it may be architecture
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It may be Architecture

by

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ABSTRACT

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Architecture’s relationship to images is manifold: architecture starts with an image and results in an image. Staying true to the claim, the thesis posits that architecture and its images are interchangeable and enforces that the image should be translated into a spatial condition. The aim is to instrumentalize image-making techniques as a mode of designing space. The methodology of the thesis is constructed through formal analysis of contemporary image types, explicitly focusing on Instagram as the world’s largest image database. The ambition is to both understand and highlight the effects of the social media on image culture, specifically in architecture, and develop an alternative design procedure as a response to the rapid growth in the dependency on images in architecture.
ACKNOWLEDGMENTS

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Architecture's relationship to images is manifold:
architecture starts with an image and it results in an image.
Images have played a communicative role in architecture, both to describe an unbuilt space and document the realization of it. Even though the image has always been the primary communicative tool in architecture, it has been secondary to the *architecture with the capital A* and has been dismissed as representational tools.

This claim presents a paradox; architecture as a discipline produces more product that stays within the images than exists outside of its images. To untangle this problem and set up a framework, the thesis assumes that architecture and its images are interchangeable: the image is the architecture.
Historically, images served as representational tools to architecture, both to express an atmospheric set-up and document the mechanic realization of it. However, old images of architecture almost always implied a physical resolution for an architectural building, operating within an outdated definition for what architecture is. Architecture was synonymous to Building and images only served as representational tools.

Traditionally, image-making in architecture required expertise in workflow and a significant amount of labor; therefore the number of architectural images were sparse. Moreover, the need to represent architecture resulted in specific and precise image-making that often included notation, accurate display of materiality and shadows.
With the turn of the 21st century, the development of technology in various platforms has resulted in several changes in the image culture. With the advanced technology, image-making techniques that required artisanship are simulated through intuitive software tools, button clicks and artificial brushes that are unified across all digital programs. Since all computer and mobile telephone users have access to a camera and a few filters and brushes, anyone can be an image-maker in the contemporary world.

Since image production processes are reduced to mere seconds, accessing these images, have become increasingly convenient as well. On an online image database, one can search for an exact image, find it and simultaneously obtain to a vast number of images that are similar to the original search. As images become easier to consume for the contemporary eye, the user can scroll through more images per unit of time, which renders them immune to a high level of stimulation and reduces their attention to detail.
Before diving deep into the world of images, it is pressing to address one question: What is an image, and how is it defined within the thesis?

An image is something that has been translated into a quantifiable data set; meaning bits and pixels. Anything that exists in the digital realm, even though it was created outside of the digital, is now an image. Images have subgenres that are defined by the technique they are generated with.

Now that I have explained what I mean by image, we can continue with our exploration.
The new turn: images + the internet

Image 09: Human eye and the mobile phone lens have very similar lens lengths, varying between 28–33 mm. The phone can capture an image very similarly to a human eye.
Before exploring the internet as an image database, it is necessary to explain the basic premise of internet searching: looking up a “hashtag”:

Beginning July 9, 2009, a novel way of generating information was introduced to Twitter: the hashtag. An informal way of marking taxonomy has been the most recognizable directory since then. The hashtag is entirely open source, and as of now, it is growing towards a periphery we do not know.

What makes hashtag a unique categorization method is that it is not monitored by an intellectual authority, therefore resulting in free agency of the user. One can hashtag an image as anything, which results in blurring of the meaning of the original tagline.

Image 10: The original post by Chris Messina in 2007, introducing the hashtag “#”.

(a short parenthesis)
With the emergence of smartphone and social media, image databases have become a primary platform to explore architecture. Within seconds, one can access millions of unique content under a specific keyword on any internet website. The operating system is equipped with Ctrl+f, a search short-cut to allow the user to access information under any taglines.

Apart from being one of the most effective ways to participate in social media, image sharing differs from other forms of content dispersion because it eliminates the barrier of language between different users on the internet. Instagram is the leading image-based social network with 800 million members, allowing its users to post-process and hashtag their own content, as well as giving access to the rest of the users’ content under specific usernames.

Image 11: Instagram feed snapshot taken on December 11, 2018 under #pisatower.
In the past seven years, image databases have become a primary platform to explore architecture. Within seconds, one can access millions of unique content under a specific hashtag. One has not visited most of the buildings they know; instead, they have only seen images of them.

Image 12, 13, and 14: Content taken from @pisatower on Dec 11, 2018. Notice the variety of images genres that can be found under a single hashtag.
With the assumption that no image is objective due to its authors personal perspective, the vastness of image data under specific hashtags causes blurring and diversifying of what a specific word means.

As a keyword to test the limits of the subjectivity of images, I have selected #chair.

Image 15: The "most chair" chair, according to two image analysis techniques used in this thesis; Google Image API and Online surveys.
Two different image recognition techniques were applied to a set of twenty images, first, google image API, and second, online surveys with anonymous participants to extract a logical pattern for subjectivity in images.

The two-part experiment starts with online surveys that are conducted with social media users to determine the measures of identity of a keyword. In the second part, the selected images are submitted to an image recognition application, Google Vision API.
Online surveys:

The premise of the online reviews was to examine the cognitive behavior of the human eye when looking at an image. The reviewers are randomly selected from various social media platforms. For initial tests, the surveys are kept simple with a repeating question with a provided spectrum of answers and changing images.

GOOGLE Vision API:

An application programming interface, Google Vision can analyze images under thirteen different categories such as label detection, landmark detection, and object localizer. The image analysis is algorithmicized based on image tags on Google. The API recognizes each physical object with its most generic attributes. Apart from acting as an “objective” alternative to online surveys, Vision API provides a systematic analysis that can be deployed in further explorations with the online users.
After applying each image recognition technique to the set of 20 images, various analyses were conducted with the results to extract a logical pattern for subjectivity.

The analyses helped in understanding the two different tools more extensively and unpack their working methods. However, it remained an arduous task to extract a logical and somewhat simple pattern for what constitutes subjectivity.
The attempt at unpacking subjectivity resulted in one inevitable outcome: no matter what one thinks a chair is, as soon as a person thought of it as one, it is a chair.
Uncanny images of #architecture

In contemporary architecture, image-making has solidified its state as a stand-alone discourse.
Collage and Flatness, as the new black of the image, are highly utilized techniques for the matter, but yet, not always constructed through three-dimensional moves. It is also important to note that flatness and collage introduce a high level of abstraction into architecture, resulting in elevated subjectivity in images. This level of abstraction can be sufficient to communicate a narrative, yet, how it translates into a spatial experience remains in flux. Without the familiar geometric clues in an image, the eye cannot position itself within the space in a fixed point, continually oscillating between different layers of distance, exaggerated texture, surface treatment, and color. As these images are becoming the main architectural artifact in the contemporary field, they manifest as an uncanny version of the familiar spaces we know.
One of the images of architecture is analysed for its spatial resolution.

- super crisp flat water
- tiny lifesaver?
- giant plant
- huge flooring
- is this a wall or a ceiling
- no corners?
- is the floor flat or tilting up?

Acquired from architect's website. Like count is a random number and is not objective.
Renderings and digital photography can also be categorized as uncanny architectural images: materiality and atmosphere are enhanced, and camera angles are manipulated to fix the eye of the viewer at its most desirable perspective. The eye of the viewer is trained to understand the object of rendering as an orthogonal construction in the cartesian coordinate system, however, in closer examination, it is inevitable to recognize that everything we see in these images is based on our assumptions of how it could be realized in three-dimensional space.
The massive variety of images that one can access under specific hashtag results in blurring the architectural types we are familiar with. A typical bathroom is recognizable through its finishes, fixtures, and scale (Image 25). However, the new media gives access to millions of bathroom images that show the extent of what a bathroom could be. A bathroom with exaggerated cornices, chandeliers and reflective surfaces can be simultaneously perceived as a living room (Image 26). Another image of a bathroom, with 43% of the image surface as a landscape, can be removed entirely from its domestic context (Image 27).

Image 25-26-27: Various images of #bathroom is visually analysed.
The thesis posits that architecture and its images are interchangeable and enforces that the image can be translated into a spatial condition. The aim is to transform this symbiotic relationship into a methodology and therefore instrumentalize image-making as a mode of designing space; the resulting prototype originates as an image, iterated through image and ends as an image, implying a continuous design loop. The image is established as an architectural condition and always has a physical resolution to it.

The thesis stays within contemporary image culture by replicating mentioned image-trends, such as one-point perspective, flatness, collage, blurring of distance, and the collusion of types. However, the thesis takes these trends further to transform them into three-dimensional conditions, which would allow for a new set of possibilities: a singular image can house multiple typological and spatial readings simultaneously. The resulting prototypes demonstrate a tangible space that has uncanny qualities, as a result of the way its constructed. A room that looks very deep might, in fact, be very short, or an object that seems to be floating in the air might be a collection of multiple objects placed carefully in space. All these effects have spatial resolutions that can only be unraveled once experienced from multiple points of view. The multiplicity of reading allows for experiential richness in a single, limited room, allowing for multi-dimensional use.

Image 28: The thesis mainly focuses on five image making techniques.
A room that looks deep might in fact be very short.

An object that seems to be floating in space might be multiple objects carefully placed in space.
The domestic space is where the author of the image has the most agency over its surroundings and therefore can manipulate it as a stage set for self-expression.
The contemporary domestic space is shrinking and collapsing both physically and socially due to the infusion of social media to the home. Looking at images of them on Instagram, it is inevitable to see that selected programs of the bedroom, bathroom, kitchen, and dining room are increasingly diluted in meaning.

Image 31: Domestic is a stage set for self expression of the regular person.
With the emergence of the second digital turn, the domestic typology has significantly moved away from its standardization, as it can be witnessed on various image databases such as Instagram, Pinterest, and Tumblr. The hyper self-awareness of the user and the urge to document and share it have generated alternative uses for everyday objects, such as a selfie wall or a mirror. In the contemporary world, the bathroom is the designated space for self-appreciation, whereas, the bed is the pedestal to showcase the outfit of the day.

Arguably, these alternative uses for everyday objects have always been prevalent. However, their recent dominance in the image databases has made it apparent that we cannot think of typology through its standardization anymore. In the new digital turn, the bathroom can exist without a toilet, and a bathtub can be found in the bedroom.
Image as Space
The methodology is developed through careful analysis of contemporary image techniques. When deployed as an architectural condition, these techniques allow for multiple readings in a single space. By blurring the distance, creating flatness and collage-like adjacencies, many typological juxtapositions and as well as stand-alone readings of these typologies are made possible in a single space depending on the point of view of the user.
The first group of techniques is developed to blur depth. With the tapering of the plan and the section of the room, the user perception of depth has changed from deep space to shallow space.
In a different sequence, the architectural element is relocated incrementally, which alters the reading of depth from shallow to deep.
The scale of space is understood in relation to the architectural elements it holds: by scaling a typical window up and down, the size of the space can be altered from large to small.
An alternative way to modify the interpretation of space is through surface material manipulation. By applying mirror on the surfaces, width, depth, and height of the space can be multiplied. In an opposite case, Matte black surface treatment flattens depth, focusing the attention on the objects in the room.
A typical grid is projected orthogonally for standard applications, which help reading the depth of the space by generating construction lines. However, an anamorphic projection, which prioritizes the viewers’ perspective for construction, can drastically affect the reading of the space, due to the viewers’ predetermined assumption of how a tile is applied on walls.
Utilizing the technique of anamorphic projection, seemingly random lines can be harmonized in a specific image to generate a calculated composition.

Image 41: Another use of anamorphic projection to render a single object floating in space.
The Prototype
The thesis comprises of a prototypical continuous space that is designed exclusively through images. In the following pages, every element relating to the respective spaces other than the primary image is generated as an aftermath of the design process.

The five images are developed with the basic premises of blurring depth, flattening distance, collaging, and scaling to orchestrate a highly specific space with a calculated outcome. These five images evoke an overarching reading in the first impression. However, the more time the viewer spends on the image, the further the image gets both unpacked and packed with meaning due to its uncanny spatial construction.

Image 42: The prototype is made up of five calculated images.
Although the architecture of the images is highly specific, generic objects of the daily life are embedded in them. Mostly seen unarchitectural, these mundane objects behave as familiar references for scale and program, giving the viewer ways to break down the image for many translations.
In the five images, materiality and color are reduced their formal qualities. A tile becomes a grid with legible contrast, and color only exists as light, dark, glossy, matte, opaque or transparent. The material palette of the images is limited in number with the intention to focus the viewer’s attention on form and scale.
The sequence of five images starts with the entrance. Seemingly a standard, yet curiously shaped space holds three doors, with the center one being propped open to invite the viewer inside.
The application of the straight lines in the bottom and top registers look uncanny: not only they do not comply with orthogonal construction, but also they mark a calculated inconsistency. The doors are sized based on the viewer’s perspective, resulting in the furthest door being the largest and nearest door being the smallest.
Moreover, the stoops are designed as uncanny: Seemingly leading up to same sized doors, the one on the left contains four landings, whereas the one on the right has only two. In this case, the flatness of the floor plane becomes questionable.

Generic objects of daily use, such as chairs and bottles are placed in the scene as points of references. Their mundaneness does not lock the attention of the viewer; however, it makes them quickly recognizable for their scale. The chair by the center doors is the same scale as the chair in the front. By comparing the height of the door handles in relation to the chairs, the viewer can start to unpack the uncanny construction of these architectural elements.
Inside the apartment, the domestic types are being juxtaposed. In this image, the juxtaposition happens figuratively by collaging two seemingly different spaces together.
The room is split in two via the viewer’s perspective, utilizing anamorphic projection. On the left, a kitchen is portrayed with a ceramic tile wall and a highly glossy floor finish. On the right, a reading room with tectonic objects drags the eye of the viewer up and down along the composition of the circular forms.

Seemingly close to each other in location, the armchair looks significantly shrunken in size next to the kitchen bar with stools. Upon closer examination, it appears that the tile is applied through perspective on the left, altogether eliminating the depth of the space. However, on the right, the material is applied orthogonally, revealing the deep barrel vault. In 3 dimensional space, there are 20 feet between the chair and the kitchen bar; however, surface manipulation results in a closer adjacency.

There is a flat surface behind the couch. The surface is also generated through perspectival projection, blurring the location of the wall in relation to the objects in the foreground.
Various generic objects are placed in the scene to explain the construction technique and the form of the room. A hat is placed on a side table to reveal that the flat surface is a stand-alone structure and not attached to the side walls. The leg of the mirror is placed strategically in the middle to highlight the material change of the floor. The cords of the lighting fixtures are wrapped around the profile of the space to give away the barrel vault.

Image 53-54: The kitchen / reading room is cropped to highlight floor material change and wrapped lighting chords.
The next image is a dining scene. The viewer is looking into a space framed by various black lines, focusing the attention on a window that seems to be standing far in the distance. The dining room is long and narrow with tall, monumental ceiling height.
In the isometric view, the room is revealed as rather short. The room is tapering down planometrically and sectionally to mimic the orthogonal construction of depth. The window, although fully operable, is shrunken to 18 inches by 20 inches. The viewer is placed on the toilet and raised by a platform to further alter the reading of the space.
The room begins to dissolve in its scale once the viewer pays attention to the objects on the table. The room looks spacious, yet the objects appear large compared to the space that holds them. The crown molding draws the focus on the edges, but seem to be chunky. The bust of Napoleon is used as a scale: more massive than a typical human, the bust stands as a quirky reminder of the uncanny scale of the space.
The next image is viewed from the opposite side of the dining room when sitting on the chair at the head of the table. In this case, the depth of the room is reversed due to its geometry: the distance between the toilet and the viewer is wholly collapsed, rendering the room as shorter.

Image 58: The bathroom, viewed from the dining room
However, the scale of the bathroom objects is maintained as standard, making it seem smaller than usual: the toilet, the sink, and the bathtub look tiny.
The bent steel black structures function as visual thresholds between the bathroom and the dining room. These devices are the only physical separators between two different programmatic types. They not only mark the uncanny territory between the bathroom and the dining room but also frame each image, adding to the picturesque element.
The fifth and the final image of the prototype is the communal space. The image is split in two by using two contrasting surface treatments, and the bottom half of the image is depicting a room full of objects.
In the first impression, the scene looks like a diorama: the objects seem uncannily small, ridding them of their programmatic use and turning them into dollhouse furniture.
As seen in the axonometric view, the viewer is raised by a 7-foot tall platform. The ceiling of this common room is incredibly tall, measuring about 20 feet in height. The line that separates the black wall paint from the white is selected to match an average ceiling height for a domestic space: it is nine and a half feet off of the ground.

Since the viewer’s perspective is elevated to 10 feet off the ground, the room around the gaze becomes miniscule, resulting in the diorama effect. Furthermore, the enlarged checkerboard tile is applied through anamorphic perspective to generate a dollhouse effect.
The five images in their spatial resolutions are stitched together to generate a continuous space. The resulting structure contains the five constructed images, as well as interstitial images that reveal the spatial overlaps between five views. Once inspected as a complete set, the images act as puzzle pieces, revealing the entire structure and its programmatic and spatial adjacencies.
The thesis defense for “It may be Architecture” took place on January 10th, 2019 in Anderson Hall at Rice University. The verbal presentation was accompanied by an exhibition in the Jury Room, which consisted of five tables with associated frames dedicated to each view that the prototype includes. At the head of each table, large-scale, hand-framed prints of images were placed. The table-tops were used to display interstitial images that reveal the space from different angles as well as adjacencies between the five different types. Each image was represented with an axonometric drawing that is meticulously annotated to inform the viewer about each image.
MD Anderson Hall, Rice Architecture, Jury Room. The exhibition was set up for the thesis reviews on January 10, 2019.
MD Anderson Hall, Rice Architecture, Jury Room. The exhibition was set up for the thesis reviews on January 10, 2019. Five tables were dedicated to five images:

- Entrance
- Kitchen/Reading Room
- Dining Room
- Bathroom
- Living Room
Two tables are shown up close. Image 66 shows the living room while image 67 displays the dining room. Objects of reference are placed on the tables as a reminder of the scale of these objects in the images.
Each image in the exhibition was accompanied by an annotated axonometric drawing that unravels the methods of construction. Illustrations were printed at 18”x18” scale, laminated on ¼” foam core, and placed in the middle of the tables for the viewer to read as they observe the images.
It may be Architecture

Entrance

Kitchen/Reading Room
It may be Architecture

Drawing 120

Drawing 121

**Dining Room**

**Bathroom**

**Concrete Pedestal for the toilet**

**Rough Texture (RAL 4077)**

**Frame as Threshold**

**Bent Steel in Matte Black Finish, 2 inch diameter**

**Three steel structures are placed in the space to create virtual thresholds**

**Dimensions:**

- Oval dining table: 6' 6" inch x 2' - 4' (width varies)
- Dining room window: placed at 18 inch x 24 inch
- Imitation Bust of Napoleon
- Imitation Cups, Candles

**Materials:**

- **Matte Black Frame**
- **RAL 9005 Matte Acrylic Paint**
- **Matte Black Acrylic Paint**
- **3 inch x 3 inch White Ceramic Tile**

**Wall Paint:**

- **Gray Acrylic Wall Paint, Rough Texture (RAL 4077)**

**Molding:**

- **Solid Pine molding, 12 inch x 12 inch**
- **Crown-Molding**

**Elevations:**

- The bathroom becomes an image in it seem to be even smaller. The objects placed on it, further interpreting of the table and altar of the room. Its small size adds to the deep reading of the room depending on the perspective.

- The oval dining table is shaped for the objects on top of it.

- The bust is used as a scalie; its glossy epoxy surface serves as a display for the objects on top of it.

- The newly claimed space for the objects on the table, the scale of the large bust is used as a scalie; its glossy epoxy surface serves as a display for the objects on top of it.
The viewing platform invites the viewer to position themselves to see the diorama image of the room. The marble pedestal acts as a pedestal for the human body, inverting the object-viewer relationship. The human is now an object on display for others to image.

Traditionally the most private part of the house, the bed is now a place to observe from: it is positioned at the center of the house and have visual access to all spaces simultaneously.

Viewing Platform
Carrara Marble, 18in x 18 in x 72 in

The Bed
A grid is projected anamorphically from the viewer's perspective to generate the floor tiling. However, notice the scale of the tiles: The initial grid is selected quite large to add to the diorama effect.

Matte Black Acrylic Paint is added to the exposed thickness of the slabs to frame the view of the bathroom to further accentuate its singularity as an image-space. The matte black blends in with the bent steel structures between the dining table and the marble stoop.

The line that separates the wall into two is drawn strategically. The line doesn't only match the eye of the viewer but also denotes a somewhat standard ceiling height (9 ft) for domestic space. The top half of the wall is painted matte black contrast the bottom half of the wall.

The curved profile of the wall is rendered uncanny with the color contrast between the wall and the ceiling. It is unclear whether the curve happens vertically or horizontally.

The circular shapes are projected anamorphically onto the surface of the bottom half of the wall to generate flatness. The flatness results in an uncanny reading of the curvy profile of the wall.

Checkerboard Tile
Anamorphic Projection
Sizes and shapes vary

Matte Black Frame
RAL 9005 Matte Acrylic Paint

Matte Black and White paint RAL 9005 and RAL 9010

Curved Profile
Matte Black Paint Shapes RAL 9005

The human gaze is raised to generate an uncannily small environment for the image. Since the point of view is changed, along with the ceiling height, the objects within the space look seemingly miniature, creating a diorama-like image of the lounge space.

Human no.5 (female, 5'3'', 5'5' with heels, 9' standing on the platform)

A small ladder is placed next to the marble stand with the flowers. The ladder signifies the height difference between objects, hinting that the construction of the space might have something to the with the seemingly small scale of the objects inside it.

Small Ladder


Various Users. “#bathroom, #kitchen #livingroom, #architecture, # bedroom, #pisatower, #selfie and other” Instagram, Date accessed: Summer 2018-Winter 2019.

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