5m width of the street allows for an intimacy that cannot be found on the grand boulevard]
[Rue Etienne Marcel]

[Rue Montorgueil]

[Le Forum des Halles]
Initiates the first space for provisional goods within the concentrated urban center

LOUIS VI
Elaborates on market by adding storage, wheat belt and a wall to help define the territory of the producers

PHILLIPE AUGUSTE
Initiates the Church of Saint-Eustache on North West corner of the market. This begins to more permanently define the parameters of the expanding market. Construction ends in 1637.

FRANCIS I
Reformation of Les Halles helps to control the growth of the market by reconstructing the surrounding streets to better suit the dense environment

LOUIS XV
Hotel Soissons and Cimetere des Innocents are demolished to make way for the East and West expansion of the market.
Prefect Berger asks Victor Baltard to begin the first design of the pavilions while Les Halles continues to grow at a rapid pace. Surrounding fabric continues to be pushed back for more space.

Baltard constructs the first pavilion out of masonry. Napoleon III dislikes it so much he demands it to be demolished and fires Prefect Berger resulting in Haussmann becoming the new Prefect of Seine.

Under Haussmann’s dictatorship, Baltard redesigns Les Halles with Iron and Glass, masonry is kept at a minimum. Les Halles reaches its peak as a built form, usage and revenue continues to out grow the building.

1893-1936
Les Halles becomes major meeting point of all regions beyond Central Paris. Petite Bourgeois and Working Class are drivers of revenue. Eventually a community of the homeless and prostitutes would take shelter in/around the markets.
Les Halles area becomes a place of meeting and action for the French Resistance. Barricade set up to disrupt the German’s Occupancy.

Vichy France

Les Halles under goes plans of being dismantled while the producers relocate to the peripheries, Rungis.

1957 Charles de Gaulle

While people were on summer vacation in August, Pompidou orders the complete demolition of Les Halles. Leaving a hole in the ground that would be known as le trou for almost half a decade.

1971 George Pompidou

Ready to fill le trou, Mayor Chirac teams with APUR to construct a hub with gardens, leisure, pedestrian zone, train station. Food market is replaced with an underground mall in hopes of attracting corporate investment.

1974 Valery G. d’Estaing

Now as President of France, Chirac sees his earlier work as Mayor of Paris paying off with Japanese corporations buying 1/3 of Forum des Halles for 500 million Francs.

1995 Jacques Chirac

Dissatisfied with the problematic Forum des Halles, Delanoe sets up a competition between Nouvel, Koolhaas, Berger/Anziutti and Mangin.

2004 Bertrand Delanoe
With the Les Halles projects, Haussmann and Napoleon III took a different attitude by allowing the proletariat market to remain in the center of Paris.
Zola's book takes place in 1860s, discusses the flourishing life in the center of Paris when Les Halles was in the form of Baltard's pavilion design.
The cafes in the areas around Les Halles became rendezvous points for the FFI. They would sometimes use the movement of the delivery trucks for the market as a cover for distributing weapons and supplies.
Viewed the decaying iron and glass pavilions as an issue for the center of Paris, and orders demolition to the Les Halles area and Plateau du Beaubourg.
With APUR, the hole in the ground is patched with a shopping mall. The regional market is replaced by global corporate consumerism. Stores such as McDonalds, H&M, Zara, and Muji become attraction points.
With the RER lines that connects the peripheries to the center of Paris, the upper landscape level of the mall becomes a space for drug peddlers and other illegal business ventures.
The renovation project that is currently under construction is a combination of both these competition entries. The use of a singular dominant axis and one central object (the canopy) recalls the vector and end nodes method of Haussmanization. This eliminates the derive like characteristics that the S.I. were so enthralled by.
While still valuing the continuation of the nearby streets, the objects placed are encourage a movement that is not born out of a hard geometric linearity.

Although both of these entries were rejected on the premise of high costs, they offered design propositions more similar to the traditional type of Baltard’s bustling market activities.
At the same time that the cafes act as a casual in-between zone, they also serve as a forum of exchange—typically of less formal information such as gossip. Similar to the Renaissance piazze, the cafes are a place for the individual and the collective.

The display qualities of the cafes also make them a place for individual expression. The dandy aims to captivate people’s attention while strolling by.

"[Haussmann’s attitude that] Paris is not a community but a city of nomads [in which cartoonist Darjou] pointed out that displacement by Haussmann’s works has been a primary cause of namdism."


Before the growth of the tourism industry in Paris, these little nodes of cafes within the urban fabric stitched together communities. Acting as meeting points, they provided opportunities for casual communal events.

However, Haussmann’s attitude with his work reflects the current situation where many cafes are not frequented by regulars but by different categories of people passing through.
Ironically, Haussmann’s intentions of transforming the city to a bourgeois territory might have had reverse effects with the cafes on the boulevards. The military incision, like lifting a rock to expose critters concealed from the sun, exposed different social classes to each other and is emphasized by the reflective qualities of the single pane glass.

“If in this case, one such encounter forces the lovers to confront each other’s worldviews, perhaps for the first time. In ‘The Eyes of the Poor’, the glass that separates the bourgeois lovers in the cafe from the poor outside may also be considered a double screen.”


If not for the coffee, pastries or conversations, the Parisian cafe is a space designated for the gaze - not only for seeing external events but also the gaze that spikes the awareness of the viewer him/herself.

Discussion of different films such as The Truman Show and Rear Window in relation to Panopticism and Voyeurism.


Cataloguing of the major S.I. writings, including the the explanation and origins of the derive.


Catalogue of the development of the ICA in Boston through the notions of vision. Interview with Diller Scofidio + Renfro discusses the firm’s positioning on vision.


Loss of the aura with industrial types of reproduction, namely, the portable camera.


Description of urban life in Paris as influenced by the period between the French Revolution to early 20th Century. Celebrates the Arcades by discussing their creation and demise. The birth of the flaneur as written by Charles Baudelaire is elaborated upon through Marxist views.


Discusses the relationship between architecture and cinema and represented within art. Explains the inspiration to the work of Jane and Louis Wilson and Victor Pasmore.


Introduces the idea of the straight street as a geometric polical control in the urban fabric.


Vision as a method of spectacle is discussed through small tropes and scopes. The implications of having conditioned vision is a form of modernismization of the viewer.


Parallels war and tourism as partners in vision. What was once a site of warfare becomes a pilgrimage site for visitors. Elaborates upon the current media relationship with battlefields and implies that it is just as lethal to shoot with a camera as it is with a gun. Conflict is expressed through the images that represent it.


Outlines the role of optics in Renaissance Italy for the discovery of linear perspective and the social inspirations behind Brunelleschi’s experimentation. Discusses the methods behind Galileo Galilei’s calibration of the periscope and the impact on Renaissance thinkers of the time.


The Grand Projects under President Mitterand’s rule and the relationship to the symbolic function of glass and vision in Paris.


Influence of the trompe l’oil stage set paintings created by Serlio based on the single vanishing point perspective. Inspired by translating Palladio’s Teatro Olimpico.


Outlines Foucault’s ideas and evolving though on the Panopticon as an apparatus representing power while vision happens to be the medium that channels surveillance. Clarifies his stance on the function and generating of prisons in relationship to the power apparatus.


Description of the visual properties that create the psychological effect on the viewer through distortion of surroundings with glass.


Describes the functioning of the Greek theater and its transformation in Rome and then the Renaissance. Teatro Olimpico possesses many properties of the original Greek theater type.
Elaborates on multiple factors at the modernizing period of Paris under Prefect Haussmann. Beyond just a simple class revolt, description of labor power, rent, consumer spectacle, space relations and previous revolutions are analyzed as the some driving forces to the turbulent nature of Paris in the 19th Century.


Portrays global tourism as a driver to the transformation of historic centers into postcard cities that devalue the contemporary living conditions of urban environments.


Comparison between Guy Debord and Michel Foucault’s premises based on the common grounds of vision and the connotations of the observer. Spectacle as a destructive force of consumerism and capitalism is compared and contrasted to Surveillance as a type of oppressive government apparatus limiting the behaviors and thoughts of citizens.


Presents George-Eugene Haussmann through a more conservative view, where the repression of the working class and political turmoil was worth the introduction of sanitation and permanent establishment of the bourgeoisie.


Multiple essays relating the urban environment to the methods of seeing through cinema.


Michel Foucault’s views of Panopticism are presented mostly in relation to the idea of the built panopticon as described by Bentham.


A survey of Paul Virilio’s theory up to 1999 and the cross contradiction within his development.


Detailed description of the making of Les Halles under the rule of Louis Phillipe and Napoleon III. Material significance in iron and glass as borrowed from the contemporary movements of the time -paralleled by Bibliotheque St. Genevieve, Bibliotheque Nationale and the Crystal Palace. Traces the social significance of Les Halles to the Parisians, especially under the Vichy Regime where the Resistance would rendezvous and distribute weapons, ideas and information.


Analyzes the verbal battle between Perret and Le Corbusier over the orientation and proportions of windows and the reflection of the French culture.


Compares the lifestyle differences between the periphery and the center of Paris. Uses Emile Zola’s book to compare with Jean Luc Godard’s “Two or Three Things I know about her” and how the transformation of the city streets changed the social traits of Parisians.


Presents architecture through the perspective of media and the transformations of the viewer through alternate means of seeing, such as: photography, vehicles, cinema and television.


Lists the origins, job description and training need for each crew member of a bomber. The bombardier’s tasks and specific role of protecting the bomb sight are emphasized as the number one priority.


Introduces a non visual method of seeing that is dependent on speed as a driver towards connecting people across distances.


Documents the remnants of the bunkers from the Atlantic Wall. Specific formal strategies vary based on the specific combat function needed for different types of German soldiers.


Interview with a commander of Israeli paratrooper division on the methods of infiltration in Palestinian urban fabric. Selective erasure and demolition that allows for the paratroopers to unconventionally and literally walk through walls.


Building off of Susan Sontag’s writings, Wolf discusses a Marxist perspective of suffering, torture and death as captured through photographs. The cleansing of the comm unsanders after the revolution of 1871 are conducted through facial recognition from photographs. The power of observer and reproduction are related to one another.