

# Subverting Hostile Architecture

A guerrilla campaign to reclaim urban public space



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# Statement

The increasing privatization and segregation of urban public spaces is the result of design strategies that intentionally create inhospitable conditions to deter those whose presence and behavior are not welcome. Such hostile architecture intends to manage users and is an act of social control. This thesis explores how design can instead reclaim public space and apply strategies that create opportunity and promote inclusivity.



# Abstract

Hostile architecture has debased the way in which city dwellers experience urban public spaces. Hostile design strategies intend to control the behaviors and actions of users through exclusionary and discriminatory means. By way of both additive and reductive methods, hostile architecture renders public spaces as unwelcoming and thereby unusable. These strategies affect society as a whole, but disproportionately target vulnerable and marginalized populations. Such public space management only comes in response to concerns over the aesthetic symptoms of deep rooted societal problems. Rather than offer long term solutions, hostile architecture literally pushes the problem farther down the street. Consequently, it also pushes away everyday members of society.

These hostile trends require an architectural response that reclaims urban public spaces and employs design strategies that are centered on the needs of all potential users. Emerging strategies in the field encourage user participation to augment the relationship between people and space. This thesis constructs a future of design that prioritizes human needs by reclaiming public space and offering users opportunities for self definition and inclusion; an architecture of refuge and asylum.





# Thesis Essay



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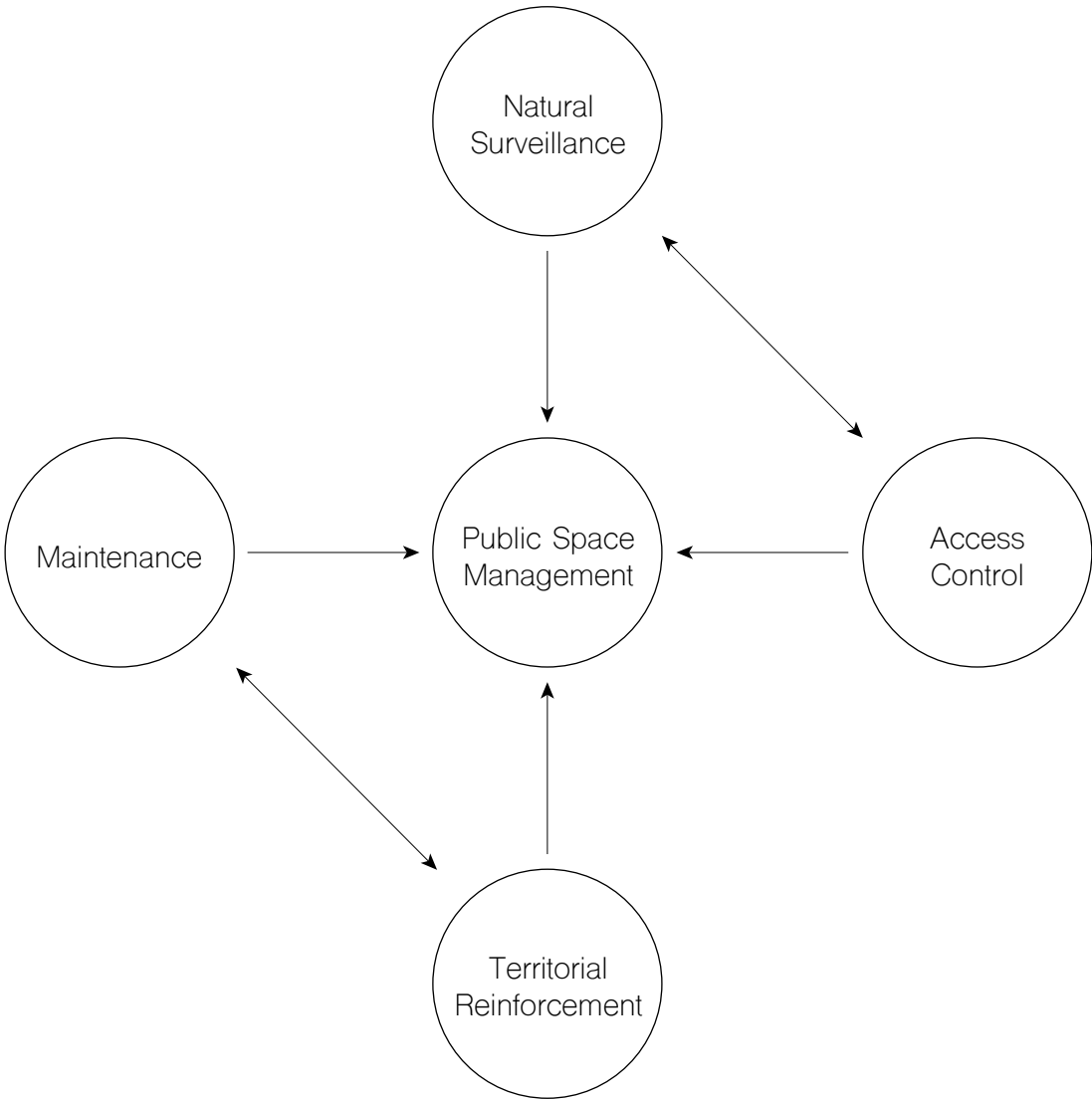
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Top: Hostile bench, London  
Middle: Hostile bench, London  
Bottom: Hostile bench, London

# Introduction

Hostile architecture is a trend in urban design that prevents people from using public spaces in predetermined undesirable ways. This method of public space management is aimed at people who fall within unwanted demographics and specifically targets marginalized and vulnerable populations. It is therefore more than just a manipulation of human behavior, but an act of social control. Recognizable forms of hostile architecture include “anti-homeless spikes” and sloped, uncomfortable seating, but most hostile architecture is more covert and even disguised to hide its true purpose. For example, public benches divided up by armrests provide a more individualized seating option at face value but actually function to prevent people from lying down. An even subtler strategy is the placement of planters, boulders, or bike parking where unwanted people may otherwise gather.

Hostile design strategies exist to provide public safety by minimizing both the amount of time people spend in an area and the activities in which they participate. That said, hostile architecture is actively designing people and activities out of space based on decision making during the design process about who and what are wanted in a space as compared to who and what are not wanted.



Above: CPTED principles | by author

# Public Space Management Theory

Hostile architecture is a relatively recent term used to describe the increasing privatization and segregation of urban public spaces. Public space management emerged in the early 1970s following the civil unrest and turmoil of the 1960s.

## *Crime Prevention Through Environmental Design*

Criminologist C. Ray Jeffery phrased the term “crime prevention through environmental design” (CPTED) in his 1971 publication of the same name. The term is used to describe a set of design principles used to discourage crime by anticipating criminal behavior and responding with environmental designs that prevent follow-through. The four main principles are: natural surveillance, natural access control, territorial reinforcement, and maintenance. The first principle, natural surveillance, suggests that lighting and landscape strategies can create visibility to in turn deter crime. The second principle, natural access control, proposes that managing and directing the circulation paths of people will decrease opportunity for crime. The third principle, territorial reinforcement, recommends expressing ownership of a space to discourage criminals. The final principle, maintenance, references the broken windows theory and contends that neglected and poorly maintained properties are breeding grounds for criminal activity.<sup>1</sup>

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<sup>1</sup> Jeffery, Clarence Ray. *Crime Prevention Through Environmental Design*. Beverly Hills: Sage Publications, 1977.

## *Defensible Space Theory*

Architect Oscar Newman developed the defensible space theory concurrently to the CPTED principles. Almost identical to the CPTED theory, Newman argues that crime can be controlled by environmental design. He defines his theory through five factors that echo the CPTED principles: territoriality, natural surveillance, image, milieu, and safe adjoining areas. Newman's first principle, territoriality, is of most significance. Here, he suggests that design strategies can establish territoriality and give the impression that public or semi-public space belongs to local residents and therefore is private space. To do so, Newman suggests the use of real and symbolic barriers to access. Real barriers to access include walls, gates, fences, and locks. Symbolic barriers are more difficult to define but use design to create the impression that spaces are private and access is limited. This strategy unjustly and unofficially encourages the privatization and segregation of public space.<sup>2</sup>

## *Broken Windows Theory*

James Wilson and George Kelling proposed the broken windows theory in 1982. The theory argues that signs of crime, anti-social behavior, and disorder create an environment that perpetuates crime.<sup>3</sup> The theory can also be interpreted in that – similar to broken windows or graffiti – the presence of homelessness is a reflection of a poorly maintained or controlled environment susceptible to crime and disorder.<sup>4</sup> This theory can therefore be used by governmental organizations and figures of authority to justify the negligent treatment of the homeless.

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<sup>2</sup> Newman, Oscar. *Defensible Space: Crime Prevention Through Urban Design*. 1st ed. New York: Collier Books, 1973.

<sup>3</sup> Kelling, George L., and James Q. Wilson. "Broken Windows." *The Atlantic*. May 04, 2018. <https://www.theatlantic.com/magazine/archive/1982/03/broken-windows/304465/>.

<sup>4</sup> Mitchell, Don. *The Right to the City: Social Justice and the Fight for Public Space*. 1st ed. New York: Guilford Press, 2003

## *Hostile Architecture*

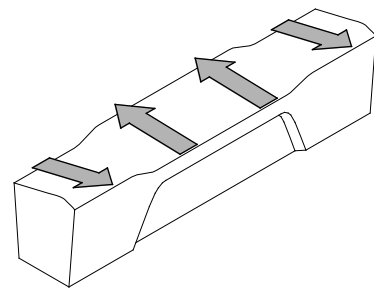
The use of crime prevention principles is wide, varied, and successful when used appropriately. That said, hostile architecture uses extreme applications of the aforementioned principles. Hostile design frames the anticipatory crime prevention strategies to respond to perceived risk rather than risk based on actual assessment. Similarly, the people and behaviors associated with the perceived risk are targeted and deterred. The resulting public spaces are unpleasant, exclusionary, and discriminatory to undesirable demographics and also to society as a whole.



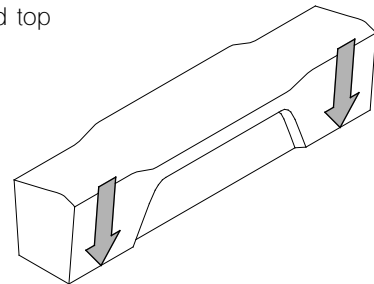
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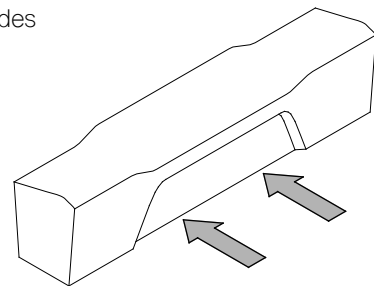
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Cambered top



Angled sides



Inset

Top: Camden Bench, London  
Bottom Left: Camden Bench, London  
Bottom Right: Camden Bench form analysis | by author



# Classifications

Hostile architecture can be accomplished by way of intentional design strategies and also through additive and reductive measures to existing infrastructure. Regardless of how it is accomplished, the sole purpose of hostile design is to render objects and spaces unusable to specific behaviors associated with unwanted demographics. Within that framework, such design interventions are definitive, inflexible, and non-negotiable.

## *Designing “Anti-Objects”*

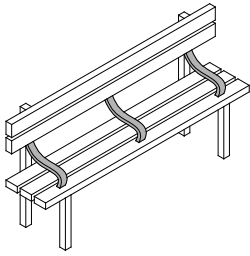
The newest trend in hostile architecture is to design objects that provide no more than minimal benefit to their users. Public seating options are the primary mechanism through which this design effort can be evidenced. Such objects intend to be uncomfortable to limit the amount of time people spend somewhere and to deter rough sleeping. For example, benches may be designed as wavy or sloping to provide users with minimum comfort. Similarly, seating is increasingly designed either as individualized, independent, or divided up by armrests<sup>5</sup> to prevent people from lying. Furthermore, many public seating options are now designed without a backrest as to discourage extended use. Slippery and uncomfortable materials are also used to achieve similar effects.

The Camden Bench is a notable example of an “anti-object”.<sup>6</sup> The solid concrete and steel bench installed in 2012 in Camden, London is designed to resist more uses than it provides. The cambered top discourages extended use and rough sleeping while the angled sides obstruct skateboarders and have been coated to prevent vandalism. The introduction of Camden Bench to public spaces caused significant controversy and contributed to the ongoing debate on hostile architecture.

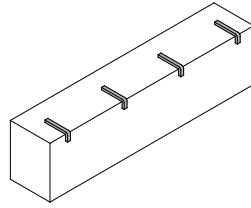
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<sup>5</sup> Armbrorst, Tobias, Daniel D'Oca, Georgeen Theodore, and Riley Gold. *The Arsenal of Exclusion & Inclusion*. New York: Actar, 2017.

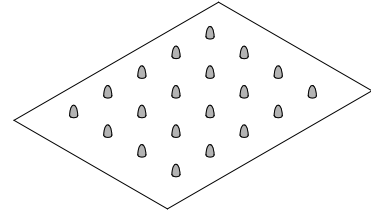
<sup>6</sup> Swain, Frank. “Designing the Perfect Anti-Object – Futures Exchange – Medium.” Medium. December 05, 2013. <https://medium.com/futures-exchange/designing-the-perfect-anti-object-49a184a6667a>.



Armrests



Skate stoppers



Anti-homeless spikes

## *Additive Measures*

Hostile architecture can also be achieved through additive measures. Such design supplements existing infrastructure to prevent certain uses. For example, “anti-homeless spikes” can be added to ground or sills to prevent people from standing or sitting. Similarly, armrests can be added to existing benches to prevent people from lying. Another example are “pig ears” or “skate stoppers”, which are metal pieces bolted to surfaces to prevent skateboarders from grinding. A less conspicuous method is to add large objects such as flower planters, boulders, or bike racks in places where people may otherwise gather. Other hostile designs add lighting or sound effects<sup>7</sup> to deter users.

Anti-homeless spikes installed outside a block of luxury flats in central London in 2014 provoked outrage and public outcry. The spikes installed by management of the apartment building intended to deter the homeless from rough sleeping outside of the entryway. London Mayor Boris Johnson commented on the controversy saying that the spikes were “ugly, self-defeating and stupid” and “not a good look”.<sup>8</sup> His concern for urban aesthetics is representative of the greater and idealized vision of a maintained and controlled built environment. This focus on aesthetics is wrongly prioritized above the rights and welfare of the people affected.

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<sup>7</sup> Armbrorst, Tobias, Daniel D’Oca, Georreen Theodore, and Riley Gold. *The Arsenal of Exclusion & Inclusion*. New York: Actar, 2017.

<sup>8</sup> Petty, James. “The London Spikes Controversy: Homelessness, Urban Securitisation and the Question of ‘Hostile Architecture’.” *International Journal for Crime, Justice and Social Democracy* 5, no. 1 (2016): 67–81. doi:10.5204/ijcjsd.v5i1.286.



6



7

Opposite: Additive hostile design strategies | by author  
Top: The London spikes controversy  
Bottom: Structure added to vent to prevent rough sleeping, Toronto



8



9

Top: Golden Bauhinia Square, Wan Chai, Hong Kong  
Bottom: Response to the #missingseats campaign - discarded seats at a local bus stop in Hong Kong

## *Reductive Measures*

Hostile architecture can also be accomplished through the removal of spatial elements, though this is the least common method used. For example, benches and seating can be removed to make it impossible for people to spend too much time in urban public spaces. Similarly but even less common and harder to identify is the removal of access and entry points. When public spaces are completely inaccessible there is no longer a need for active management strategies.

Golden Bauhinia Square, in Wan Chai, Hong Kong is devoid of public seating. There are no seating options available in the public square, along the nearby waterfront, in the surrounding shopping malls, or at local bus stops. Unfortunately this is only representative of the greater and ongoing hostile design crisis in Hong Kong. The campaign #missingseats emerged in response to call out the lack of public seating available.<sup>9</sup> The campaign inspired locals to take matters into their own hands and discarded chairs and makeshift seating options can now be found along the streets. The participation of the community is admirable, though the solution is only short-term.

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<sup>9</sup> Sharp, Mark. "#missingseats Campaign in Hong Kong, City Where There's No Place to Sit." South China Morning Post. May 27, 2015. <https://www.scmp.com/lifestyle/article/1809630/missingseats-campaign-hong-kong-city-where-theres-no-place-sit>.



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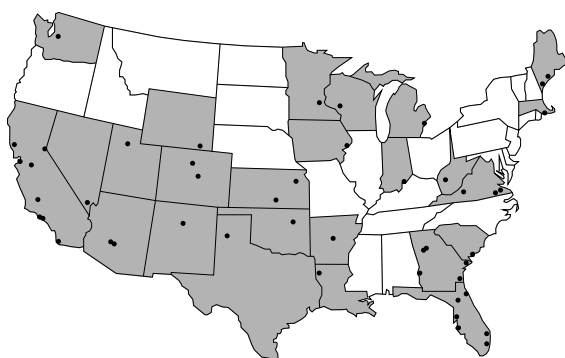
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Top: Homeless people sleeping on a bench  
Bottom: Homeless person sleeping on a bench

## Urban Segregation

The equal and absolute right to public space is not formally recognized but rather it is an implied right that the defensive measures of hostile architecture directly violate.<sup>10</sup> These measures also consistently affect marginalized and vulnerable populations who have no voice, no say, and are not included in the decision making processes of public spaces.

Hostile architecture targets contextually defined unwanted demographics and disproportionately restricts skateboarders and the homeless. However, hostile architecture also inadvertently creates spaces that are inaccessible to people with disabilities, to the elderly and to children.



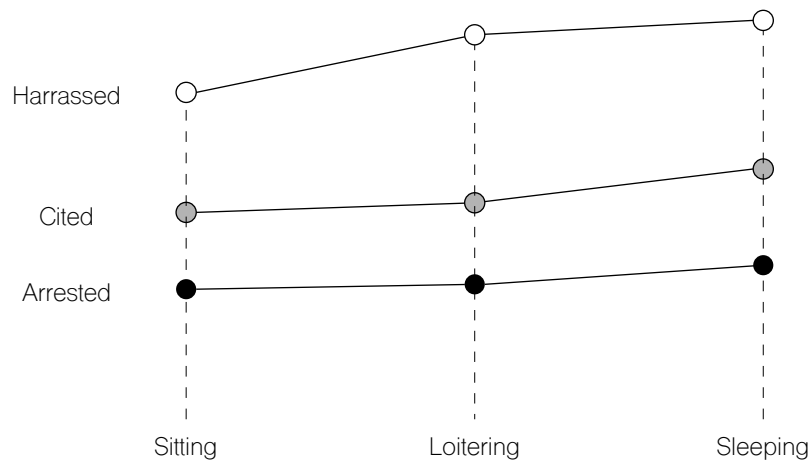
States with cities that have laws prohibiting sitting or laying in public | by author

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<sup>10</sup> Mitchell, Don. *The Right to the City: Social Justice and the Fight for Public Space*. 1st ed. New York: Guilford Press, 2003

## The Homeless

Homelessness has long been a signifier of ‘otherness’ subjected to both exclusion and stigmatization.<sup>11</sup> That said, the increasing prevalence of hostile architecture is representative of our society’s changing definition and experience of homelessness. Homelessness is no longer considered a structural problem; rather it is perceived as a moral issue. In our world today, homelessness is more than just the absence of a physical and permanent dwelling. More significantly, homelessness is the lack of roots, identity, security, sense of belonging, and place of wellbeing. It is best said by Dr. Tom Baker of the University of Auckland as quoted by Mira Adler-Gillies that hostile architecture “serves to displace the visibility of profound inequality.”<sup>12</sup> Concurrently, homelessness is being increasingly criminalized. Likewise, many of the practices associated with homelessness are heavily regulated and policed.<sup>13</sup> Many U.S. cities have laws prohibiting camping in public, sleeping in public, begging in public, loitering, sitting or lying down, and food sharing.<sup>14</sup>



Regulation of practices associated with the homeless | by author

<sup>11</sup> Petty, James. “The London Spikes Controversy: Homelessness, Urban Securitisation and the Question of ‘Hostile Architecture’.” *International Journal for Crime, Justice and Social Democracy* 5, no. 1 (2016): 67–81. doi:10.5204/ijcjsd.v5i1.286.

<sup>12</sup> Adler-Gillies, Mira. “Design Crimes: How ‘hostile Design’ Is Quietly Hurting Our Cities.” ABC News. March 01, 2018. <http://www.abc.net.au/news/2018-03-02/design-crimes-how-hostile-architecture-is-hurting-our-cities/9498912>.

<sup>13</sup> Armbrorst, Tobias, Daniel D’Oca, Georreen Theodore, and Riley Gold. *The Arsenal of Exclusion & Inclusion*. New York: Actar, 2017.

<sup>14</sup> No Safe Place: The Criminalization of Homelessness in U.S. Cities. PDF. National Law Center on Homelessness & Poverty, 2014.



## *Skateboarders*

Skateboarding is associated with values of freedom and individualism, but ironically there are more places in the world with laws preventing skateboarding than there are skateparks. The general public views skateboarding as a disruptive and destructive activity of insolent and rebellious teenagers. As such, city authorities enact limitations to the recreational opportunities available to skateboarders. These skateboarding bans claim to reduce collisions between skaters and pedestrians and to address the physical safety of skateboarders themselves, but primarily exist to remove skateboarding from public life. Management strategies also include manipulation of the law to render skateboarding as criminal. In extreme cases, skateboarders are considered vandals and trespassers. That said, skateboarding itself is not a crime, and so governing bodies also use unofficial strategies to regulate the skaters who do use public spaces, including the application of skate stoppers to surfaces. These official and unofficial measures create significant tension between skaters and non-skaters and further promotes the construct of skateboarding as a subculture.<sup>15</sup>

## *Other Marginalized and Vulnerable Populations*

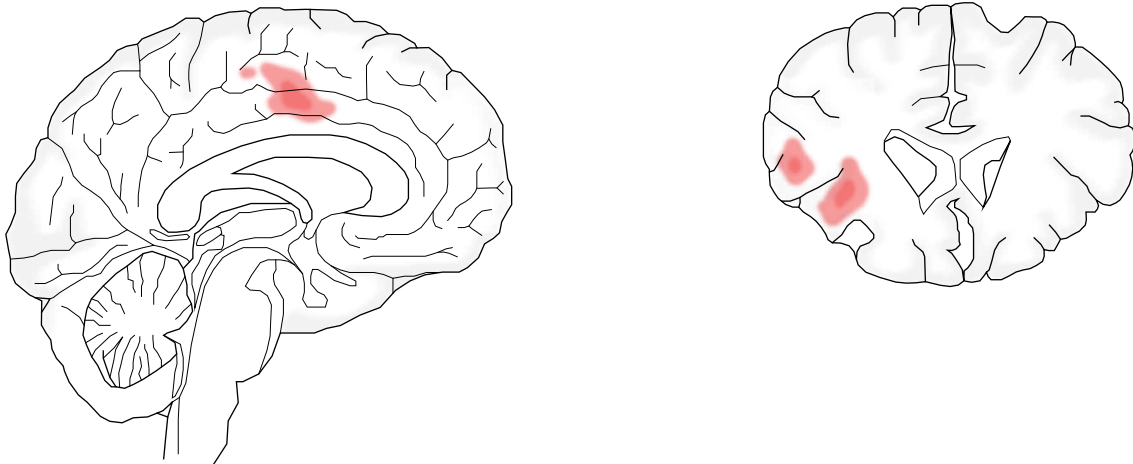
Marginalized and vulnerable populations are defined as those who are underserved, disregarded, ostracized, harassed, and persecuted. Such groups include people with disabilities, the elderly, and children. These groups are infrequently the intended targets of hostile design and unfortunately, hostile architecture cannot distinguish. Consequently, hostile design measures make urban public spaces uncomfortable and thereby unusable to those dependent and in need of inclusive infrastructure. Furthermore, 53% of U.S. cities (refer to map on page 23) prohibit sitting or lying down in particular public places as an attempt to criminalize homelessness.<sup>16</sup> These regulations affect more than just homeless populations by criminalizing global human behaviors.

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<sup>15</sup> Borden, Iain. *Skateboarding, Space and the City: Architecture and the Body*. Oxford and New York: Berg, 2001.

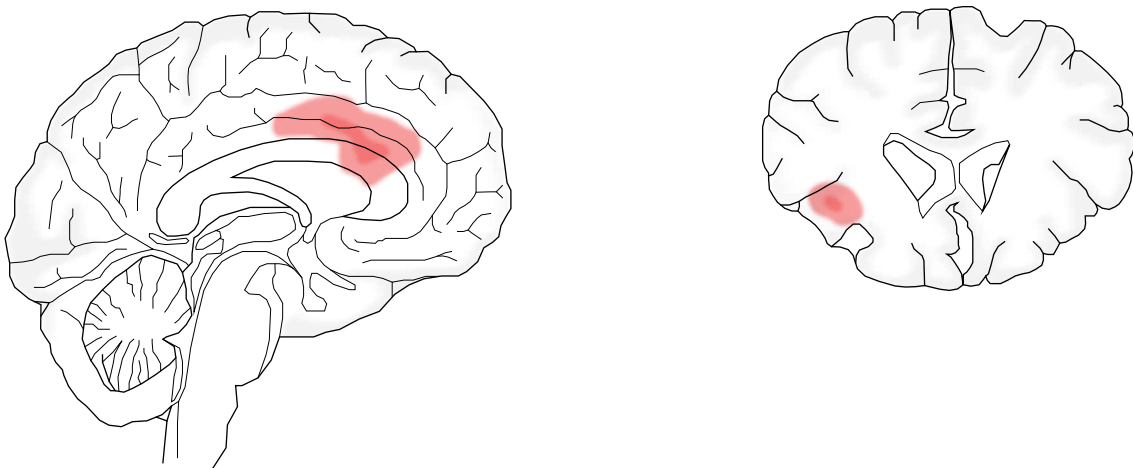
<sup>16</sup> No Safe Place: The Criminalization of Homelessness in U.S. Cities. PDF. National Law Center on Homelessness & Poverty, 2014.

Social Pain



12

Physical Pain



13

Above: Feelings of pain associated with social exclusion activates the same parts of the brain as feelings of physical pain | edited by author

# Consequences

Hostile architecture only offers limited and short term benefits to public space management but has more lasting and extensive repercussions. Such consequences include adverse psychological effects, diminished societal functioning and political.

## *Psychological Effects*

Hostile architecture intends to be both exclusionary and discriminatory and therefore has devastating psychological effects on the wellbeing of those it targets. Achieving a sense of social belonging is a fundamental psychological need and a mechanism for survival. Social exclusion impairs emotional regulation, diminishes intellectual functioning, and evokes aggression. These effects are neural and MRI scans show that social and physical pain elicit similar brain responses. People who consistently feel excluded also have poorer sleep quality, higher stress levels, and weakened immune systems. Furthermore, rejection can cause marginalized people to experience more mental health problems, primarily anxiety and depression. Unfortunately for the people targeted, this social exclusion is a perpetual cycle with no relief.<sup>17</sup>

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<sup>17</sup> Hutchison, Paul, Dominic Abrams, and Julie Christian. "The Social Psychology of Exclusion." In *Multidisciplinary Handbook of Social Exclusion Research*, 29–57. 1st ed. Wiley, 2008.

## *Social Effects*

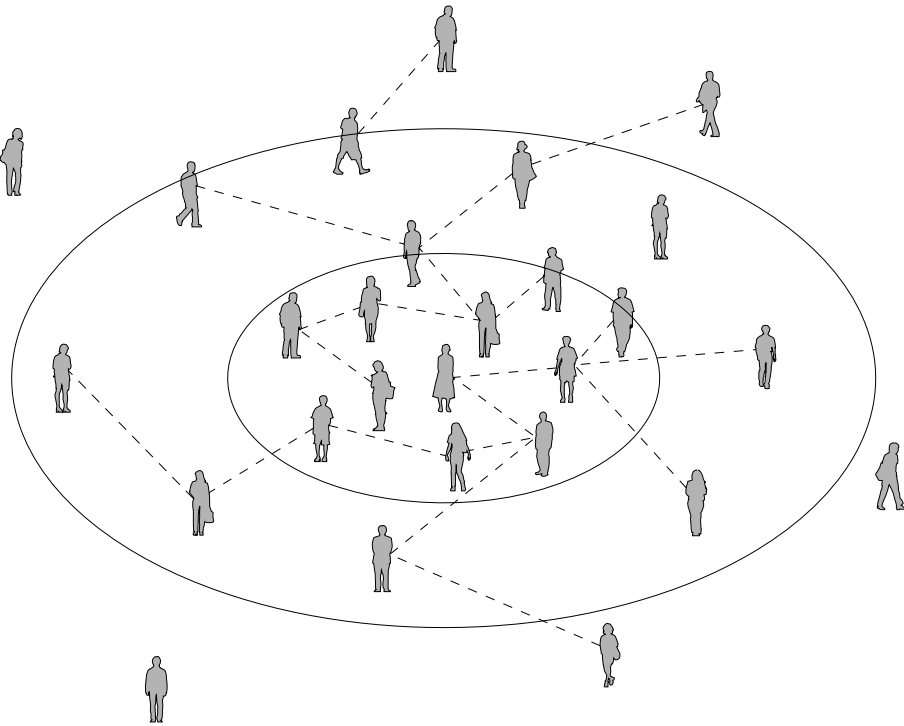
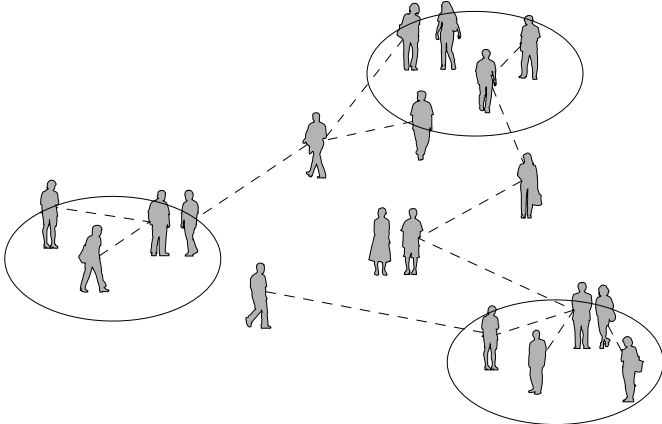
Public spaces offer considerable social value to urban communities by providing people with places to come together. Social spaces are important in that they allow people to make connections to other people and to spaces, thereby facilitating community ties and forging a shared cultural identity. That said, these environments are only functional when they are inclusive to the diversity of groups in a city and create a space for everyone to participate in; community participation is critical to the success of urban public spaces. Hostile design strategies explicitly prevent urban public spaces from operating socially. Instead, hostile architecture targets and deters both users and activities.

## *Diversity Effects*

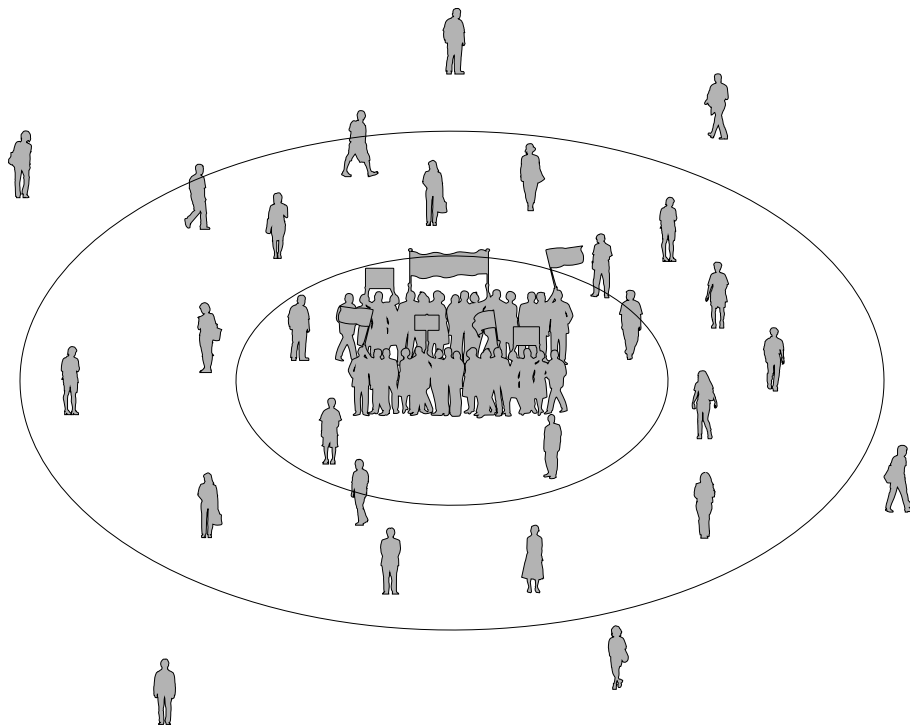
The public realm provides opportunities for people of a variety of ethnic, cultural, and socio-economic backgrounds to interact. Diverse environments allow people to understand the different perspectives of others within the world we live and to develop trust, respect, and understanding across cultures. Likewise, exposure to diversity is associated with many benefits including enhanced dimensions of thinking, creating, and building. Hostile architecture threatens the diversity of urban landscapes by targeting and removing contextually defined unwanted demographics.<sup>18</sup>

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<sup>18</sup> Mitchell, Don. *The Right to the City: Social Justice and the Fight for Public Space*. 1st ed. New York: Guilford Press, 2003



Above: Diagrams of social space | by author



Above: Diagrams of social space | by author

## *Political Effects*

The origin of public space can be traced to Greek agoras. Agora translates to “gathering place” or “assembly” and appropriately, agoras were the centers of commercial and social life in Greek cities. For Greek citizens, agoras also served as the center of political life and the practice of democracy. It was in these ancient public spaces that the precedent of providing all citizens with the equal opportunity to appear politically was established. Political appearance can be defined as a citizen’s right to publically speak, act and engage politically. Political appearance can also expand to include citizens’ rights to organize publically, as seen in political demonstrations and assemblies at both the individual and collective scales. Today, political appearance can also be understood as presence and representation in society and in the existing political structure. Hostile architecture specifically functions to prevent marginalized and vulnerable populations from appearing politically and does so by removing these populations from public spaces altogether. It is unlawful and immoral to inhibit the political appearance of the groups that are most in need of political presence.<sup>19</sup>

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<sup>19</sup> Baird, George. *The Space of Appearance*. Cambridge, MA: MIT Press, 2003.



14

Above: Zuccotti Park, New York City



# The Death of Public Space

Hostile architecture is a not-so-subtle method of public space management. Such measures reveal that public space is not really that public at all. Rather, these spaces are heavily regulated and can therefore be considered as pseudo-public. Beyond that, these urban spaces designed to deter make no positive contribution to their surroundings or users, as evidenced by the psychological, social and political consequences.

## *“Public” Space*

Often, public spaces belong to a city or governing body. It is this figure of authority that makes decisions on how public spaces are structured and how they function. These considerations are made early in the design process and are based on an imagined and idealized “public” defined by the governing body. Consequently, public spaces are designed to deter undesirable people and prevent unwanted behaviors. These spaces are therefore exclusionary, discriminatory and no longer public.

## *“Democratic” Space*

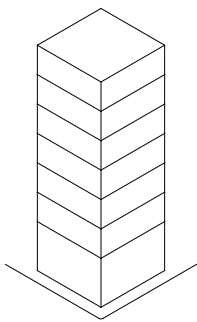
Public space is inherently reflective of the political values of the aforementioned governing body that owns the public space. Often, public space is conceptualized as democratic space. Democratic public space can be characterized by public ownership, universal accessibility and inclusivity, flexibility of use, and freedom of expression.<sup>20</sup> As such, the regulation and management brought on by the implementation of hostile architecture directly contradict the ideals and realization of democratic space.

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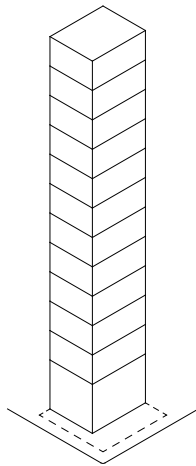
<sup>20</sup> Sohbaty, Nahal, and Rivka Weinstock. “Democratic Public Space.” August 24, 2017. <https://www.cmgsite.com/democratic-public-space/>.

## *Privately Owned Public Space*

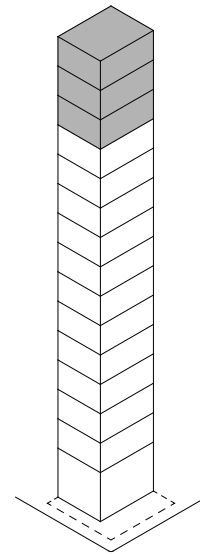
Privately owned public space (POPS) is a 1961 New York City zoning concept that incentivizes developers by offering more floor area in exchange for the construction of public spaces. POPS is heavily regulated in regards to design and use. For example, POPS have specified hours of public access, amenities required, and quality of seating provisions and spaces. As such, POPS cedes significant rights associated with private property ownership, including the right to exclude members of the public. That said, these contractual obligations have not prevented owners and designers of POPS from treating the spaces as hostile. Often, access is blocked physically and symbolically, required amenities are not provided and the available seating options discourage extended use. Consequently, POPS is exclusive and discriminatory.<sup>21</sup>



1. Floor area ratio (FAR) configuration



2. FAR reconfigured



3. Bonus floor area for providing public space

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<sup>21</sup> Armbrorst, Tobias, Daniel D'Oca, Georgeen Theodore, and Riley Gold. *The Arsenal of Exclusion & Inclusion*. New York: Actar, 2017.



15

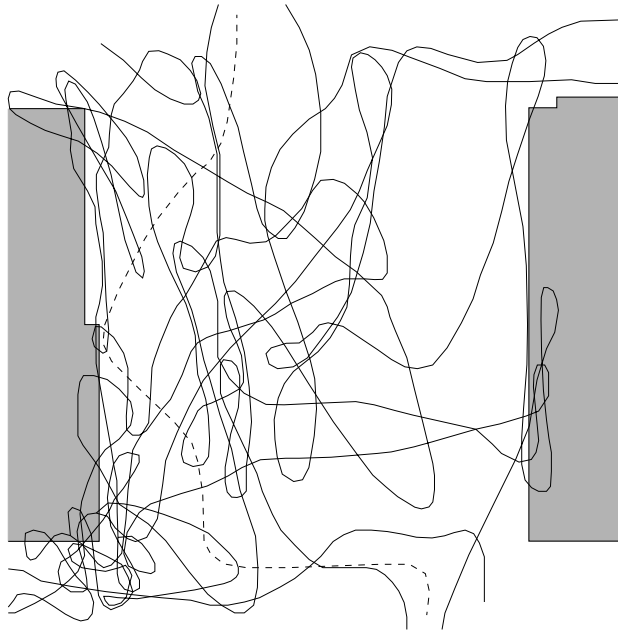


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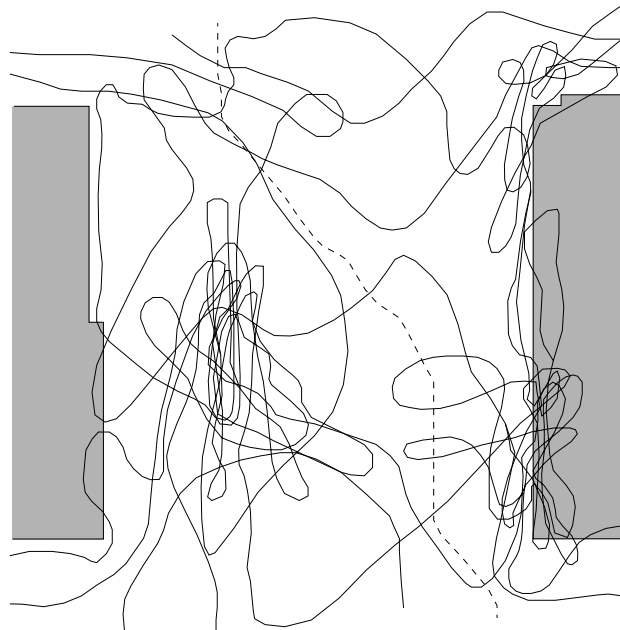
Opposite: POPS zoning incentives diagram | by author

Top: Plaque at a POPS in Seattle

Bottom: Signs at Zuccotti Park, a POPS in New York City



17



18

Above: The movement of a skateboarder (solid line) compared to the movement of an architect (dashed line) | edited by author

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# User Informed Design

Architecture is made by both use and design. That said, users of space are rarely the client and therefore tend to have very little influence in the design process. However, design strategies typically suggest and attract specific types of users. It is therefore necessary to anticipate the end-user and consider their role in defining a space.

## *Creative Users*

Creative users have a desire for exploration, play, surprise, and intimate interaction with the built environment. As such they can be expected to challenge design intentions to give existing spaces new meaning. Creative users need spaces that empower them to conceive and create. Design strategies that recognize user creativity include appropriation, collaboration, disjunction, DIY, and montage. It is through this dynamic relationship between user and space that architecture is augmented.<sup>22</sup>

Skateboarding culture is the epitome of creative use. Skateboarders uniquely respond to the built environment by challenging the preconceptions we have of everyday function. Skateboarders instead see space in unexpected ways and as opportunities for creation and recreation. As such, they skillfully resist the standardization and repetition of urban landscapes.<sup>23</sup>

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<sup>22</sup> Hill, Jonathan. *Actions of Architecture: Architects and Creative Users*. London and New York: Routledge, 2003.

<sup>23</sup> Borden, Iain. *Skateboarding, Space and the City: Architecture and the Body*. Oxford and New York: Berg, 2001.

## *The Accidental Playground*

David Campo documents the “accidental playground” in his 2013 publication in reference to the evolution of an abandoned Brooklyn waterfront in Williamsburg into an unexpected public space.<sup>24</sup> Here, locals reclaimed a vacated property without authority, capital, assistance, vision, or even coordination amongst themselves. Lacking any formal governing, the site was transformed in unexpected ways outside of conventionally ordered urban spaces. Users were able to reclaim the site as a place for experimentation, creation, practice, and play. The site also provided users with the opportunity to continuously create, destroy, and reimagine as necessary. The site therefore allowed people to engage with their landscape in a more meaningful manner. Campo tells this story to advocate for the “unplanned” and “undesigned” in creative production and to encourage citizens to reclaim their cities.<sup>25</sup>

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<sup>24</sup> Campo, Daniel. *The Accidental Playground: Brooklyn Waterfront Narratives of the Undesigned and Unplanned*. New York: Empire State Editions, 2013.

<sup>25</sup> IBID

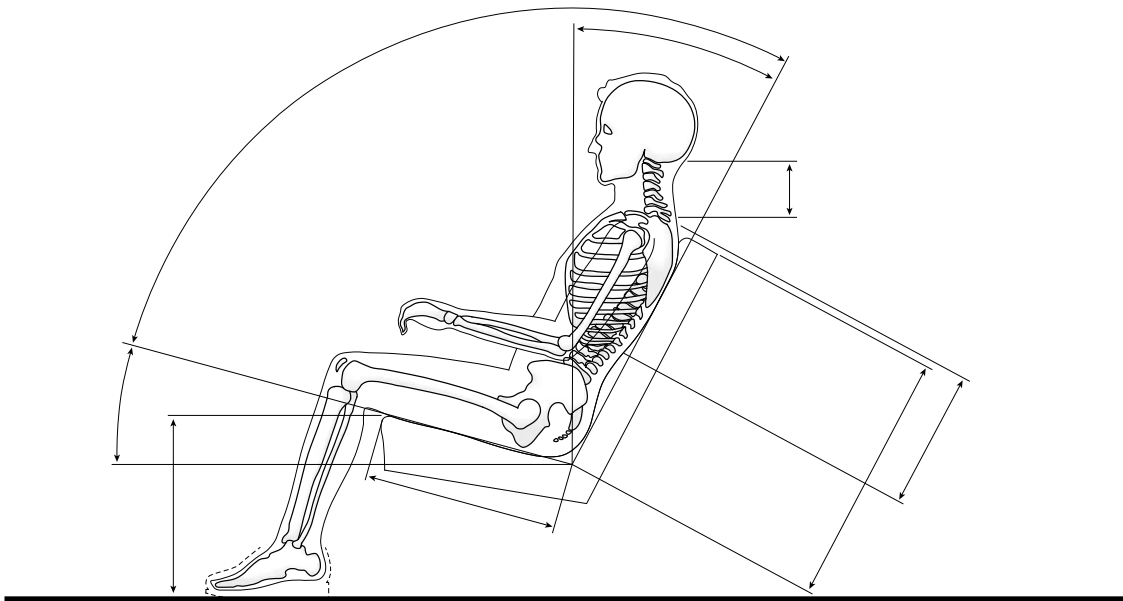


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Above: Scenes from the accidental playground





## Notes on Comfort

Having a sense of comfort is integral to our general wellbeing and to our experience of the architectural world. Physical comfort in the built environment is dependent on heat, light, sound, and air quality.<sup>26</sup> Physical comfort is also dependent on how the human body is supported by environmental features. Our state of physical comfort influences our psychological comfort and the interaction of the two determines our behavior. These comforts are considered as neutral states and are only achieved only when users are indifferent towards their environment. Change to any of the criteria for comfort influences how people both feel and behave in a space. Hostile architecture intends to disrupt our sense of comfort, to instead regulate and control human behavior.

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<sup>26</sup> Ong, Boon Lay. *Beyond Environmental Comfort*. London and New York: Routledge, 2013.



## Conclusion

Hostile architecture makes urban public spaces exclusionary, discriminatory, and unpleasant. Hostile design strategies specifically target marginalized and vulnerable populations based on perceived associations to undesirable behaviors. Hostile design strategies are enacted to actively deter people and activities from public spaces. Public spaces are therefore heavily regulated and as such can be considered as no longer public but rather as pseudo-public.

These hostile measures need to be counteracted to reclaim urban public spaces for everyday users. To do so, it is necessary for designers to employ strategies that anticipate and respond to the needs of all potential users, such as resting, socializing, and recreation. It is also important that these design strategies encourage user participation and creativity to augment the relationships between people and space. Interventions that embody these strategies offer users opportunities for interaction, reconfiguration, and self-expression. Furthermore, such interventions empower users to create and define their own environments.



## Precedents + Case Studies





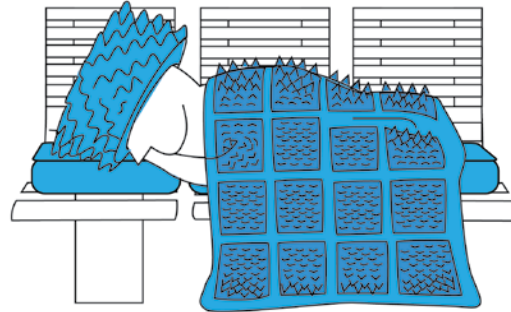
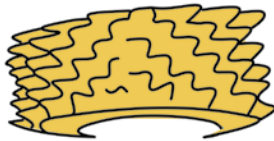
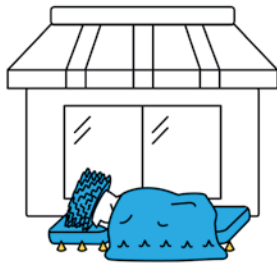
## Stair Squares

Mark Reigelman  
Brooklyn, New York | 2007

Stair Squares is an interactive and modular public installation composed of a series of blue metal structures, scattered on the steps of Brooklyn Borough Hall's staircase. Reigelman was inspired by the use of stairs as impromptu seating for New Yorkers to rest, relax and meet. The pieces intend to enhance the experience of users by offering a variety of opportunities for resting and socializing. In turn, the installation encourages public interaction and engagement and brings life to the steps of an otherwise mundane government building.



Reigelman, Mark. "Stair Squares." <http://www.markreigelman.com/stair-squares/>.



## Hemlös | The IKEA Collection

Rosemarie Gresham, Robyn Goodridge  
+ Samantha Slinn | 2017

Hemlös is a speculative design of a modular sleep set. The set is marketed towards the homeless to aid them in sleeping comfortably outdoors. The artists chose to invent the set as a product of IKEA because the company advocates for democratic design. IKEA designs products that function for a variety of different lifestyles and are made to be both efficient and inexpensive. The 2017 IKEA theme was “design for everyone” and the artists used that to argue that the idea of home includes public spaces.

The modular sleep set includes three pieces. The headpiece is designed to block light and noise while also functioning as a pillow. The mattress pad is made of 3 cushions of moldable material to shape themselves to the space they are occupying. An insulating and water resistant blanket is also included.





## DN100 | Urban Furniture

Oliver Schau  
Germany | 2011 - 2012

DN100 is a series of public furniture that reclaim public space in the German cities of Hamburg, Braunschweig and Dresden. Inexpensive, weather resistant and flexible drainage pipes are wrapped around existing urban infrastructure to transform uninhabitable spaces into variety of seating options. Schau chose to create seating because he considers seats as meaningful objects that contribute to the qualities and liveliness of urban spaces. The bright yellow color allows the furniture to stand out from it's surroundings and therefore draw the attention of passersby.



Schau, Oliver. "DN100." <http://oliverschau.de/portfolio/dn100-hamburg/>.

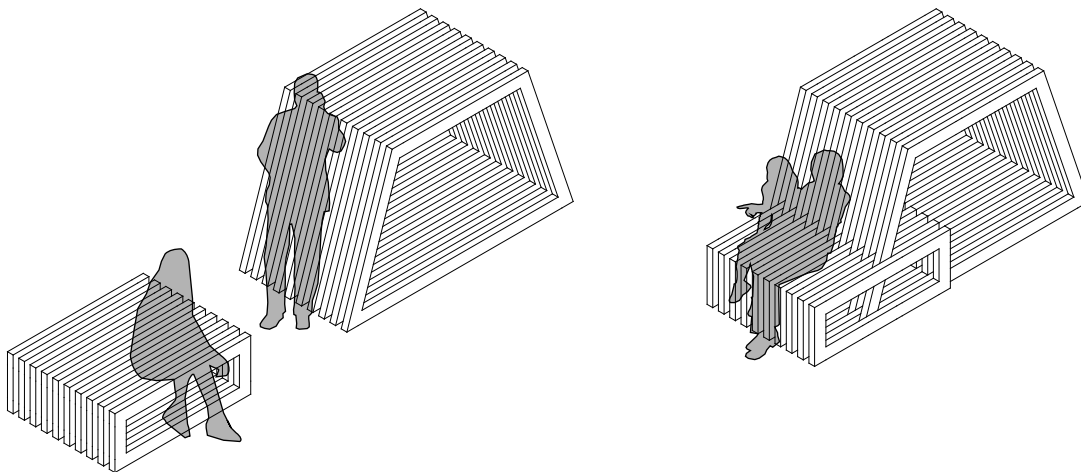
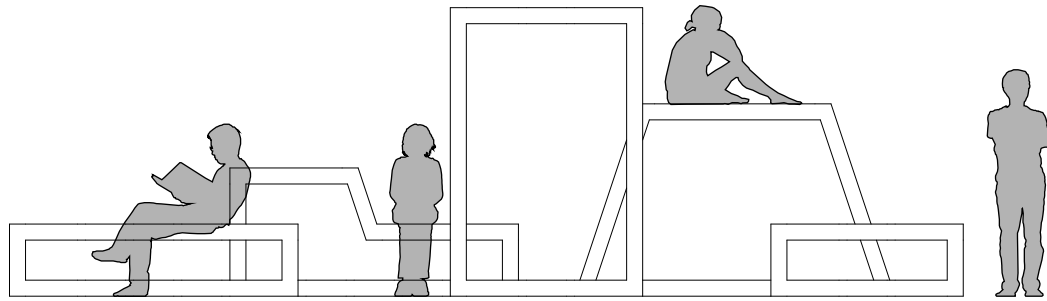


## Intersections

Izabela Boloz  
Poland | 2014



Intersections by Izabela Boloz is a geometric and modular urban furniture collection. The individual pieces come in a several different colors and forms and are made of lightweight material so that they can be freely arranged by users. The slatted structure allows the pieces to slide and lock into one another to create new forms and spatial combinations. The result is an endlessly changing urban environment that offers a variety of opportunities and spaces for meeting, play and relaxation.



Above: Form analysis | by author

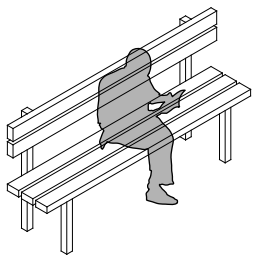


## Modified Social Benches

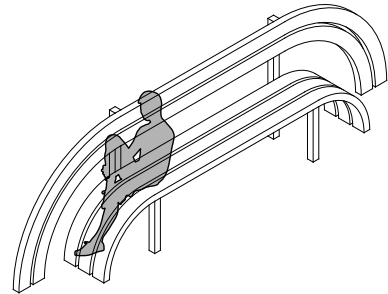
Jeppe Hein  
2005 - 2015

The modified social benches are a collection of benches across the globe with extreme alterations to the basic form of a traditional park or garden bench. The benches are uniquely manipulated into a variety of shapes and forms to offer numerous opportunities for resting, socializing, and recreation. The resulting form is somewhere between a sculpture and a functional piece of furniture. Hein describes that the benches “transform their surroundings into places of activity” and “foster exchange between the users and the passers-by, thus lending the work a social quality.”

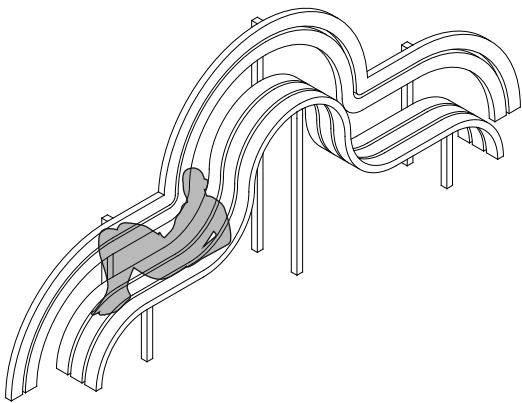




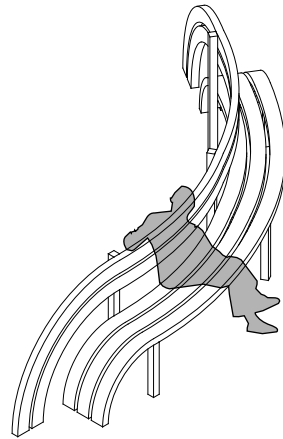
1. Traditional bench form



2. Extend



3.A. Manipulate



3.B. Curve

Above: Form analysis | by author



# Program





## Program Narrative

Public spaces offer considerable social value to urban communities by providing people with opportunities to come together. Public spaces can only be considered successful when they are inclusive to the diversity of groups in a city and create a social space for everyone to participate in. That said, hostile design strategies specifically prevent public spaces from functioning socially. Instead, hostile architecture explicitly targets and deters users and activities.

This thesis explores how passive programming can be employed to reclaim urban public spaces. Through the use of abstracted and multivalent interventions, users will be encouraged and empowered to uniquely define spaces. Such interventions can be rearranged and combined to offer users a variety of opportunities for resting, socializing, and recreation. As such, the reclaimed space will be able to accommodate the needs of constantly changing users and events.



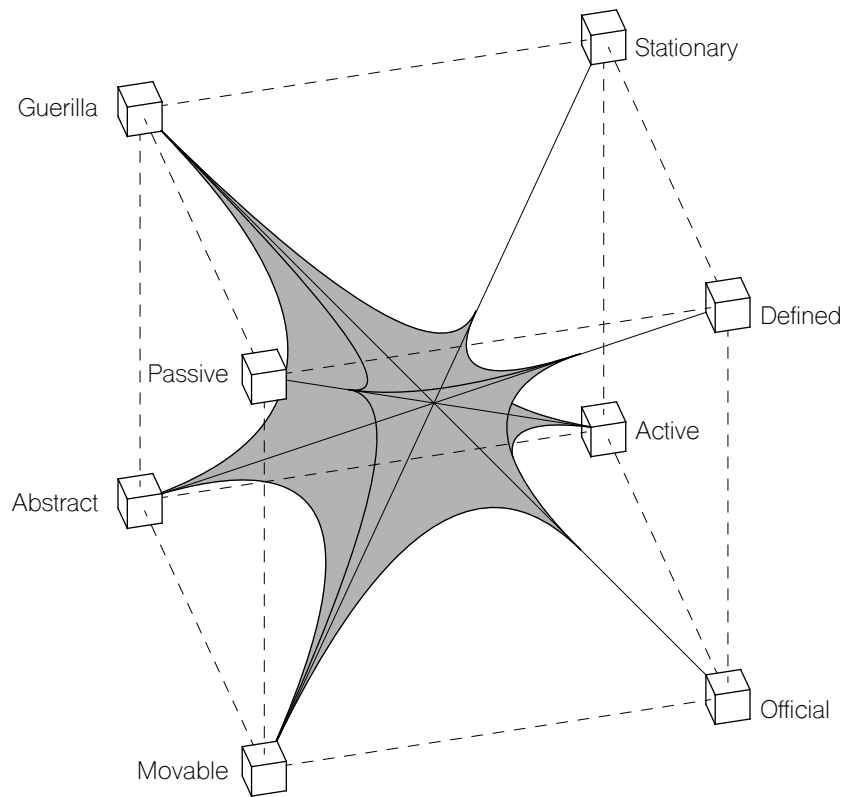
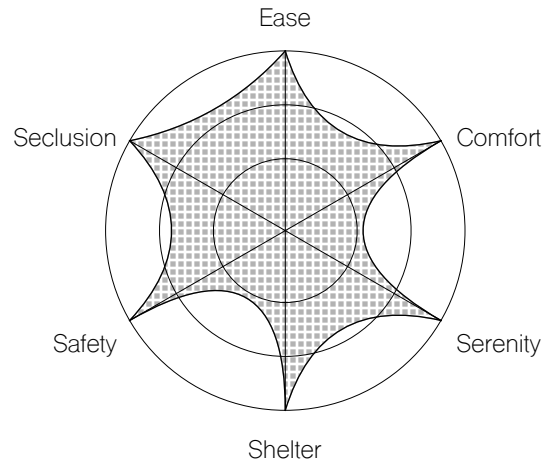
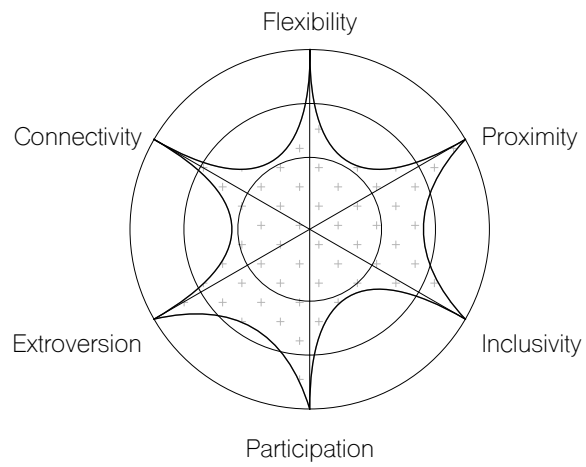


Diagram of programmatic objectives | by author

Rest



Socialization



Recreation

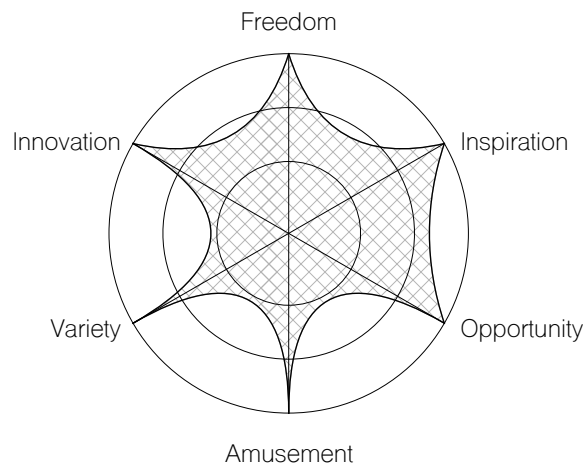


Diagram of programmatic needs | by author

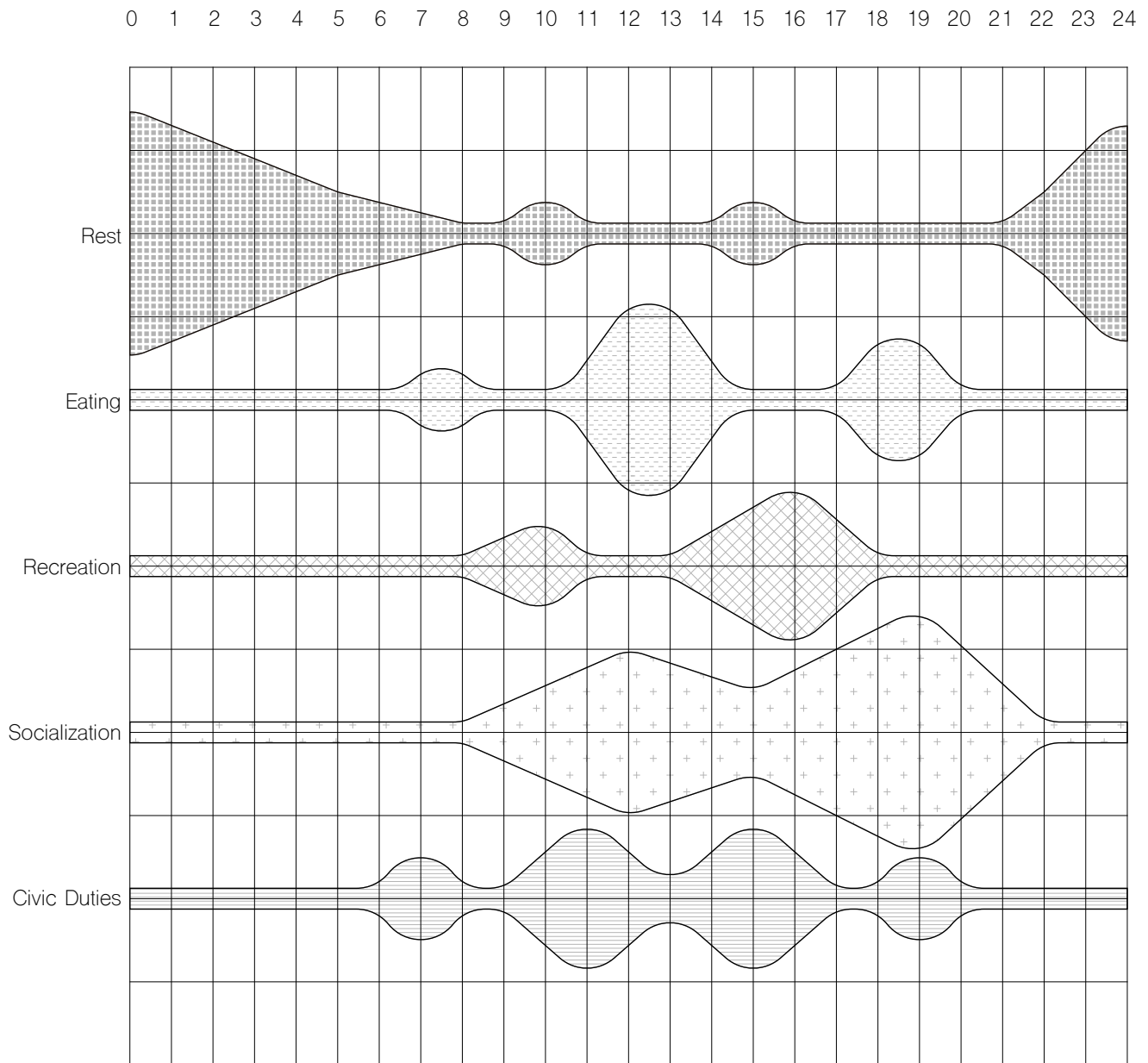
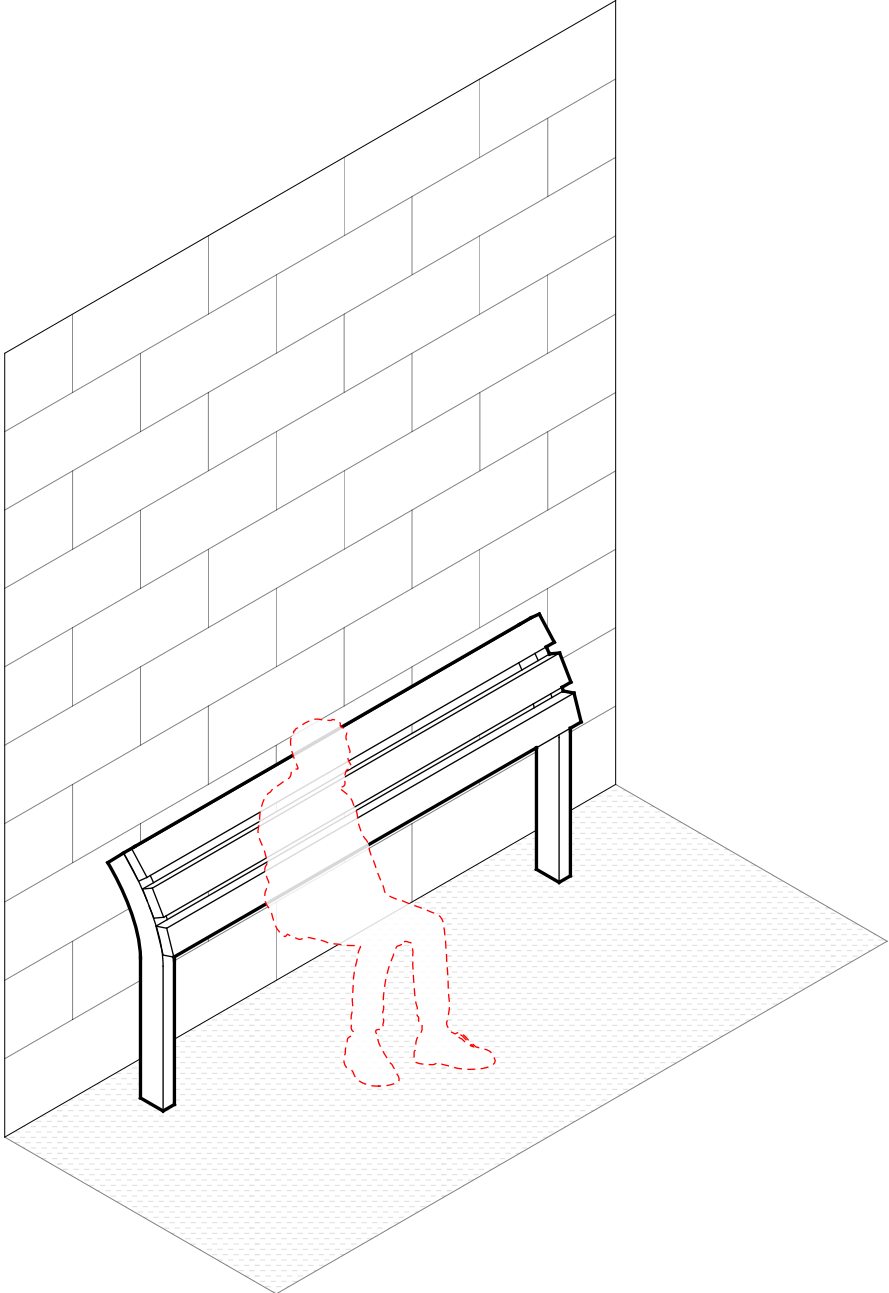


Diagram of programmatic timeline | by author



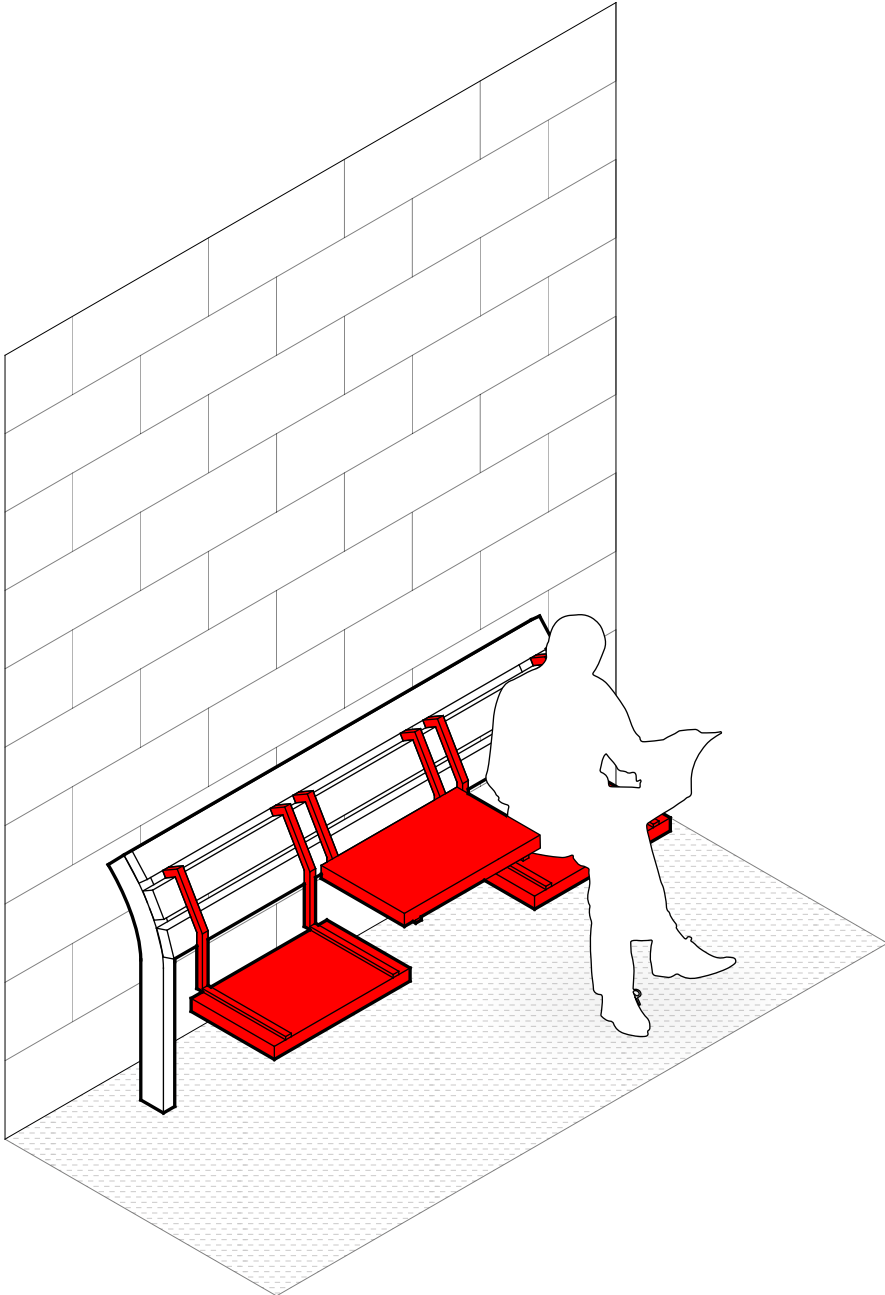
# Proposal





# Documentation

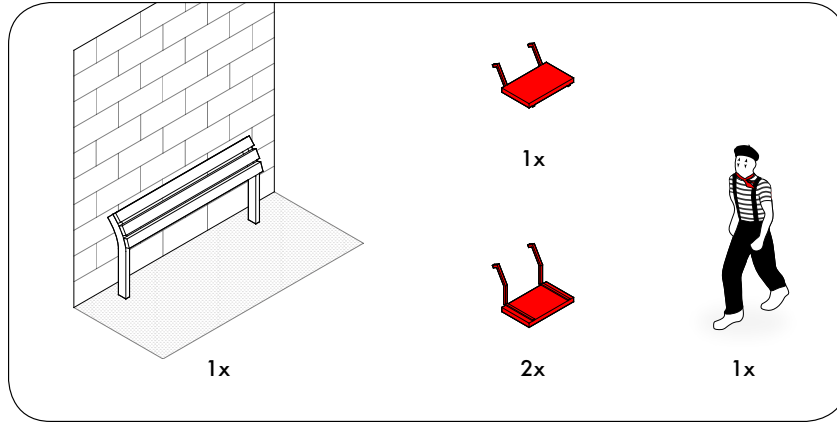
This thesis begins by documenting several existing typologies of hostile infrastructure. Illustrations are also included to demonstrate what activities and behaviors the hostile infrastructure is hostile to. Such documentation is important to spread awareness and to promote understanding.



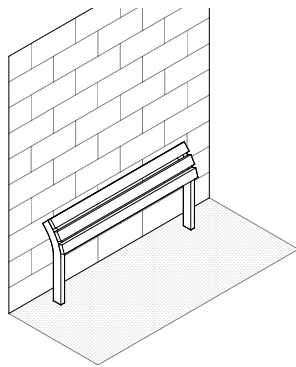
# Antidote

To counteract the documented pieces of existing hostile infrastructure, a variety of guerrilla antidotal strategies are offered. The strategies include *compensating*, *wrapping*, *supplementing*, *alleviating*, and *repurposing*. These strategies all address but maintain the existing piece of hostile infrastructure and offer users the ability to either reclaim a function that is prevented or to add a new function.

# QUÅNTRILL TABLE AND SEAT SET



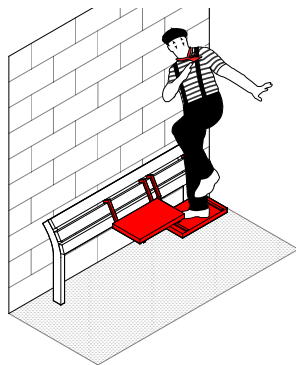
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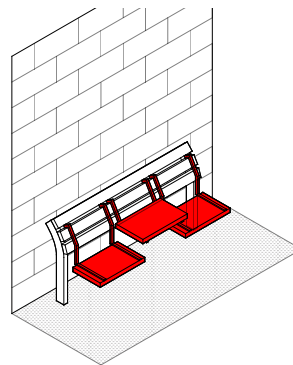
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3

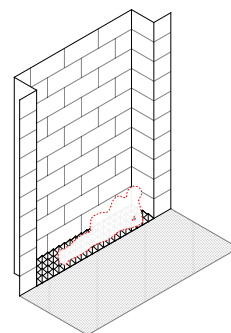
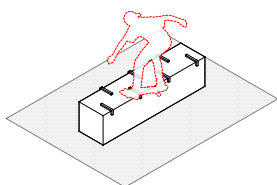
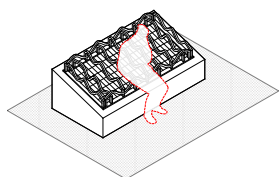
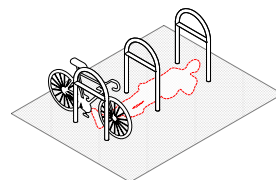
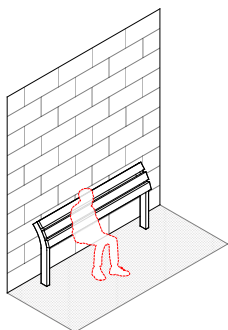
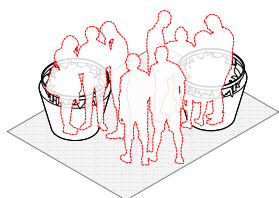
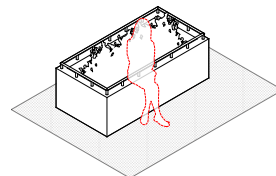
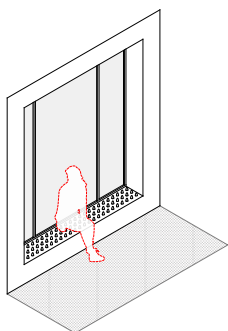
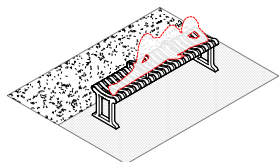


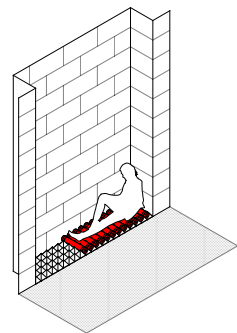
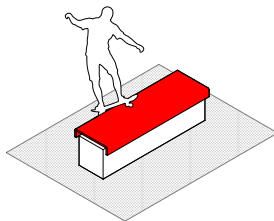
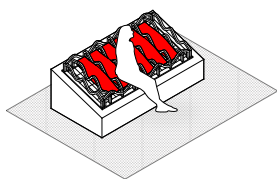
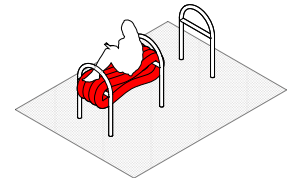
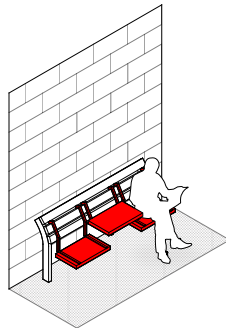
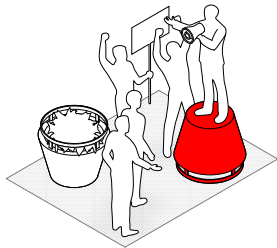
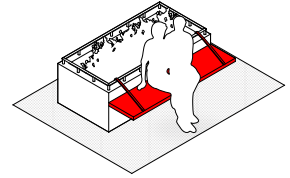
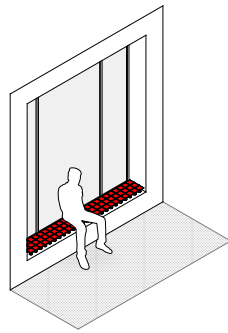
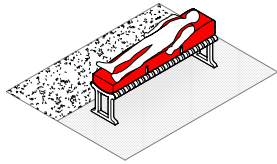
4



# Implementation

To apply the guerrilla antidotal strategies to the existing hostile infrastructure, suggestions for execution are provided. The implementation strategies offered include *looking official*, *creating distractions*, and *installing at night*.





### YÅNK URBAN BED

1x 1x

1 2

3 4

### NETREPSER WINDOW SEAT

1x 72x 1x

1 2

3 4

### BANKSY WRAPPED SEAT

1x 1x 1x

1 2

3 4

### CHE INFLATABLE SEAT

1x 6x 1x

1 2

3 4



### MÅO HANGING SEAT

1x 1x 1x

1 2

3 4

### MILLWALL BRICK PLATFORM

1x 1x 1x

1 2

3 4

### SHEPARD FAIREY GRIND RAIL

1x 1x 1x

1 2

3 4

### MÅRIGHELLÅ SLEEPING PAD

1x 3x 1x

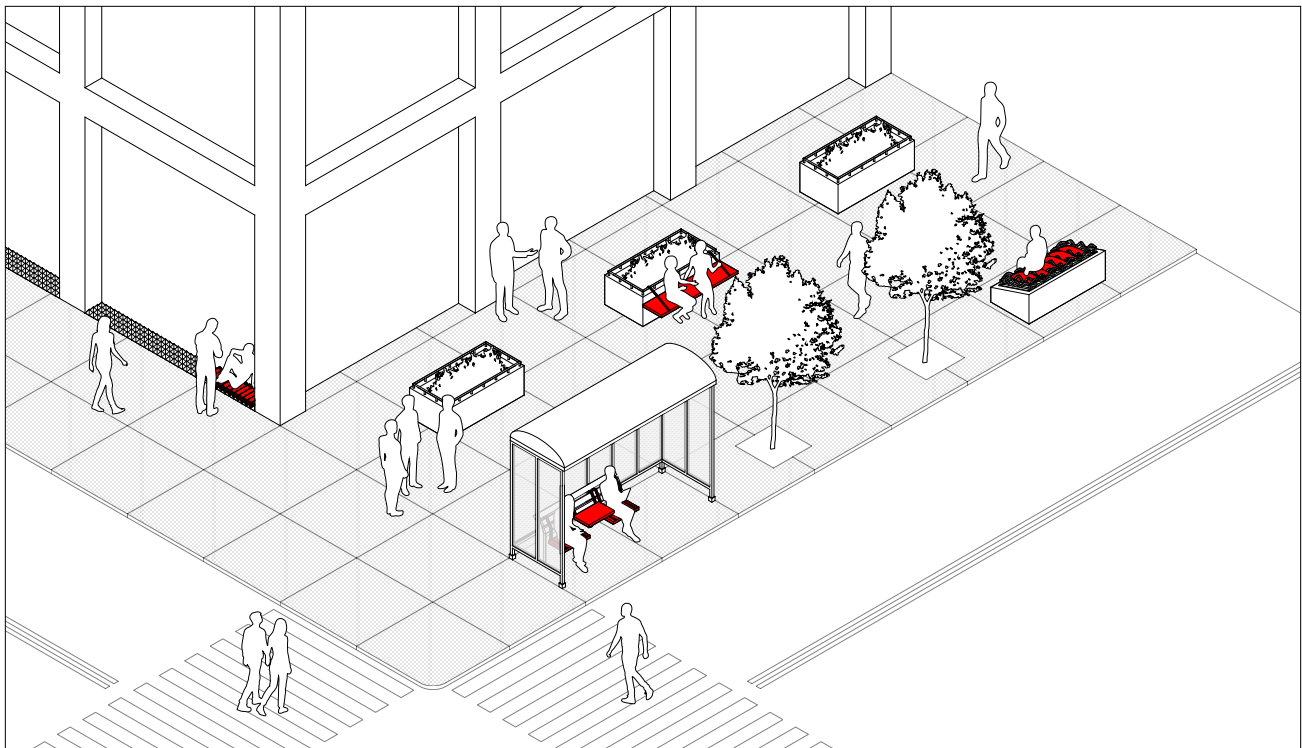
1 2

3 4



## Composite

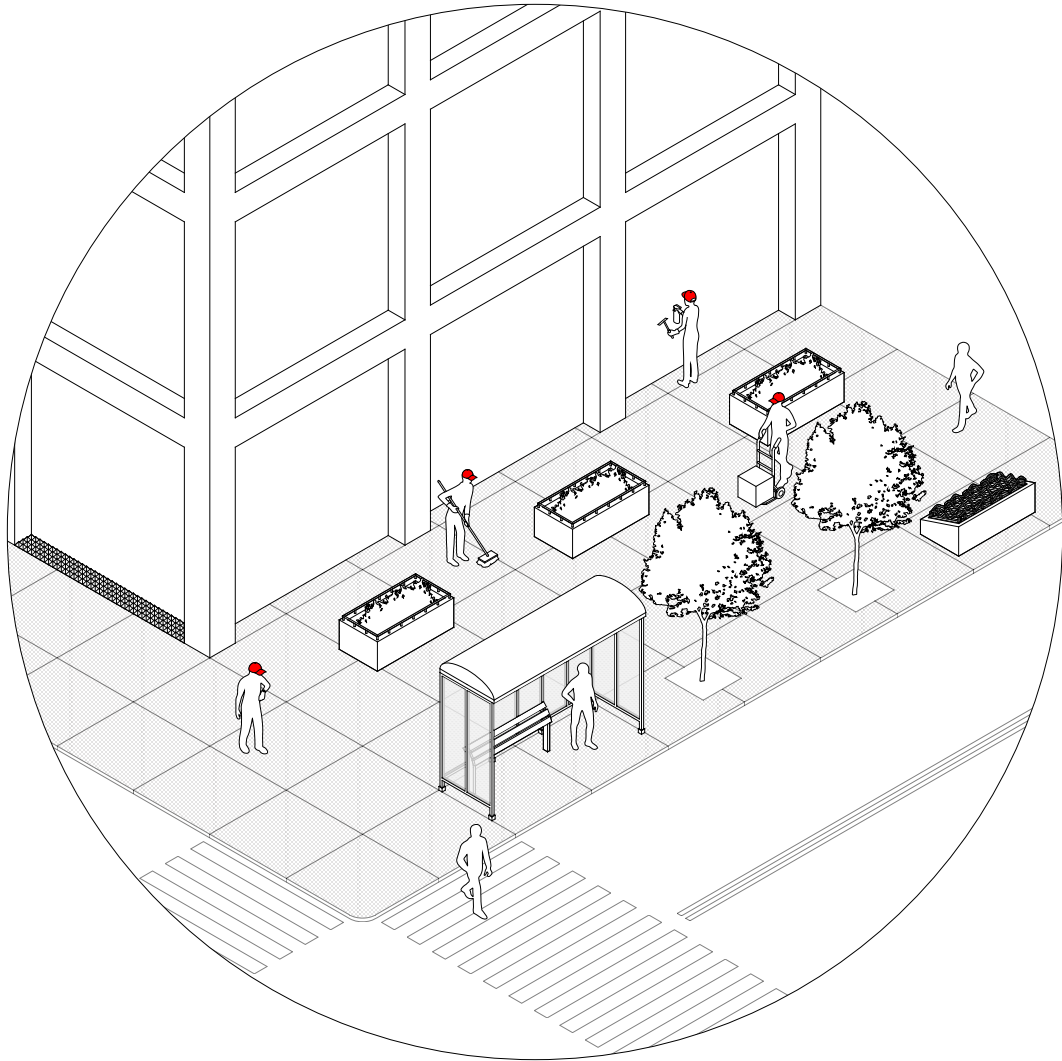
The next series of drawings are composite scenes that demonstrate the application of the antidotal strategies to two non-specific sites. The composite drawings also expand upon the suggestions for implementation to offer instructions for a how a collective like an activist organization can install a variety of antidotes to a site.



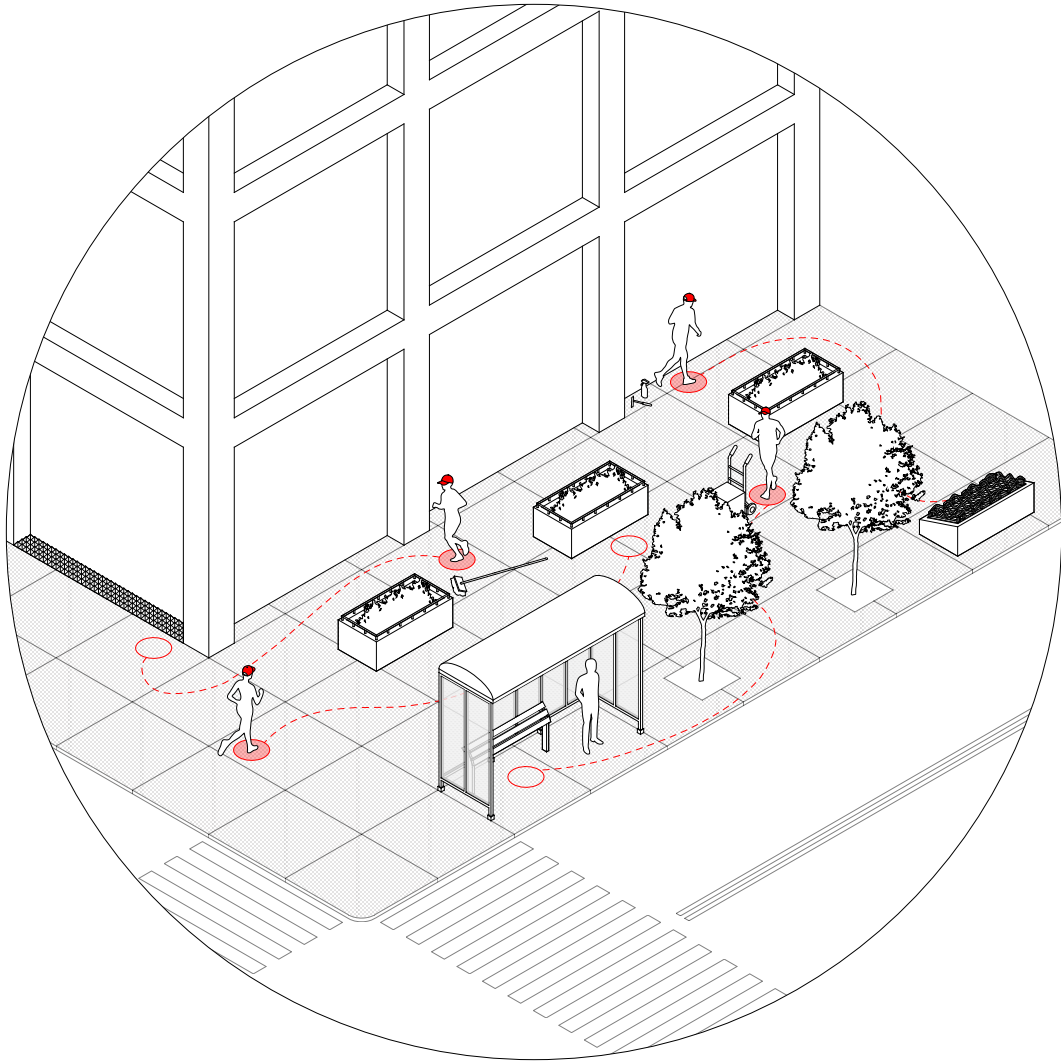
Top: Composite drawing 1 with hostile infrastructure | by author  
Bottom: Composite drawing 1 with antidotes | by author

# Composite 1

The first composite scene uses a building plaza to demonstrate the application of the antidotal strategies by a collective group. In this scene, the suggestion for implementation is to look official and to then execute a coordinated installation.



Above: Composite drawing 1 implementation instructions | by author



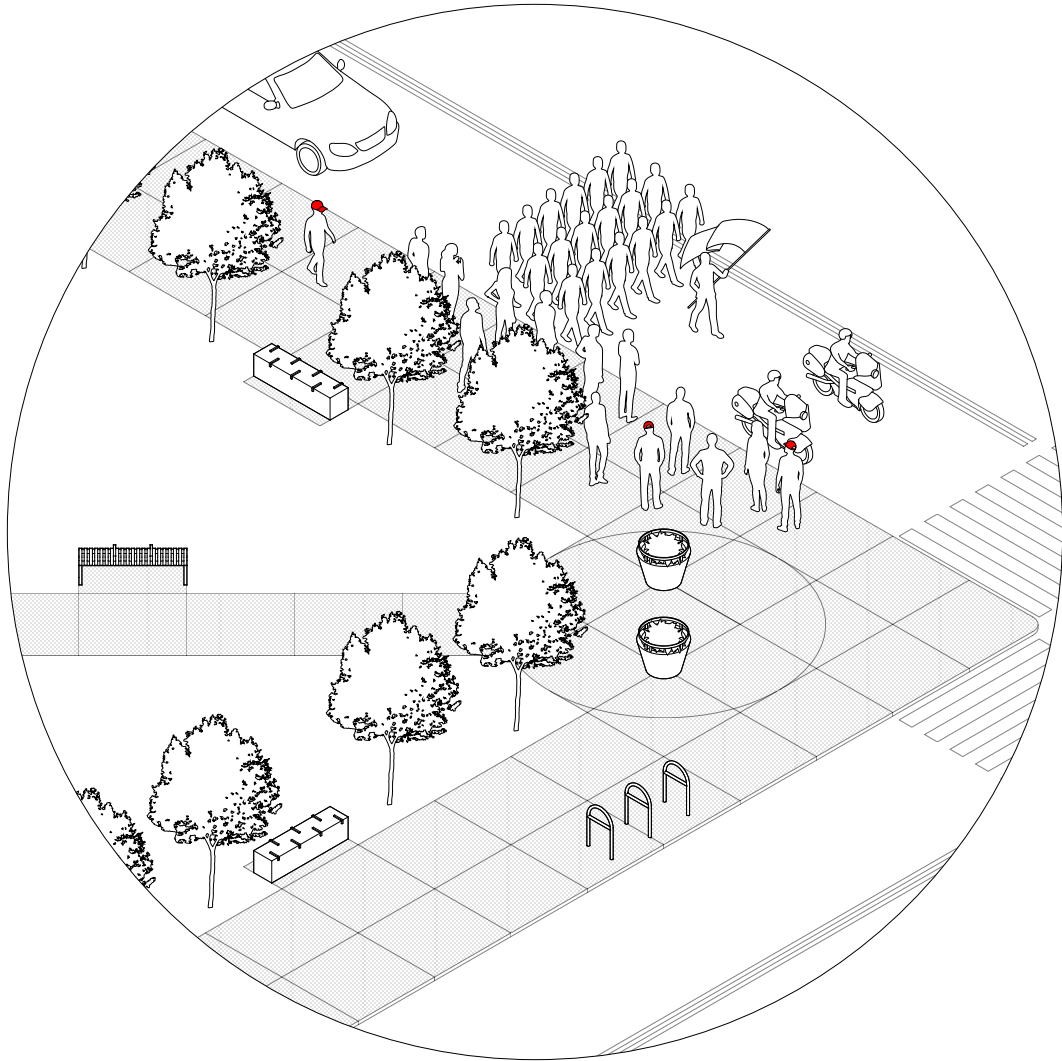
Above: Composite drawing 1 implementation instructions | by author



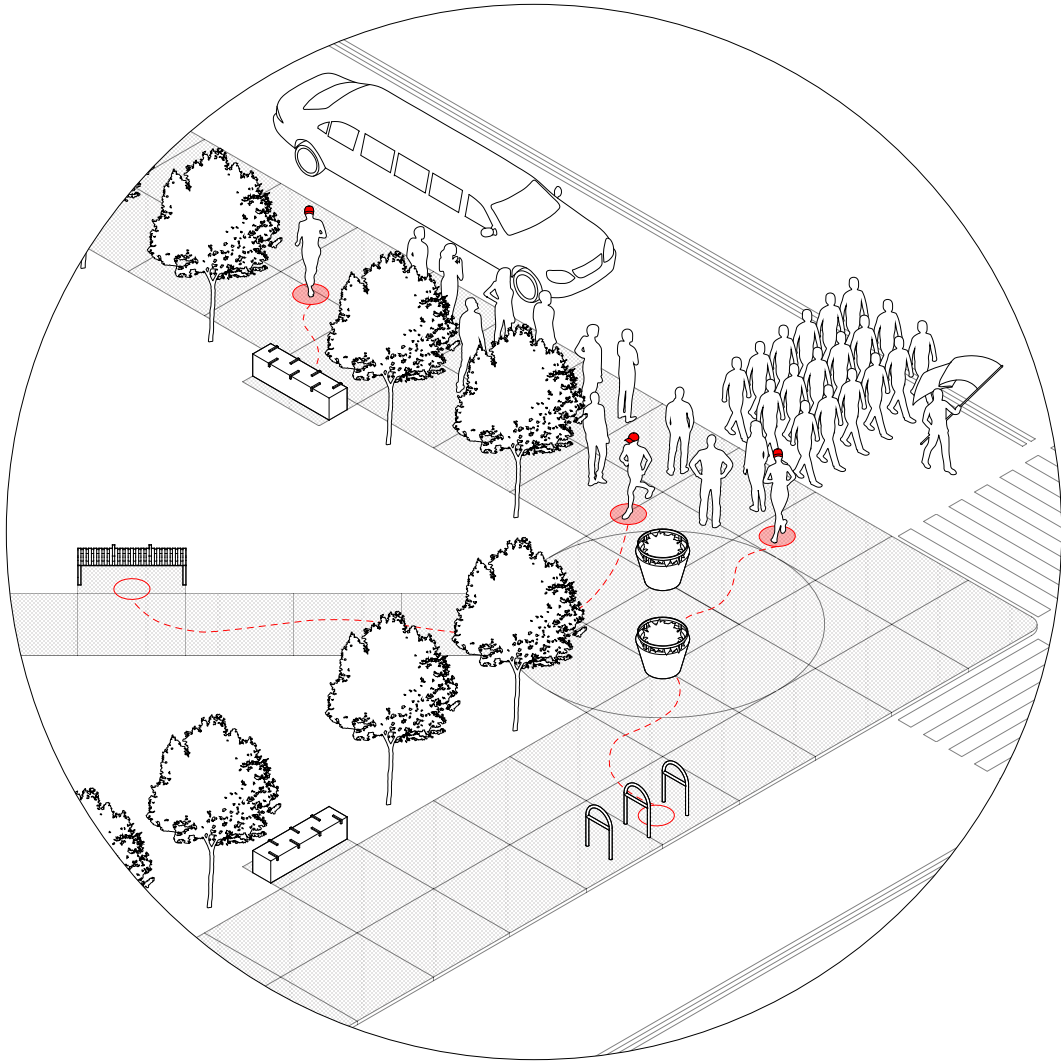


## Composite 2

The second composite scene uses a park corner to demonstrate the application of the antidotal strategies by an activist organization. In this scene, the suggestion for implementation is to use an existing event as a distraction from a choreographed installation. It is then necessary to hijack the event to instead call attention to and promote the priorities of the activist organization.



Above: Composite drawing 2 implementation instructions | by author



Above: Composite drawing 2 implementation instructions | by author

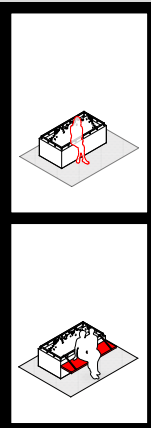
**SUBVERTING HOSTILE ARCHITECTURE**  
A Guerrilla Campaign to Reclaim Urban Public Space  
Bryn Koeppel | Professor Owen

**YÄNK URBAN BED**

1 2 3 4

**NETREPSER WINDOW SEAT**

1 2 3 4

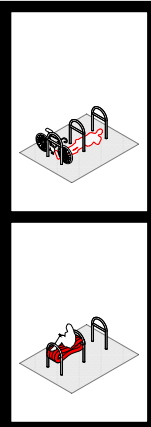


**MILLWALL BRICK PLATFORM**

1 2 3 4

**QUÄNTRILL TABLE AND SEAT SET**

1 2 3 4

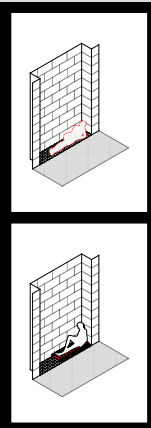


**CHE INFLATABLE SEAT**

1 2 3 4

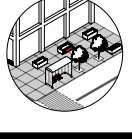
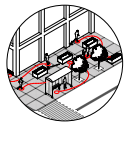
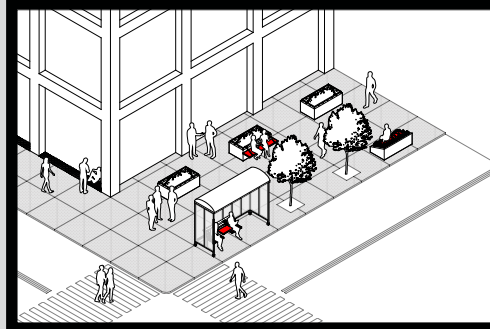
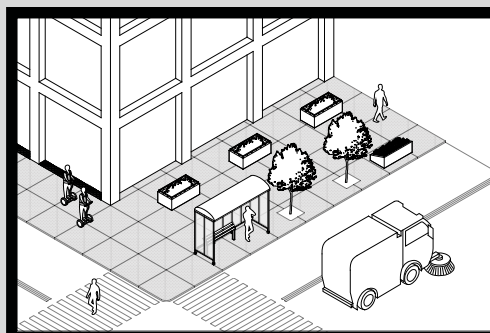
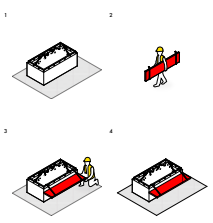
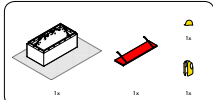
**SHEPARD FAIREY GRIND RAIL**

1 2 3 4

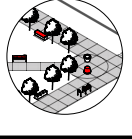
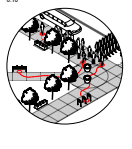
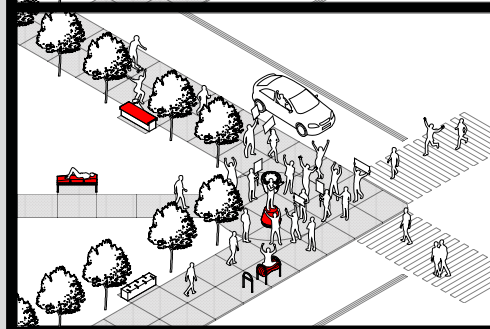
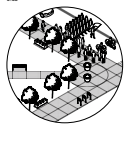
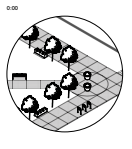
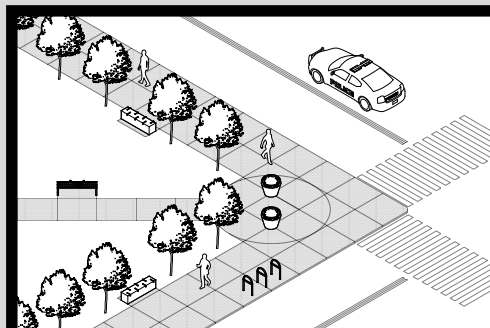
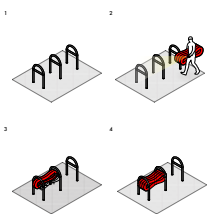
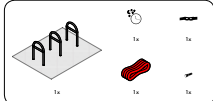


Right: Final presentation

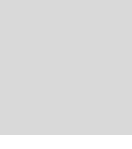
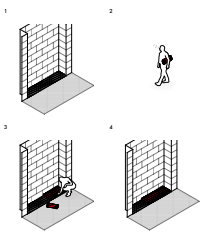
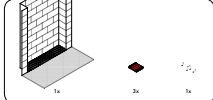
**MÃO** HANGING SEAT



**BANKSY** WRAPPED SEAT

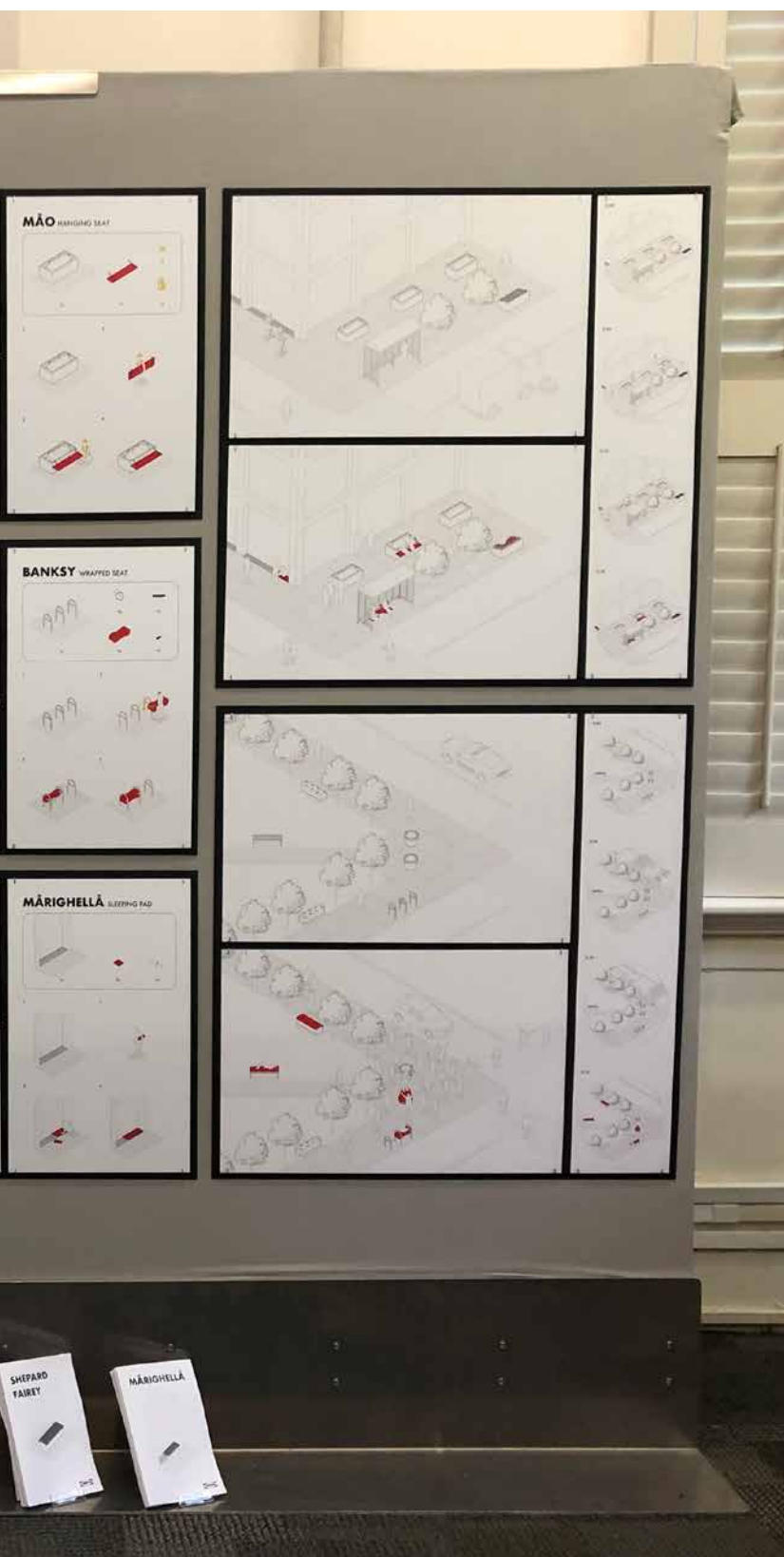


**MÀRIGHELLÀ** SLEEPING PAD





Right: Final presentation







# Annotated Bibliography

Armbrorst, Tobias, Daniel D'Oca, Georgeen Theodore, and Riley Gold. *The Arsenal of Exclusion & Inclusion*. New York: Actar, 2017.

The Arsenal of Exclusion & Inclusion is a compilation of human-made strategies employed by urban agents in the United States to regulate access to built public spaces. This encyclopedia illustrates just how heavily public urban spaces are governed by a plethora of policies, practices and physical objects. These tools are then evaluated on their past or current use and theorized about their future role in public space management. Notably, the selections cover a wide-ranging view. Listed devices are wielded by a diverse many and aimed at just about anyone who has been considered undesirable for a variety of motives. Most importantly, this collection highlights just how blurry the lines are between exclusivity and inclusivity.

Borden, Iain. *Skateboarding, Space and the City: Architecture and the Body*. Oxford and New York: Berg, 2001.

In this book, Borden explores urban space through the subculture of skateboarding. Borden analyzes both the history and evolution of the sport but argues that throughout time, the relationship skateboarding has to the built world has not changed. Skateboarders uniquely address physical architecture with fun and creativity and see possibility in challenging the preconceptions we have of everyday function. Beyond that, skateboarders create new space through engagement of the body with the physical environment. Borden asserts that there are many interpretations to a space beyond the design intentions. Architecture is therefore an ongoing process of reproduction and reimagining through both people and time.

**Campo, Daniel. *The Accidental Playground: Brooklyn Waterfront Narratives of the Undesigned and Unplanned*. New York: Empire State Editions, 2013.**

The *Accidental Playground* explores the evolution of an abandoned Brooklyn waterfront in Williamsburg into a unique social hub of recreation and creativity. Campo tells the story of the waterfront development through narrations and perspectives of the individual users and groups who reclaimed the vacated property without authority, capital, assistance, vision, or even coordination amongst themselves. Lacking any formal governing, the site was transformed in spectacular and unexpected ways, and users were able to continuously reimagine and recreate as necessary. As such, people were able to engage with the landscape in methods not possible elsewhere. For instance, users sourced raw materials from the site in various informal manners to support the current needs of occupants. And though the site served as a haven for subcultures it is important to note that people generally participated in peaceful activities and appropriate social behavior. Therefore, the site was both supported and used by local residents. Campo tells this story to advocate for the “unplanned” and “undesigned” in creative production and to encourage citizens to reclaim their cities.

**Hill, Jonathan. *Actions of Architecture: Architects and Creative Users*. London and New York: Routledge, 2003.**

Hill argues that architecture is made by design but is also made by use and in this book he considers the relationship between the architect and the user. He starts by claiming that users are rarely clients and therefore tend to have very little influence in the design process. That said, Hill asserts that it is important to recognize the type of user a design strategy suggests. Hill then goes on to identify three models of users. The passive user who follows space as directed by the architect. The reactive user who modifies physical characteristics of space according to need. And the creative user who creates new space or gives an existing space new meaning. According to Hill, a user can be any of the above in response to the character of the space they inhabit. In order to augment architecture though, Hill believes it is necessary for the architect to recognize the user as creative. Hill offers and advocates for architectural gaps to do so. Gaps are elements that remain unfinished so that they are open to varied interpretation, revision, and appropriation. Here, Hill completely challenges and denounces the preconception that architects alone make architecture.

**Mitchell, Don. *The Right to the City: Social Justice and the Fight for Public Space*. 1st ed. New York: Guilford Press, 2003.**

The Right to the City is a manifesto by Don Mitchell that advocates for access rights to urban public space. This book documents a detailed history of the efforts to secure rights to public space in American cities and examines the relationship between struggles over public space and movements for social justice. Specifically, Mitchell scrutinizes the difficulty of marginalized groups to expand their rights by referencing an extensive list of the discourses, policies, bylaws, and legal decisions that disenfranchise the homeless. Mitchell asserts that property rights imply the power to exclude and therefore groups without property become alienated from political power. As such, homeless people denied the right to housing are also increasingly denied access to public space. Mitchell's discussion on rights, social justice, and urban space contributes to the ongoing and greater debate.

**Ong, Boon Lay. *Beyond Environmental Comfort*. London and New York: Routledge, 2013.**

Ong identifies the criteria for physical comfort in built environments as heat, light, sound, and air quality. He also believes that humans are inherently outdoor creatures whose survival depends on knowledge of climate, weather and landscape. Such knowledge provides increased comfort in exterior environments. It is important to note that Ong argues comfort as a neutral state; comfort is reached only when users are indifferent to their environment. Therefore, change to any of the criteria identified by Ong influences how people both feel and behave in a space. That said, studies have proven that humans have a higher tolerance for non-neutral conditions in outdoor public places. Accordingly, outdoor public spaces have a greater opportunity to support a general livability. Ong goes on to describe livable space as separate from physical and geometrical space, distinguished as "existential space". He defines existential space as structured by the meanings, intentions and values reflected by a group. Ong further identifies that existential space is uniquely interpreted through memory and experience. Existential space therefore transcends other spaces to constitute collective identities and a sense of togetherness.



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