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Who We Are:

Our team is made up of scholars and practitioners in the fields of architecture, sociology, engineering, and non-profit service. Since 2019, we have interviewed over 450 residents and staff, trained 1,400 organizations and individuals, and impacted trauma-informed design on over 25 buildings. This pamphlet presents the culmination of these endeavors: why we think about trauma, what we have learned, and how we design.

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The Big Idea

To heal more than harm

Trauma-informed design is a framework combining trauma-informed care with the design process.

This pamphlet focuses on ways to design a building to help regulate the body and support therapeutic approaches.

Since trauma lives and works through the body, and the body reacts to physical space before we cognitively process it, the built environment is integral to how one experiences trauma.

The spatial principles and design values presented here should be implemented hand-in-hand with a participatory pre-design process (interviewing residents and staff) and a focus on comfort, community, and choice.



Trauma A Brief Primer

In the context of this pamphlet, trauma is used short-hand for the consistent and persistent hauntings of an initial crisis. Trauma is an extreme stressor that overwhelms the capacity to cope and has lasting adverse effects on physical, social, emotional, or spiritual well-being.

The original crisis can be individual (like emotional abuse, a car crash, a natural disaster, or war) and can also be institutional and systemic (e.g. racism, sexism, homophobia, transphobia), chronic and enduring (e.g. homelessness), cultural and historical (e.g. colonization, genocide), and environmental (e.g. natural disasters, pollution).

Everyone experiences trauma in their lives at one point or another. Many people quickly recover from these experiences. However for other people, the initial trauma becomes embedded into their lives such as with post-traumatic stress disorder (PTSD) and persistent deleterious effects on health. Susceptibility to long-term traumatic stress depends on a multitude of factors like the intensity and duration of a crisis, an individual's physiological resistance, communal and financial support systems, and preexisting psychological conditions.

Why is space important?

Our first relationship is with our physical environment. Before social encounters, before cognitive meaning-making, our bodies have immediate responses to the space we are in.

For people who have trauma, their body will signal 'danger' before their mind even thinks, "I am in danger." The body immediately dispatches a physiological stress response: fight, flight, freeze, or fawn.

Architecture can heighten or calm the body's response to perceived stressors by modulating environmental stimuli and atmospheres.

Additionally, many traumatized people bond more quickly to familiar inanimate objects than other people. If we can foster an intimate and safe relationship with a building, healing can take place.

Architecture has the opportunity to be the first point of contact to cultivate safety and connection.

Physiology of trauma

Survival needs and coping mechanisms take precedence. The past interrupts the present and the future becomes inconceivable. Memory and timelines warp. The body dysregulates.

- Amygdala (emotional and survival center) goes into overdrive
- Prefrontal cortex becomes suppressed, so you're less capable of controlling your fear
- Reduced activity in the hippocampus, one of whose functions is to distinguish between past and present. In other words, your brain can't tell the difference between the actual traumatic event and the memory of it
- · Shallow and rapid breathing
- Increased heart rate
- Constricted muscles
- Hypervigilance and heightened visual, olfactory, and auditory senses
- Disrupted and distorted sleep cycles

Common triggers

Without an understanding of trauma, we may design buildings that perpetuate and cause trauma. Common environmental triggers include:

- Disruptive sounds (e.g. footsteps, doors slamming, overhearing someone have an episode, buzzing lights or appliances)
- Unpleasant scents (e.g. body odor, mildew, cigarette smoke, perfumes)
- Lack of security for self and belongings (e.g. open windows, broken security cameras, marginalized stairwells)
- Visual noise (e.g. lack of exits, unclear wayfinding, blind turns, indistinguishable repeating doors and corridors, stains on floors and walls)
- Uncomfortable sensations (e.g. no adjustable thermostat, narrow hallways, buckling floors, no fresh air)
- Institutional materials (e.g. fluorescent lights, ceiling tiles, generic furniture)

Architecture as a medium for somatic processing

We need to design not just in terms of program, section, and plan, but in terms of atmosphere, affect, and ambiance.

A substantial amount of scholarship has beckoned the architectural profession and field to abandon a technocratic and predominately visual approach to architecture. Notably, the theories and ontologies of "atmosphere," "affective space," and "ambiance," celebrate the emotional valence of space and the sensory affect of materials and forms.

By shifting the framework from which we design and build, we can approach trauma-informed architecture not just as a medical and sociological prescription for mental health, but as a metaphorical living organism that can form a somatic relationship with the people inside of it.

Instead of asking questions like, "What is the optimal square footage of a staff office," we can think about the the character of space and the experience it can elicit.

Fight mode needs a safe release like channeling energy into exercise. For people who go into flight mode, every little stimulus can be overwhelming, so a safe place to hide in solitude can ease fear. Excitement and stimulation can ease people in a freeze mode back into their bodies. People who fawn (go into people-pleasing mode) can benefit from clear physical boundaries and welcoming social interactions.

Spatial experience for trauma response

How can we think of space as medium to balance the extremes of the fight, flight, freeze, and fawn responses?

Calming isolation: A place to completely block out the world, to rest, and to breathe. A room to ground and feel safe. A dwelling that smells like you and only you. Where you can reconnect with yourself and preserve your boundaries.

Distraction: A space to break the cycle of activation and tunnel vision. Somewhere to detach from crisis and focus on something simple like smoking a cigarette, working on a puzzle, playing with a pet, or stewarding the growth of a plant.

Gentle Stimulation: Slowly getting out of disassociation or a freeze

state and back into the body.
Feeling a cool breeze, watching car headlights dance in the night, or walking on crunchy gravel.
Humming with the dryer in the laundry room. Rocking back and forth on a porch swing.

Active discharge: An area to run, scream, sweat, escape, and safely process overwhelming emotion. Getting a controlled dose of adrenaline in a mediatedrisk environment. A punching bag in a rec room, a winding path around the premises, a sound-proof booth, a path to pace in the waiting room.

With ALL this in mind, we ask some questions of architecture and design:

Avoiding triggers: What can the built environment do to preempt

and limit a triggering encounter?

What typologies like emergency rooms, prisons, offices, and bathrooms are more likely to be triggering? In what ways can design directly prevent or dampen some of these sensory disturbances?

2

Recovering from triggers: What can the built environment do to intervene or assuage an activated response?

The overall response to a "trigger" in the environment can fall into the fight, flight, freeze,

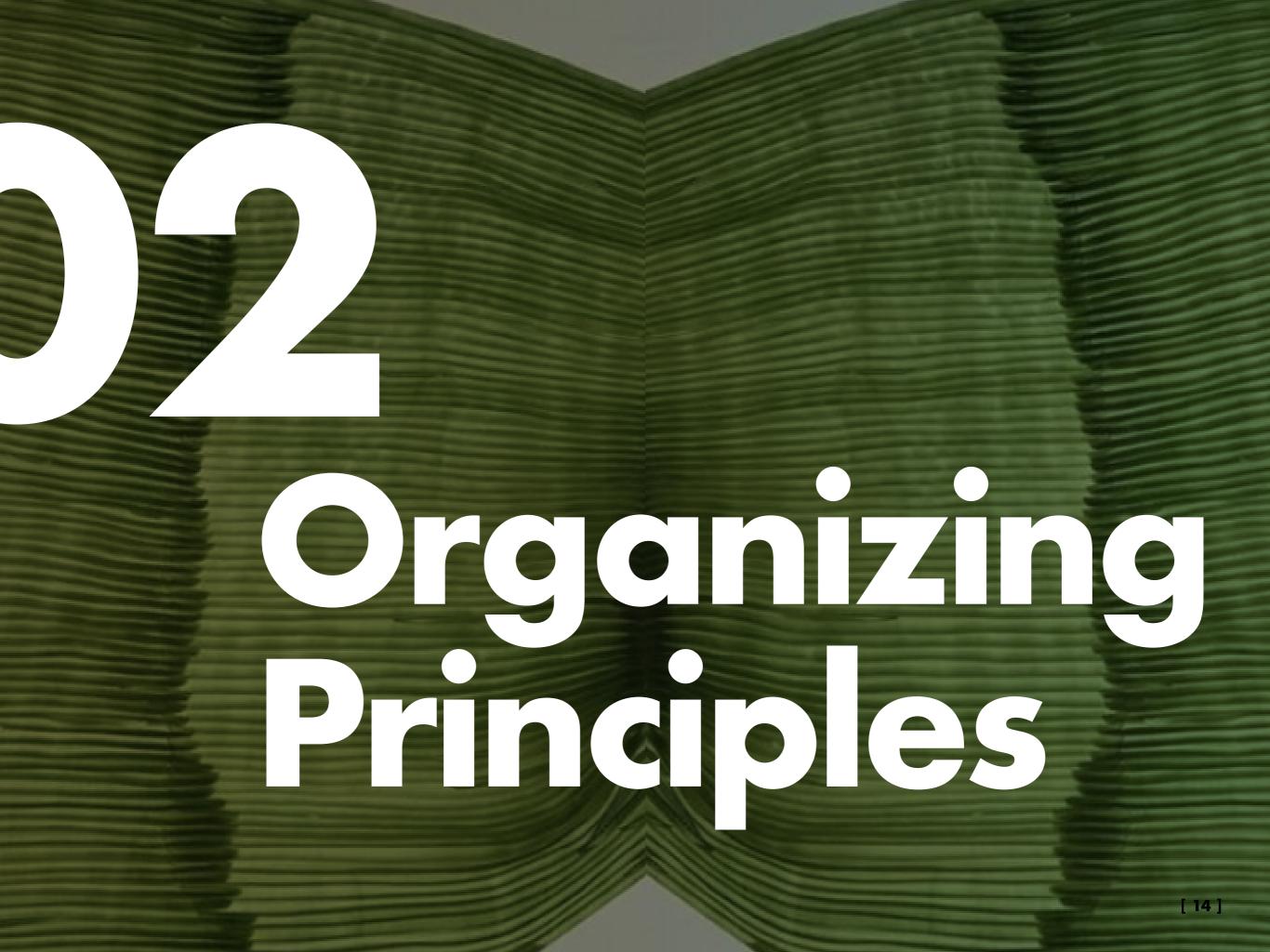
or fawn category. What if we thought of the spaces we design in terms of what can counter those reactions?

3

Thriving not surviving: What can the built environment provide to add personal pleasure, luxury, and joy while engendering new relationships?

As people begin to heal and feel safer, we can begin to think about what architecture can provide beyond basic survival needs. What are magical and beautiful additions that support creativity and discovery?

Questions + Aims



02

Organizing Principles

While there is individuality in experience, research identifies common responses to trauma and stimuli. These principles seek to outline spatial responses to complex needs.

What follows are three concepts that leverage architecture and the way trauma works on the body. They are: sensory boundaries, nested layers, and identity anchors.

We propose that a trauma-informed building is most successful when all three concepts are integrated and balanced. Quality takes precedence over quantity, but adding more elements thoughtfully will add complexity and depth to the space. These principles can be applied throughout the building, whether in plan, section, or elevation. They can be practiced in building systems, material selection, interior design, or programming.

These principles are not intended to be used as a checklist but rather as ways to recontextualize the design decisions of a project. Trauma-informed values, site- and population- specificity, and questions we ask during trauma-informed design take precedence over industry standards.

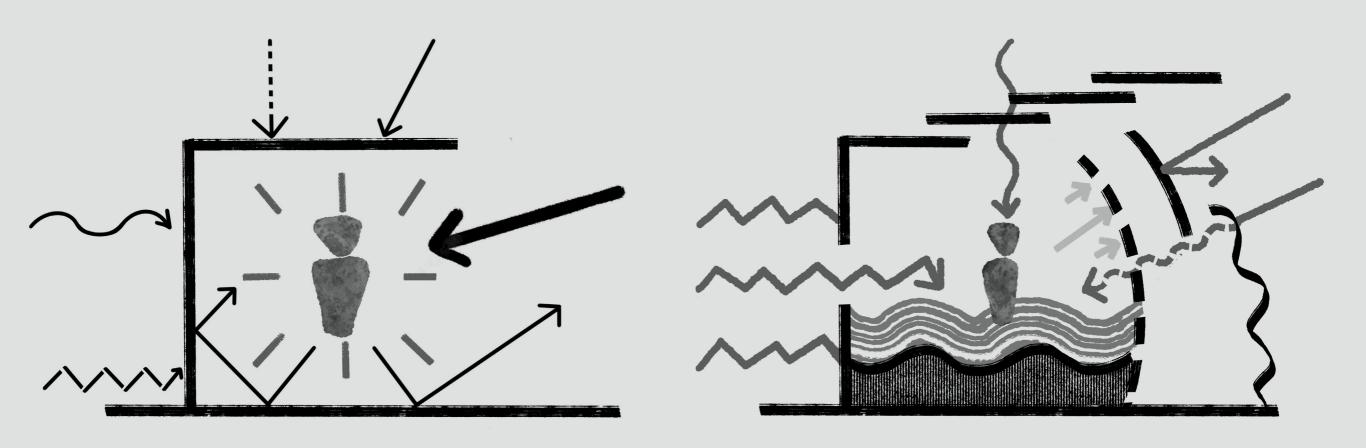
Sensory boundaries

Modulating Stimuli. Finding Poetry.

People who have experienced trauma often have sensory sensitivity. By creating sensory boundaries, we can preserve a sense of security, well-being, and wonder while limiting stimuli that negatively impact the fight, flight, freeze, and fawn responses.

While the first instinct may be to work through subtraction and addition of sensory information, we recommend a practice of modulation and filtration. Instead of blocking sound, think of how to change the quality of it. Instead of sterilizing scent, imagine materials that enhance some smells and resist others.

Organizing Principles Sensory boundaries



Common approach:

Most sensory information is aggressively blocked. Only one dominant source of information is piped in. This results in a sterile and harsh environment with a stressed body.

Suggested approach:

Permeable membranes made from different materials and placed in different locations modulate sensory information. Smells, sounds, sights, and kinetic potential shift in intensity and quality while still maintaining coherence.

Sensory boundaries

Instead of adding and subtracting sensory information, create symphonies of experience.

Key themes: membranes, materiality, and mechanics. Less-industrial materials: e.g. wood and natural fibers or fabrics provide insulation for sound and can absorb and transmit pleasant scent.

Rocking chairs or swings for soothing rhythmic movement.

Textured walls and floors to absorb sound, engage tactility, and stimulate visual curiosity.

Invite the outdoors in with garage doors and windows - highlighting how light changes throughout the day, how flora changes with the seasons.

Thresholds: gentle transitions between indoor/outdoor, public/ private, compression/expansion Air ventilation to mitigate odors and create air movement palpable on the skin.

Membranes not dividers: windows for interior rooms, perforated screens, or three-quarter walls.

Materials that can be easily swapped out or replaced when adulterated with offensive odors or stains.

Black-out curtains and thermostats in sleeping quarters for choice, control, and body regulation

"Friendly" machines: consider the sounds that lights, mechanical systems, and other powered things make. Harness their soothing hum or dampen their alarmist beeps.

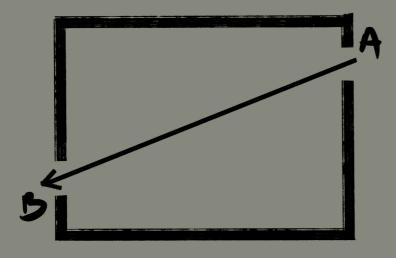
Nested layers

Rooms Within Rooms. Patterns With Variation.

Over time, people who are healing from trauma will have different needs. Nesting layers in space cultivates choice over time. By adding well-ordered spatial complexity, people can choose their level of social, physical, and sensory engagement.

Trauma leads to black-and-white thinking; healing means finding the grey space between the extremes. Phenomenologically speaking, nesting layers can span many different extremes such as compression/expansion, introversion/extroversion, and domestic/professional in a single space. It offers a gradient of experience.

Organizing Principles Nested layers

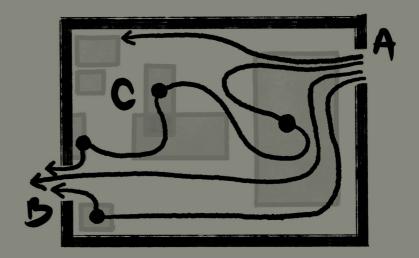


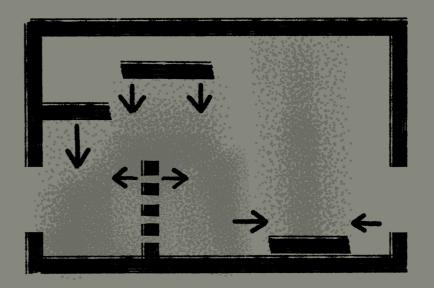




In Plan - Designing around paths of least resistance.
Circulation is direct, exposed, and singular. No
options for introverts to sidle social exposure.

In Section - A monolithic field of ambiance and atmosphere.





Suggested approach:

In plan - multiple 'islands' of possible interaction or withdrawal.

In section - a variation of compression and expansion of spatial field offering kinetic options.

Nested layers

It is crucial to offer choice without becoming overwhelming and to design with complexity while avoiding noise.

Key themes: wayfinding, thresholds, extrusion, and human scale.

Multiple uses for a single space (economy of square footage alongside social and material activation).

Niches and nooks for escape and rest while still gently connected to a bigger space.

Human scale (break up large spaces into smaller bits with dropped ceilings, perforated walls, or area rugs).

Volume variation in height and width (using lights, dropped ceilings, beveled niches, furnishings, screens, etc.).

Color and pattern complexity in fenestration, interior design, and facade.

Thresholds - avoid entrances and exits that create a "point of no return" such as dead ends or being thrust into a large open space upon entry.

Legibility - line of sight to see where you've come from and where you're going.

Gradients of security from main entry to private residential units - ideally these can change over time as safety and trust are established.

Identity anchors

The Connection To Self, Community, Landscape, And History.

Building a sense of self, cultivating relationships with others, and connecting to the past, present, and future are all crucial for people to heal from trauma.

Identity anchors are a way for people to see themselves in the environment and to be part of something bigger than themselves. It is a way to combat isolation with a sense of belonging; a way to feel valued after being marginalized.

Organizing Principles Identity anchors



Common approach:

A single message or style chosen as a "catch-all" or "neutral" symbol for "all." Instead of unifying people, it can be read as institutional, insensitive to the context, or hegemonic.



Suggested approach:

Design offers a constellation of 'touch points or 'anchors' for various identities. People can see parts of themselves in the building and each other. Space is intentionally left for personalization and expression.

Identity anchors

No culture is a monolith and not one thing can represent a diverse set of inhabitants. Aim to provide a building offering multiple symbolic and spatial meanings.

Key themes: art, personalization, landscape, and intergenerational design.

Welcoming exterior: A building's face is the first impression. Without a humanizing facade, no one will ever want to set foot through the door.

Built-in places for personalization: mural walls, ledges outside of each residential unit door, gardens, bookshelves.

Intergenerational spaces: multi-use spaces for children, young adults, adults, and seniors.

Gathering spaces: outdoor areas for cook-outs, indoor spaces for memorials or celebrations, stoops for watching the world go by, pet areas, or team sport amenities.

Ritual spaces: to journal, smoke, cook a meal, light a candle, pray, meditate, exercise, create.

Icebreaker elements: things that spark conversation among strangers like a work of art, a sublime view, or an odd-looking door.

Stylistic and symbolic ties to the neighborhood and community served: murals, reclaimed and salvaged materials, facade represents the site's cultural history, geology, and ecosystem.

Sincere space: no faux materials or fake plants (things must be what they appear to be). No tokenized representation. Stalwart design to convey continuity and endurance.

Gender-responsive space: different genders experience different traumas and have different needs to feel safe, connected, and confident.



03

Annotated Spaces

What follows is a selection of rooms and spaces completed by Shopworks from 2020 to 2021. These are not intended to be used as templates, but as examples to visually and architecturally ground the principles previously discussed in this pamphlet.

Each space is composed of various elements that illustrate how nested layers, sensory boundaries, and identity anchors work together to create a whole environment; a trauma-informed space.

As you investigate these spaces, you may find certain patterns emerge. If you see these patterns, question how they function differently in different contexts and how they may or may not work for your project.

Trauma-informed design is always evolving and should always respond to specific contexts.

After reading through the images and their annotations, you might also ask, "What is missing? What would you add, change, or subtract from each space? What could be altered to work better or more appropriately for your context?"

Amenity Room

Nested Layers

- 1. Extruded wall and dropped ceiling to create a niche creating a room within a room
- 2. Dropped lights delineate a small sitting area by bringing the ceiling level down

Sensory Boundaries

- 1. Ornamental screen that lends privacy but doesn't create blind corners or fully blocked off areas
- 2. Central fireplace creates a hearth, another temperature zone, and flickering natural light which can help calm the nervous system
- 3. Wooden flooring to add warmth, resonate sound, and texture
- 4. Comfortable seating to listen to the rhythmic sounds of the washing machines

- 1. Built in shelving to share books and display personal belongings
- 2. Place for bulletin board or art
- 3. Space for mentoring and building life skills



Laundry spa. Elisabetta. Denver, CO. 2020. Affordable housing development.



Building exterior and sculpture garden with walking path. Laurel House. Grand Junction, CO. 2020. A supportive housing development for youth exiting homelessness.

Site / Facade



Nested Layers

- 1. Entrance scaled to human body: a small cabin inside of a large house inside of a building
- 2. Off-set extruded volumes break up large front facade into smaller units



Sensory Boundaries

- 1. Meandering path to engage rhythmic walking
- 2. Flora with leaves that create shimmering sound
- 3. When trees mature over time, they will create a gentle barrier from the parking lot; deciduous trees express the passage of time (seasons) while evergreens convey endurance and consistency (growing but not going dormant)
- 4. Many windows allow you to see into the building without causing a "fish tank" effect of being fully exposed; the varying sizes add variation to the pattern, deinstitutionalizing the facade
- 5. Walking path is a mix of gravel and concrete to engage the feeling of the changing ground underneath the serpentine form encourages meandering
- 6. Pools of light create markers along the way this warm pool of light extends into the center of the building, serving as a hearth to the home



- 1. Facade using colors of the nearby mountain range
- 2. Wooden column shaped to look like an abstracted tree trunk, conjuring images of a tree house, a safe and playful home-away-from-home
- 3. Plinths for sculptures to add interest and showcase local artists

Apartment Unit

Nested Layers

- 1. Niche created under the stairs for a sense of secrecy and privacy
- 2. Loft sleeping area with audio-visual connection to the main living area to monitor guests and to easily monitor for possible intruders

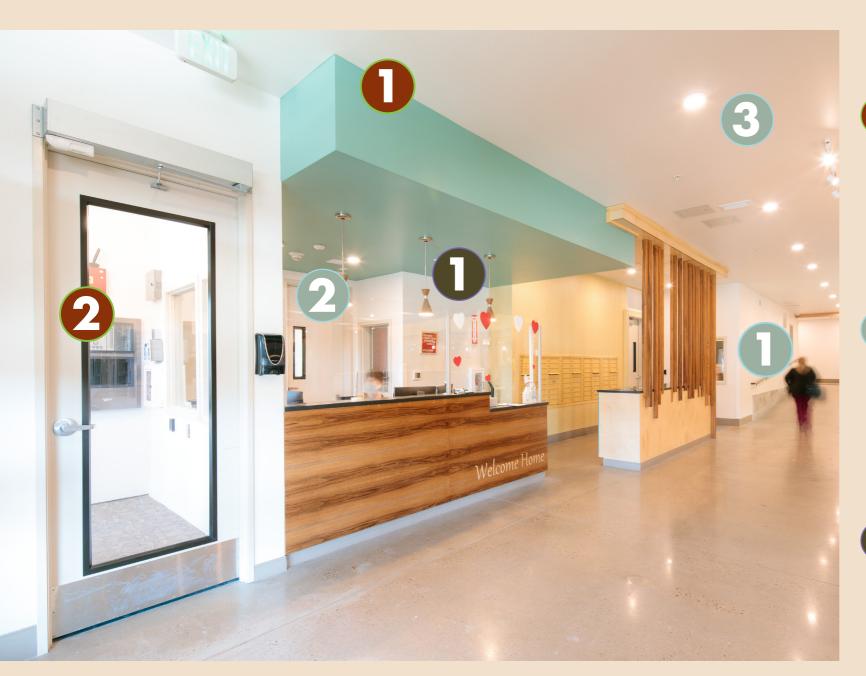
Sensory Boundaries

- 1. Wall-mounted A/C units allow for custom temperature control while keeping cost of building down to redistribute to other finishings and design details
- 2. Carpeted staircase to limit sound of footsteps
- 3. Slatted wooden ceiling to add visual texture, acoustic buffering, and subtle olfactory stimulation

- 1. High-quality furnishings that convey worth and longevity
- 2. Apartment style connects to Denver Metro's warehouse loft culture and history
- 3. Wooden vaulted ceiling hearkens to Colorado's mountain cabins



Micro-apartment unit. Indy Street Flats. Lakewood, CO. 2020. Affordable housing development.



Secure front entry. Mason Place. Fort Collins, CO. 2021. Permanent supportive housing development.

Main Entry

Nested Layers

- 1. Dropped ceiling delineates a boundary through extruded volume, not walls
- 2. The entrance creates various thresholds with a secure vestibule, a front desk area, a mail room, and secure entry to the staff offices

Sensory Boundaries

- 1. Wooden slats create some visual privacy and kinetic boundaries a mail room without walls
- 2. Staff areas have multiple interior-facing windows for visual connection
- 3. A variety of soft lighting deinstitutionalizes the space and is customizable

Identity Anchors

1. Retro-contemporary colors and finishings give a nod to the old movie theater this building once was



Common area. Laurel House. Grand Junction, CO. 2020. A supportive housing development for youth exiting homelessness.

Youth Common Area



- 1. Built in nooks and niches to curl into and be alone while still having proximity to social life
- 2. Two-tiered space where one can be above or below and see who is using the space before deciding whether or not to join
- 3. Extruded walls lend complexity, scale, and visual interest
- 4. Hallway only runs the length of the kitchen, creating spatial distinction while not feeling claustrophobic
- 5. Varying heights of counter tops for complexity and accessibility breaks up one long bar table into two different spaces
- 6. Slatted railings for visual transparency and physical safety
- 7. Variety of lighting dropped cans add another vertical dimension (almost like a dropped ceiling of light) light under the balcony emphasizes the subtle kitchen nook
- 8. Rugs break up a large space into smaller intimate areas

Identity Anchors

- 1. Built in shelving for personalization (books, boots of the builder, art pieces, or kitchen storage)
- 2. Chalkboard for messages
- 3. Bright and playful finishings and furnishings: balancing a mature and contemporary aesthetic with youthful quirk
- 4. Multiple options for seating so that whether extroverted or introverted, younger or older, in a larger group or alone, one can find their own temporary territory



Sensory Boundaries

- 1. Wood frequently used as material for acoustic, olfactory, and tactile qualities adds warmth and deinstitutionalizes the space
- 2. Slanted and dropped ceiling to bring scale of room down and feel more tree-house-aframe-like
- 3. Windows in an interior room to give visual transparency but privacy for the rest of the senses (muting sound, blocking scent)
- 4. Clear visual wayfinding queues like brightly colored door frames
- 5. Repeating visual patterns with variation such as porthole windows, circular nooks, and round tables
- 6. Variety in materiality, colors, and textures to stimulate the senses without overwhelming them

Circulation

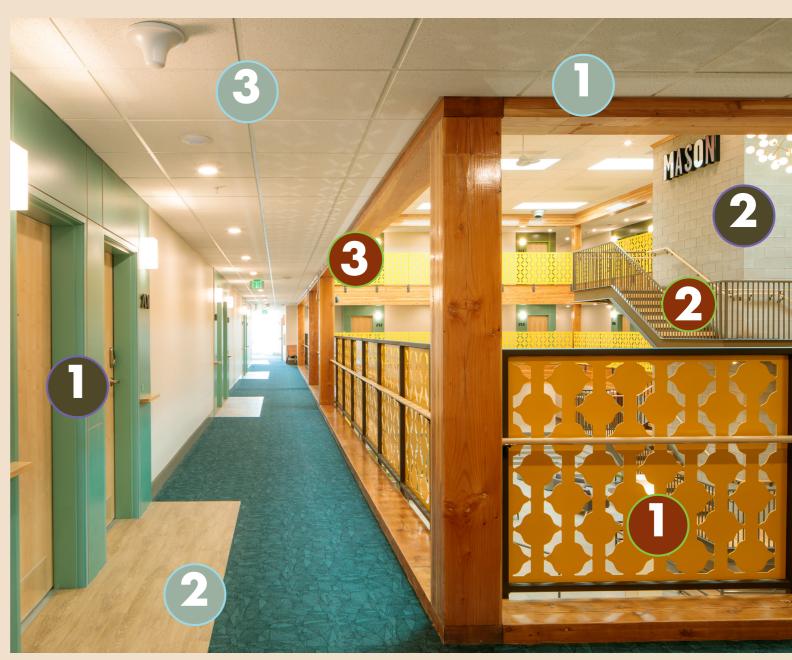
Nested Layers

- 1. Perforated guardrails provide screen for privacy while also preventing anyone from hiding behind them.
- 2. Staircase wraps around elevator shaft for clear circulation a preview of people approaching
- 3. Visual pattern of frame within frames: door frames, guardrail pillar frames, and atrium volume

Sensory Boundaries

- 1. Patterned guardrail along with lighting create subtle reflections and shadows on the floor and ceiling
- 2. Hard floor material near doors to signal that someone is near but carpet in the rest of the hallway so footsteps do not dominate the acoustic landscape
- 3. Tectum used in lieu of standard acoustic tile (which can have immediate institutional connotations)

- 1. Small shelves to place photos, plants, spiritual artifacts, etc. to personalize the entrance to one's own apartment unit
- 2. Creating a place-name



Second floor residential hallway facing the atrium. Mason Place. Fort Collins, CO. 2021. Permanent supportive housing development.



04

Design Values + Approach

Trauma informed design is about prioritization. The starting point for every decision must be rooted in collaboration, trauma awareness, and context sensitivity.

At the same time, it requires innovation and wile to convert pipe dreams into built reality.

What follows are four core themes for the process stage of design: socio-cultural context, time, balance, and the Robinhood theory.

Socio - cultural context

- 1. There is no one-size-fits all. While trauma has some universal responses, it is also incredibly individualized, often having comorbidities like substance abuse, 5. Architects and designers have depression, and anxiety. Different traumas affect people differently and even the same traumas affect people differently.
- 2. Residents and staff are the experts of their own lived experience, needs, and desires. Every project has to start with talking to the people who will live and work in the building. This looks like having focus groups, interviewing people one-on-one, and handing out surveys.
- 3. Listen to the people who have been doing the work for years. Partner with community organizations and experts in the field.

- 4. Neighborhoods, cities, states, and regions all have their own identities and histories.
- their own baggage, personally and professionally. Excavate professional standards that have been historically oppressive. Reflect on your own biases and fears.
- 6. For whom is the building? Who is unintentionally or intentionally excluded?

Time

Trauma rearranges time.

A "trigger" can activate the body into believing a traumatic past event is happening in the present.

Architecture has the opportunity to create a sense of stability and evolution. Time can fall back into place.

- 1. Buildings are not static. The neighborhoods around them change, the materials show wear and tear, and people's relationships to them change over time. Week one looks different from month three or year one.
- 2. Relationships, comfort, and familiarity take time. By living in a place, we learn where the exits are, what time of day is the busiest, and how to open the lock that jams. Our rooms start to smell like us, sounds become familiar, and we recognize patterns in how the light falls in the hallway.
- 3. Architecture must acknowledge its impermanence and produce flexibility to adapt to changing relationships between people, space, and animate and inanimate objects.
- 4. Architecture orders experience and movement through space.
 When a trauma is activated, time

- warps. The body may need to move quickly but the building may force it to stand still. Conversely, the body may need to take a moment to quietly be still while the building forces mobilization.
- 5. Architecture can distance us from natural cycles, processes, and rhythms. While we want to ensure comfort, it is also important to not fully sever an inhabitant from the changing of the seasons, the patterns of the day, and the passage of years.
- 6. Trauma rearranges time. Past traumas color present experiences and mute future opportunities.

 Make space for the complexity of the present and future change.
- 7. Architecture doesn't end at the day of unveiling. Circle back to the buildings to see what worked and what didn't. Inform future projects with these learned lessons.

Balance

When triggered, the body swings from one extreme response to another, like a pendulum. The environment has to find a common ground, a fulcrum, a balancing between these extremes.

- 1. Different stimuli are needed for different trauma responses.
- 2. Offer privacy without compromising security.
- 3. Offer choice without being overwhelming.
- 4. Design spaces that serve different purposes at different times so that one extreme experience (like quiet isolation or hectic stimulation) isn't always dominating.
- 5. Keep consent in mind. Often times, we avoid certain security measures out of fear of creating a panopticon that functions like a prison. In our conversations with residents, they frequently requested things like barred windows, more security cameras, and gated entry. They wanted these to feel safe,

- not to keep them in, but to keep negative influences out. Let the residents and staff guide how they participate in designing their own safety.
- 6. Take a walk in another pair of shoes. Experiment with different diagrams while designing to explore being someone who might be opposite you. What path would an introvert take through this space? What path would an extrovert take? What does someone in a wheelchair see when approaching the building? What about someone with extreme social anxiety? Where would you go if you needed a quick moment of peace? Where would you go if you wanted to be around people?

Robinhood theory

Architecture often comes down to decision-making and resource allocation. Traditionally, this can take the soul out of a building. We suggest becoming wily and resourceful.

- 1. Finding the cheapest, fastest solutions to complex problems can do more harm than good. Instead, redistribute resources and find ways around and through obstacles. By funneling money away from generic standards, we can pour it back into the unique lived quality and experience of the space.
- 2. Build lasting relationships with contractors, consultants, and clients. Strong relationships mean you start on the same page with every new project which means no extra time to train new people.
- 3. Elevate humble materials with Swiss precision and artistic vision. Find a material palette that isn't machined to perfection e.g. reclaimed wood or raw concrete. Use colors, plants, and patterns to add organized complexity in the landscape and throughout the building.

- 4. Leverage existing systems like gravity, air circulation, and surrounding ecologies. This can look like daylighting to conserve energy, storm water roof top detention, or creating a building entrance near an existing riparian zone where residents can take a nature walk.
- 5. Stay agile with building codes and rules. Finding loopholes, adapting to new ordinances, and advocating for policy change all can dramatically impact the character and cost of the building. Rethink parking from the get-go. Consider firewalls and fire retardant materials to minimize sprinkler costs.
- 6. Mistakes will be made. Get feedback early and often. Then come back to the scene of the crime so you can learn from it and won't become a repeat offender.



05









Personas

Four characters in search of an architect

Gloria, Logan, Calvin, and Erika are composites of people with whom we have spoken over the years and common themes we've heard. The narratives are intended to serve as a brief glimpse into the past lives and current situations that can inform what people with trauma, both residents and staff, need from their built environment.

Gloria



Gloria has been living in the building for nearly eight years now but has not forgotten how it felt the day she moved from her Lincoln Town Car into the sunny one-bedroom apartment. While living in her car, she paid careful attention to privacy and safety – thinking about where to park so that she was out of plain view but not so isolated that people wouldn't know if something happened to her. That hypervigilance around personal security and proximity to others has never left her.

Now in her own apartment, Gloria prefers to keep the windows open so sunlight can flow through the entire space. Every windowsill is filled with herbs that she uses in her cooking. She is always preparing food for her family, neighbors, and staff. Her first weekend in the building, she baked three batches of her mother's peach cobbler, which some residents still remember and reference to this day.

When her daughter is working, Gloria takes care of her grandchildren. The kids love running around outside, and Gloria appreciates that the fenced-in backyard is both safe and comfortable, with benches in the shade for her to watch them play.

However, the experience of living in her car and years of closely watching every approaching person and vehicle have made it difficult to put down her guard. She never feels truly safe – especially when her grandkids are involved and especially when they're outside. There's a broken camera in the parking lot and Gloria is frustrated that it hasn't been repaired yet.

Key Amenities for Gloria

- A spacious kitchen with a full oven and plenty of storage and counter space
- Family-friendly outdoor areas away from busy streets with secure fencing, security cameras, and shaded seating areas
- A common area where she can host gatherings for her extended family and repair relationships that fell to the wayside when she was unhoused.
- An informal meeting space in front of the building, close to staff, where she can interact with friends who she wants to reconnect with but isn't quite ready to invite up into her apartment.
- A fenced-in, well-lit parking lot with direct access to the front desk, staffed 24/7 to both provide safety and buzz her into the building promptly, so she doesn't have to stand out of the elements

Logan



This is Logan's first time living alone. Three years ago, they were forced to leave a negative situation at home and have been on their own ever since. They developed a tightly-bonded street family and largely slept outside, with occasional stints and ongoing case management at the local youth shelter.

The shelter staff were nice enough; however, the building was an unsettling environment. Every aspect of the space felt institutional, from the fluorescent lights and plexiglass windows, to the cramped dorms with standard issue pillows and blankets. Without air conditioning, they were forced to prop open the windows. This made Logan feel uneasy, particularly at night. They had seen a strange man lurk outside the dorm and since the windows weren't secured, someone could easily enter through them when everyone was sleeping. Logan didn't sleep well.

The bathrooms and dorms were gendered, sending Logan a clear message that they were not welcome. The old textured concrete sinks absorbed the smells of everyone who came before them and wouldn't come clean no matter how hard one would scrub during chore rotations. The shatter-proof scratched-up mirrors reminded Logan of using public park bathrooms to get ready in the morning.

When Logan's case manager told them about an apartment opening, they were initially nervous to move into a place on their own. Nights alone can get especially quiet and unnerving.

Art and music have provided Logan with a reliable source of comfort and companionship over the years. They are looking for an inclusive, non-institutional, safe space for themselves, their drawing, their guitar, and Bilbo.

Key Amenities for Logan

- Accent walls as well as some choice of furniture.
- Wide hallways so they can take their dog outside without bumping into anyone.
- A multi-purpose room for art classes, writing workshops, and other community events.
- Space in the communal areas where the art classes can display their projects, giving a sense of belonging and ownership over that space.
- An intentional, well-lit dog run that feels safe and accessible at night - and adjacent to a gazebo where they can enjoy nice summer evenings with their friends.
- Gender-neutral bathrooms with easy-toclean fixtures so every day can feel and smell new.

Calvin



Calvin moved in six months ago and is still adjusting to his new surroundings. He was born and raised in this town and left to join the army in his early 20s.

In the past, Calvin spent a lot of time at the local VA hospital. The front entryway felt like a point of no return with sliding doors that snapped shut behind him. He would sit in a busy, loud waiting room with blasting air conditioning making him shiver. A large fake plant gathered dust and ceiling tiles overhead reminded him of his school days, sitting bored and anxious in class. He always felt like the staff was whispering behind his back and could never see what they were doing.

Now, Calvin prefers hanging out in his own apartment. He considers himself an introvert and doesn't often seek out the company of others. His daily routine is fairly consistent – eggs and toast while watching the news, a walk around the neighborhood, lunch, dinner, a bit more TV, and early to bed. He occasionally checks in with his neighbor, an elderly woman who lives on her own. When she hears him in the hall, she'll poke her head out and ask about the weather. She insists on sharing dinner when she's made too much. He insists on taking out her trash and recycling in return.

Calvin's experience in the military has made it hard for him to be around crowds, loud noises, bright lights, and clutter. To stay grounded, he is looking for an environment that is quiet, stable, and predictable. He likes privacy and a select few one-on-one interactions with people he trusts.

Key Amenities for Calvin

- Visible staff offices near the entrance of the building.
- Tucked away seating options both inside and outside for people-watching and quiet contemplation.
- A community garden where he enjoys stewarding a tomato plant and some flowers.
- Intentional soundproofing throughout the building as well as blackout shades and dimmable light switches.
- Personalized storage in the shared kitchen for the food he gets from the pantry.

Erika



Erika has been working at a supportive housing building for nearly three years. She has herself experienced financial and housing insecurity over the years. In her current role, she finds joy in meeting people where they're at and walking alongside them. However, hearing intimate stories of loss and trauma day in and day out has taken a toll on Erika's mental health. Her supervisor calls it vicarious trauma. Regardless, Erika is determined to keep showing up for everyone she works with.

The open floor plan of the staff's office is great for bonding with coworkers. However, there is no privacy for residents who share intimate details of their lives during case management conversations.

Now and then, after a particularly stressful situation, Erika feels an urgent need to get away from it all. When she worked the overnight shift, she would go into the locked community kitchen and walk in circles until she calmed down. During the day there are people everywhere, so she retreats to her car, reclines the passenger seat, and lets the tears come.

Safety has always been a major concern for Erika, especially when she worked the overnight shift at the front desk. Unfortunately, obscured views are common throughout the building, with long narrow hallways, random cutouts, and windowless rooms and doors. Additionally, Erika avoids the dark stairwell that runs from the top floor to the basement as well as the makeshift storage shed at the far end of the yard, which holds a large collection of overflow furniture and other donations.

Key Amenities for Erika

- A dedicated staff break room with a small kitchen, a candle to light, a bulletin board where you can leave notes for fellow staff, and cozy furniture.
- Enclosed office spaces to allow staff to meet privately with residents as well as other staff members. The offices have large windows with blinds that can be pulled down when needed.
- Large windows at the front entrance to provide visual access for new visitors to see inside the building and front desk staff to see outside the building.
- Clear sightlines throughout the building, including interior-facing windows in common rooms.
- Intentional storage throughout the building and in various rooms for staff to store craft supplies, intake forms, office supplies, etc.



Final Thoughts

06

Final Thoughts

Synopsis Imaginary Spaces Constant Iteration Research This pamphlet presented a brief primer on the body-space-trauma relationship, organizing principles for trauma-informed architecture, some examples of built work, and narratives that inform what amenities residents and staff may need. The aim is to provide a spatial and somatic framework from which to approach trauma-informed architecture.

Sometimes to break through the biases and design habits to which we default, we must experiment and imagine well outside the boundaries of our current reality. What would a room with breathing walls look like? What would a vibrating floor do for people learning how to return to their body? And what about Willy Wonka's lickable walls? While these may be wildly impractical (just think of the fire code), they also can point us toward envisioning architecture as another body, another personality, that plays a role in processing trauma.

The important thing is to stay immersed and ready to iterate - to revive what worked and retool what didn't. If mistakes are made, make sure the lessons are learned. Some things will be learned by trial-and-error, others by rigorous research, and others still by criticism and conversation.

For our team's reports, case studies, pamphlets, and academic articles, please visit our website:

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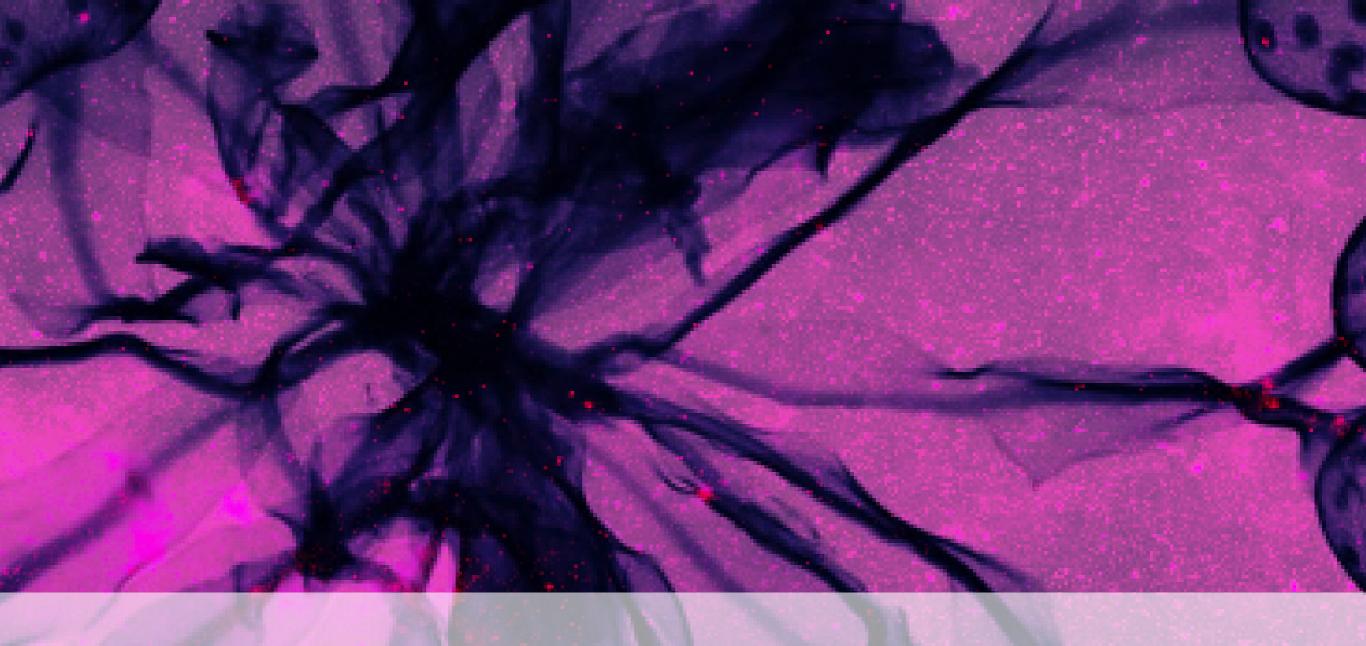
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