

BATOUL FAOUR —

# Glass Politics: On Broken Windows in Beirut

“Beirut sounds like glass.”<sup>[1]</sup>

A blanket of glass covers the streets. Shards of it rain down from the surrounding balconies and windows. The devastating explosion on August 4, 2020, hit Lebanon’s capital at 6:07 pm, damaging or destroying eight thousand buildings, killing over two hundred people, injuring thousands, and leaving some three hundred thousand homeless. The cause of the destruction, a shipment of 2,750 tons of ammonium nitrate, had been carelessly left at Beirut’s port for six years—an act of negligence brought about by a corrupt political class that has ruled the country and instigated countless other tragedies over the past forty years.<sup>[2]</sup> Although the August 4 event is unprecedented in its magnitude, the sound of explosion is not unfamiliar to the Lebanese people, who have had to live through a fifteen-year-long civil war, followed by years of continued sectarian violence and repeated Israeli aggression. Also familiar is the echo of shattering glass that immediately follows an explosion, the crunching underfoot in the streets later on, and the clinking of shards as they are raked across the asphalt day after day.

It had been almost a year since a series of austerity measures sparked the October revolution, and five since the severity of the waste crisis set off the “you stink” protests.<sup>[3]</sup> Although triggered by isolated events, the demonstrations were the byproduct of years of indifference and political impunity that convulsed the country in crisis after crisis. On the evening of August 4, at 6:00 pm on the dot, the electricity clicked out on most of Beirut’s homes—a daily occurrence in the country’s decade-long electricity crisis.<sup>[4]</sup> While residents waited for power to be restored, many lounged on glass-enclosed balconies that shielded them from the heat of the thick summer air—in a city that boasts some of the worst air quality in the world.<sup>[5]</sup> Seven minutes later, the glass blasted inward.

Desired for its transparency in a country that has none to offer its people, glass in Beirut is a valuable form of absence: it provides unobstructed views of the city beyond. Windows permit one to see without having to smell, hear, or touch the power structures at play beyond the transparent panels. As political and economic corruption flourishes and the outside world grows exponentially more inhospitable, glass proliferates across the city. Glass, in all its many iterations, was the last line of defense for a people attempting to make a life within and around the failures of the Lebanese state.

Citation: Batoul Faour, “Glass Politics: On Broken Windows in Beirut,” in the *Avery Review* 52 (April 2021), <http://averyreview.com/issues/52/glass-politics>.

[1] A sentiment heard on the streets during the cleanup efforts following the blast.

[2] Lebanon’s sectarian political system was established through the negotiation and approval of the “Taif” agreement in 1989, to end fifteen years of civil war by satisfying the wills of eighteen religious groups and distributing seats of power among them. However, the agreement also meant that the same warlords that terrorized the country for the past fifteen years were to rise to power and pass on seats in the parliament to their children and allies. This sectarian rule extends to government jobs, contracts, resources, and institutions where nepotism, embezzlement, and other forms of corruption flourish. Even the distribution of power within the private sector is deeply rooted in connections to the political elite. A most recent and abhorrent demonstration of this corruption is the removal and reassignment of the judge investigating the port explosion, after his investigation implicated several members of parliament and ministers. For more on this, see Jeanine Jalkh, Nada Maucourant Atallah, and Anthony Samrani, “How Lebanon’s Political Class Took Out the Lead Investigator into the Beirut Port Explosion,” *L’Orient Today*, March 11, 2021, [link](#); and Mohamad Bazzi, “The Corrupt Political Class that Broke Lebanon: A Decaying Sectarian System Kindled Beirut’s Port Blast,” *Foreign Affairs*, August 14, 2020, [link](#).

[3] See Nadia Massih, “How Beirut’s ‘YouStink’ Protests Bloomed into Political Movement,” *Middle East Eye*, September 3, 2016, [link](#).

[4] See Leila Hatoum, “Why Lebanon’s Electricity Crisis Is So Hard to Fix,” *Arab News*, June 15, 2020, [link](#).

[5] Air quality in Beirut has drastically suffered over the years due to its ongoing solid waste crisis, now worsened by the added waste produced by the explosion, the severe damage of one of its waste management plants, and the contamination of the air caused by the chemicals stored at the obliterated port. Beirut’s pollution has already exceeded environmental standards, according to the World Health Organization, with Lebanon ranking among the top 10 most polluted countries in the world. See “Beirut Facing Acute Environmental Crisis, Warns UN Energy Specialist,” *UN News*, September 1, 2020, [link](#); and Khaled Suleiman, “Lebanon: A Paradise of Waste and Pollution,” *Daraj*, July 10, 2019, [link](#).

A material designed to uplift quality of life through light and views, glass has instead become a weapon wielded by a corrupt state. On August 4, it splintered and stabbed for miles across Beirut's homes and streets—disfiguring, blinding, and murdering.[6] Some victims, left with dozens of stitches, described how the glass hit them like “shooting guns.”[7] Shattered and splintered glass was blamed for causing an overwhelming number of the recorded injuries and deaths.[8]

These casualties were likely amplified by the widespread use of nontempered or annealed glass in building construction, even in newer developments. Whereas tempered or safety glass shatters completely into very small, round pieces that cause minimal harm, this glass breaks into long, sharp splinters. The use of safety glass in new developments was mandated by a 2005 decree mostly in response to global seismic design concerns.[9] The decree set specific glass standards managed by technical inspection for buildings over 21 meters in height. The safety of tempered glass is, however, a luxury, with only high-end developments subject to inspection by globally recognized certification agencies (such as Bureau Veritas and Bureau De Controle) that properly enforce safety standards. Meanwhile, lower-end developments fall under the jurisdiction of local inspection agencies, often linked to heads of state or their cronies, with the ability to cheat their way out of full compliance.[10] This lack of uniform regulation has rendered the material unreliable, a reality uncovered by the force of the explosion, which left a mosaic of shards, pebbles, panels, frames, and fragments of various sizes and breakage patterns across the urban fabric.

The stories of this damage unfold a history and geography of Beirut and its surrounding hills. The city's development around the port over the years put this tragedy center stage.[11] Ascending the mountains, the city's homes were like seats in an amphitheater, overlooking the spectacle of the 750-meter-high smoke cloud through their glass enclosures. The ignited pressure wave carried a cloud of debris throughout the city, heaving a wall of deadly projectiles—including the very fragile, easily broken glass fragments from windows and façades—and ripping through space, surfaces, and *bodies*. Although the immediate blast radius suffered various types of destruction, glass-related damage was recorded as far as 10 kilometers from the blast site.[12] Those living within a 3-kilometer radius reported injuries. Sounds of sweeping glass could be heard for the next several months.

[6] See Bethan McKernan, “‘Our Stitches Ran Out’: Beirut’s Struggle to Deal with Injuries from Port Blast,” *The Guardian* (Guardian News and Media, August 24, 2020), [link](#).

[7] From an interview with Yasmina Hilal, explaining how her cousin Leya experienced a glass door blowing into her face and arms at a gym where she was working when the blast hit. Interview by author, Beirut, Oct 14, 2020.

[8] See Ziad Abu-Faraj, “Shattered Glass Is Allegedly Blamable for Most of the Victims of Beirut’s Blast,” LinkedIn, August 26, 2020, [link](#).

[9] The decree made it mandatory to follow glass building standards issued by the Lebanese Standards Institution. The Lebanese Standards Institution (LIBNOR) is the main standard issuing authority with regards to technical inspection and quality control. Decree 7964 found in the National Newspaper.

[10] Many developments use wired glass for their windows. While fire resistant, it is not a type of safety glass. The wire actually weakens the glass and increases the likelihood of breakage even under relatively mild forces. Even worse, the wire embedded in the fragile glass can snare a hand or leg that passes through the broken glass, making injuries more severe. The information on corruption in local inspection agencies is from an interview with Abir Zaatari, on the investigative work the Beirut Urban Lab is doing on developments in Beirut. Their research into fire code compliance found that several local inspection committees were tied to positions of power within the syndicate. Developers of the residential building where Abir lives had claimed that the glass installed was safety glass, but the explosion proved otherwise. Interview by the author, Beirut, October 17, 2020.

[11] See maps showing growth of Beirut in area over time from the Michel Écochard Archive at [link](#).

[12] See the Beirut damage and recovery map at [link](#).



Broken windows across Beirut's landscape.  
Photograph by the author.

### "Glass controls us." [13]

In "Blue Sky Urbanism: The Socio-Territoriality of Ultra-Clear," Andrés Jaque describes clear glass as "a radical techno-social invention" that, from its introduction in 1989, "started to reshape the way the planet operates, an invention intended to redefine the way finance, environments, cultures, and bodies relate to each other, yet one that was embedded so effectively in the contemporary architecture of power that it could hardly be perceived." [14] In a city where bodies have been disfigured by broken glass, this power is one of violence, manifesting through the consequences of ongoing conflict, corruption, and negligence. A political agenda with a desire for a modern, luxurious, glassy image of Beirut lined the city's shores with glazed high-rises, some of which could not have been erected in a corruption-free system due to their many "exceptions" to Beirut's zoning and building laws, a product of the political elite's ties to major developers. [15]

This is most clearly demonstrated by the state's formation and commissioning of luxury developer Solidere's postwar reconstruction of the city center that effectively rendered it a ghost town, inviting big-name architects to build seaside towers that boasted the most expensive views in the country, views that no Lebanese person could afford. [16] These empty towers are representative of yet another form of absence and its divisive power—as they enable an erasure of access to the city, its former hustle and liveliness, its affordability, and the history of its violent past—all consequences of a financially segregative neoliberal agenda. Whatever glass in this area was not shattered by the explosion had likely already been smashed by angry protesters in the series of uprisings that commenced in October 2019, recognizing luxury development among the many injustices of the authoritarian state. [17] As the city picks itself up following the 2020 blast, major developers hoping to replace vulnerable property with more high-end real estate are already inciting criticism. [18]

At an industrial level, the roots of conflict that rendered glass a liability are also recorded in its history. Lebanon's glass manufacturing industry was repeatedly damaged by a series of violent shocks during both the civil war and the 2006 July War. [19] While demand for more advanced glass and higher rates of production are in part driven by an appetite for globalized development,

[13] From an interview with Rana Samara Jubaili, one of the architects leading the reconstruction efforts on the ground with an NGO called Nusaned, on the repair efforts relating to the difficulties of acquiring and reinstalling glass panes for the many damaged homes. Interview by author, Beirut, September 25, 2020.

[14] Andrés Jaque, "Blue Sky Urbanism: The Socio-Territoriality of Ultra-Clear," *e-flux*, December 6, 2019, [link](#).

[15] In 2004, several amendments to the Lebanese building law were implemented after a series of parliamentary debates, driven by the desire to create higher buildings, and increase total exploitation ratio. The draft of the new law proposed that glass curtains be considered as usual textile curtains. This turned glazed balconies into de facto closed spaces and consequently increased the total ETR by about 20 percent. The outcome of the joint committees' debates, and the quick and unanimous confirmation of the law can be best explained through exploring the ties between the Lebanese political elite and the real estate industry. For more info, see Hisham Ashkar, "Lebanon 2004 Construction Law: Inside the Parliamentary Debates," Civil Society Knowledge Centre, Lebanon Support, 2014, [link](#). For more on exceptions in Beirut developments, see Marieke Krijnen and Mona Fawaz, "Exception as the Rule: High-End Developments in Neoliberal Beirut," *Built Environment* (1978–) 36, no. 2 (2010): 245–259.

[16] Solidere is a private developing company founded in 1994 by billionaire businessman and former prime minister Rafik Hariri. It was tasked with reconstructing the city center for two decades following the end of the civil war and was opposed by the larger public as it was blamed for robbing residents of their property ownership in the city to make way for high-end developments targeting the richer elite. For more see Oliver Wainwright, "Is Beirut's Glitzy Downtown Redevelopment All that It Seems?" *The Guardian*, January 22, 2015, [link](#).

[17] See Scott Peterson, "From Shattered Glass and Broken Tents, Lebanese Draw Resolve," *The Christian Science Monitor*, November 15, 2019, [link](#).

[18] See Mona Fawaz and Soha Mneimneh, "Beirut's Blasted Neighborhoods: Between Recovery Efforts and Real Estate Interests," *The Public Source*, November 6, 2020, [link](#).

[19] When Soliver, the largest glass manufacturer in Lebanon (and in the Middle East at the time), was

instability in the region, combined with the high cost of generating one's own power to operate, led to a shrinking of support for local manufacturing. As a result, glass is among the country's primary imports—imports likely implicated in the web of corruption that governs Beirut's ports.[20]

Following the August 4 explosion, these imports increased as the demand for glass in reconstruction efforts skyrocketed.[21] Prices also rose as the Lebanese currency dropped to less than a sixth of its original value with the ongoing economic crisis—an additional struggle for those racing to enclose their homes before the winter set in.

The state has been inadequate in aiding these efforts, and its agencies have been sidelined for their incompetence and known corruption. [22] In its place, flyers advertising glass repair services were distributed by local contractors across the city. Everyone, it seemed, was now in the glass pane business. Some specialized in wooden frames preserving the appearance of Beirut's heritage buildings, while others installed the more typical aluminum. Those who could afford it hired their own help, while civil societies and NGOs took on the task of repair for more vulnerable communities. The legal complexity of restoration has challenged these efforts, and the broken glass has exposed much of the precariousness of Beirut's built environment. As one architect leading reconstruction effort describes,

WE GET CALLS FOR JUST SHATTERED GLASS WINDOW REPAIRS, BUT UPON OUR ARRIVAL, REALIZE THERE ARE MORE SERIOUS REPAIR NEEDS OFTEN BECAUSE OF THE CONDITION THE HOMES WERE IN BEFORE THE EXPLOSION. IN A WAY, GLASS HAS BEEN WHAT GETS US IN BUT ALSO WHAT GETS US STUCK. WE HAVE TO FACE THE REALITY OF THE POOR CONDITION OF MANY OF THESE HOMES AND HELP AS MUCH AS WE CAN—BUT THERE'S JUST TOO MUCH TO DO, AND WE'RE RUNNING OUT OF THE FUNDS NEEDED TO DO IT.[23]

Despite the efforts of the local and global community, many residents have had to wait months to return their homes to livable conditions. Many others are still waiting. While some opted for plastic sheets or wooden panels easily destroyed by rain, others sat helplessly in hollow-framed buildings as the cold air seeped through the rooms that once glistened with shattered glass.

damaged repeatedly during the civil war, it took the massive glass melting furnace that would normally burn 24/7 for a period of four to five months to be repaired and restarted each time. At the same time, the price of oil and raw materials was growing increasingly expensive. In the early 1980s, when the factory was still struggling to repair its infrastructure, new float glass technologies had been invented in the UK and were being attributed globally. With a lack of local support, out-of-date technology, and continuing political instability, the factory had to permanently shut down. It was reinstated as a glass-bottle-producing factory in the late 1990s, but even that sector of the industry could not compete with cheap imports and eventually closed down as well. (From an interview with GlassPro managers, the Arakji family, who have been in the glass business for decades. Interview by the author, Beirut, September 30, 2020.) Similarly, Maliban, Lebanon's only glass-waste-management plant was destroyed by an Israeli airstrike in 2006 and was never reinstated. See Lysandra Ohrstrom, "War with Israel Interrupts Rare Industrial Success Story," *The Daily Star Newspaper*, August 2, 2007, [link](#).

[20] The port's jurisdiction lies in a sort of "no man's land," as it was never properly integrated into the public sector nor fully privatized and remained governed by an ambiguous arrangement where political parties each retained a share in its administration to carry out their separate biddings. Bribery, embezzlement, and illegal trade are commonly known practice at the port. For more on this, see Reinoud Leenders, interview by LCPS, "Beirut Port: A History of Political Wrangling and Institutional Failure," *The Lebanese Center for Policy Studies*, September 2, 2020, [link](#). See also "Lebanon Product Imports," *Lebanon Product Imports 2018* ♣ WITS Data (The World Bank), [link](#).

[21] See Nabih Bulos, "Glass Is Everywhere in Blast-Shattered Beirut, except Where It's Supposed to Be," *LA Times*, September 4, 2020, [link](#).

[22] See Mona Fawaz and Mona Harb, "Is Lebanon Becoming Another 'Republic of the NGOs'?" *Beirut Urban Lab* (Arab Center, Washington, DC, October 13, 2020), [link](#).

[23] From an interview with Rana Samara Jubaili, one of the architects leading the reconstruction efforts on the ground with an NGO called Nusaned, interview by author, Beirut, March 22, 2020.





A man collects glass shards covering the carpets of a mosque damaged by the blast. Photograph by Aziz Taher. Courtesy of Reuters.

### What We See and What We Don't See.

In 1850, French economist Frederic Bastiat introduced the parable of the broken window (also known as “the broken window fallacy”) in his essay “Ce qu'on voit et ce qu'on ne voit pas” (“What Is Seen and What Is Not Seen”) to discredit the notion that going to war was good for the economy.[24] Through the story of a child breaking a glass window, Bastiat refused the idea of the broken window as a tool that justifies violence as it obscures other forms of social life and economic circulation. In 1982, criminologist George Kelling and social scientist James Wilson introduced their broken windows theory on the relationship between disorder and crime.[25] Wilson and Kelling stated that where damage existed, disorder followed, and hence crime. This theory has often been employed by US law enforcement as a policing strategy, ultimately becoming a tool of discrimination against predominantly Black neighborhoods and communities of color, where the image of vulnerability was used to justify surveillance, arrest, and disproportionate punishment.[26]

On November 9, 1938, predominantly Jewish towns across Germany, Austria, and Sudetenland were attacked and destroyed by Nazi soldiers in what became known as The Night of Broken Glass (or Crystal Night: *Kristallnacht* in German). The night was named for the shards of broken glass that littered the streets after the pogrom. The Nazi telegram instigating the destruction ordered German police “to destroy, but not to loot”—it aimed to make a statement.[27] Glass storefronts and windows and their fragile declarations of safety were both literally and metaphorically shattered as a means of subjugation.

Through blunt force or neglect, broken glass (or the broken window) enables different forms of violence. Glass as a vehicle for the violence of power can perhaps be best explained by its fragility: through breakage, it embodies or makes visible the complex politics of its surroundings. In 1850, broken windows told of the justification of violence with economic gain. In 1938, the glass-littered streets of Jewish towns told of the violence of atrocious discrimination. In the 1980s, East Harlem's broken windows juxtaposed against

[24] Frederic Bastiat, “What Is Seen and What Is Not Seen, or Political Economy in One Lesson,” in *The Collected Works of Frédéric Bastiat*, ed. Jacques de Guenin, trans. Jane Willems and Michel Willems, vol. 3 (Indianapolis: Liberty Fund, 2017), [link](#).

[25] George R. Kelling and James Q. Wilson, “Broken Windows: The Police and Neighborhood Safety,” *The Atlantic*, March 1982, [link](#).

[26] See Sarah Childress, “The Problem with ‘Broken Windows’ Policing,” *PBS Frontline*, June 28, 2016, [link](#).

[27] See Michael Ruane, “Kristallnacht: The Night Nazis Killed Jews and Destroyed Synagogues 80 Years before Pittsburgh,” *The Washington Post* (WP Company, October 30, 2018), [link](#).

Midtown Manhattan's glazed storefronts told of social disparities used to inflict further discrimination. In Beirut, newly installed glass panels are only the latest replacements in a series of previous shatterings, with some families having to repair windowpanes in buildings that still bear bullet marks from the civil war. Beirut's windows and streets have become palimpsests of broken glass, telling of generational cycles of sectarian violence in a country still ruled by the same warlords who tore the city apart forty years ago, erased their traces, and disguised this history in a dysfunctional present normality. Broken glass embodies the frustration of a city that wasn't allowed to reconcile with its past and continues to pay the price. It prompts us to ask: How much glass has littered the streets of Beirut in the past forty years? How long will we keep fixing broken windows and repairing broken glass?



Cycles of violence across generations: A child watches as an older man repairs a glass door damaged by the explosion. The building still bears bullet marks of the civil war, seen on the right—a sign that it is unlikely the first time this glass has been replaced. Photograph by the author.

### Taking Our Broken Pieces and Melting Them Back Together

One physical manifestation of the aftermath of the explosion is a 6-meter-high mountain of an estimated 25,000 tons of glass debris—labeled “glass only”—sitting on an allocated dump site of municipal land in Karantina, one of the poorest neighborhoods affected by the blast. Karantina is an unplanned mix of industrial hub and residential sprawl located in northeastern Beirut. It is home mainly to working-class Lebanese, Syrian, and Palestinian refugees, among other migrant workers and displaced groups who make up the majority of manual laborers sorting through the mountain of glass. The municipality has agreed to import the infrastructure needed to process and grind the debris in an effort to alleviate Lebanon's already overwhelmed landfills, intending to use the fine sand produced by this process to rehabilitate quarries across the country.[28] Many of these quarries are illegal to begin with, concentrated in forests and fertile land scattered across Lebanon's terrain where they threaten the local environment.[29] In this proposal, glass would become a raw material created by one tragedy of corruption buried deep in the rehabilitation of another, thereby made untraceable.

[28] See “Rubble to Mountains,” AUB@Work, [link](#).

[29] For more on the geography of Lebanese quarries, see Public Works Studio, “Reading the Quarries’ Map in Lebanon,” *Jadaliyya* (April 17, 2019), [link](#). The government's banning of cement imports in 1993 led to a market monopoly by three companies linked to a web of political actors—probable cause for the authorities' failure to control production or impose penalties against this widespread violation of the natural landscape. See Jacob Boswall and Yasmine Minkara, “Mountain to Mortar: Lebanon's Concrete Conflicts of Interests” (Triangle: Policy - Research - Media, March 2021). [link](#). The report was also recently made into a short video by Megaphone News: [link](#).



The glass dump site in Karantina, an estimated 25,000 tons collected from Beirut and its surroundings. Photograph by Mona El Hallak.

Operating at a much smaller scale, some grassroots recovery initiatives have focused on transforming the debris into raw material for jars, vases, and glass containers to support local manufacturing industries.[30] Some of these initiatives call upon the traditional Lebanese glassblowing craft to repurpose the glass.[31] Around 100 tons of glass waste has been sent to glassblowing factories in the north (Tripoli) and south (Sarafand) of Lebanon, where it is sorted, crushed, melted back to its liquid state, and remolded into designed domestic artifacts that are then marketed as recycled glass from the Beirut blast. The sentiment of buying artifacts made from the remains of this devastating event has appealed to many, reproducing the narrative of Beirut's "resilient spirit" that has been projected onto such tragedies over and over again—that we can remold and rebuild—erasing the root cause of each human-made catastrophe. One such product is a beautiful wine carafe with a label that reads:

A TRIBUTE TO LEBANESE WINE AND LEBANESE JOIE DE VIVRE.  
THIS WINE CARAFE EPITOMIZES THE RESILIENT LEBANESE  
SPIRIT: WE WILL TAKE OUR BROKEN PIECES, MELT THEM BACK  
TOGETHER AND DRINK TO THE HEALTH AND HAPPINESS OF A  
PEOPLE THAT NEVER GIVES UP.[32]

While resilience has become a requirement for survival, it has also become its sole focus— blurring the public's sight of justice and accountability; normalizing atrocities as if there were no perpetrator; branding tragedy and offering it as a marketing strategy to the world.

This material rebirth has enticed both entrepreneurs and artists who recognize the power and sentiment that glass has come to bear.[33] None, however, have acknowledged its systemic politicization, instead diverting it into a visual culture of precious artisanal objects and artifacts. Through these marketing exercises, glass is returned to blatantly premodern modes of produc-

[30] Most notably, one led by Cedar Environmental, a waste management company. See AFP, "From Window to Jug: Lebanese Recycle Glass from Blast," September 6, 2020, [link](#).

[31] Invented by the ancient Phoenicians in the region during the first century BC, the blowpipe technique revolutionized glasswork past its early inception and use for jewelry in ancient Egypt. See Sara Manisera, "Lebanon's Ancient Art of Glass Blowing at Risk of Disappearing," *Middle East Eye*, December 14, 2015, [link](#).

[32] A product description statement from the Green Glass Recycling Initiative Lebanon's website, Ggril, [link](#).

[33] See Christian Borbon, "Lebanese Artist Makes Glass Sculptures from Beirut Port Explosion Debris," *Gulf News*, September 2, 2020, [link](#).



tion, while the very modern issues around its industrial fabrication, production, and installation continue to prevail—such as the lack of support for local manufacture and the expense of imported glass that burdens reconstruction efforts. Some of these products have been met with local rage for embracing what some have called “disaster capitalism.”[34] Such artifacts are sold and introduced once again into the very homes their raw shards once covered. The cycle of broken glass has simultaneously produced both expensive imported windowpanes and fancy local bottles, each an attempt at managing the disaster in the absence of the state. In the process, however, the victims themselves are burdened with picking up the pieces and stewarding their own rehabilitation.



[34] Vanina, a local jewelry and fashion design studio released a line of handbags made from glass debris from the blast titled “Light of Beirut.” One of the bags was even called “The Silos,” modeled after the structure that now stands in ruins as a monument to the tragedy. The campaign was met with wide public backlash, and the company later pulled the collection and issued an apology. See Nadda Osman. “Lebanese Designer Removes Bag Made from Explosion Debris after Backlash.” *Middle East Eye*, December 7, 2020, [link](#). See also Philippa Dahrourj, “The August 4 Explosion: Entrepreneurial Strategies and the Reproduction of ‘Disaster Capitalism.’” *فكر*, January 30, 2021, [link](#).

A worker at a glass blowing factory carries hand-blown water jugs made from recycled shattered glass from the blast. Photograph by Joseph Eid, courtesy of AFP.

“We’re still digging it out of our rooms, our furniture, our clothes, our skin.”[35]

The irony in this resilience narrative embedded in artifacts that re-enter the home is that each object serves as a reminder that even the home has never afforded the basic assurance of safety. People have come to nervously and sadly joke about repairing their windows in time “for the next explosion”—that the anticipation of disaster in Beirut is only natural considering the lack of regulation reform that permeates every part of its political economy and built landscape.[36] Even though the physical traces of a once weaponized glass shard have been melted into these artifacts, intangible traces linger in the way that some victims now struggle to sit in glazed balconies or flee from a window upon hearing a loud noise. Some have attempted to verbalize this pain, coining terms to deal with the collective trauma now embedded in the material.[37] The history of tragic events from the civil war leading up to the political turmoil of the present day and everything in between—from political assassinations to shootings and bombings—is echoed by the sound of broken glass invading homes.

Over the years, windows have had to adapt to unconventional and counterproductive uses in an effort to render them less vulnerable—masking tape became the makeshift lamination of the ’80s, while windows were left open in preparation for the next disaster.[38] These defensive architectural mechanisms have continued to transform through the August blast. They are seen now

[35] From an interview with a volunteer, on the collection and cleanup efforts in regard to the overwhelming presence of the material.

[36] “For the next explosion” is a common sentiment heard on the streets amid post-blast repair and reconstruction.

[37] Dar Onboz coined “Glassophobia” as an anxiety disorder relating to the fear of glass and the irrationality of panic from being near windows. See Dar Onboz, Instagram post from August 24, 2020, [link](#).

[38] Those who lived through the civil war describe how they would sometimes tape their windows thinking it might hold the panes together the way lamination would. It is a common practice among residents in the



in the rebuilding efforts: in how some have decided to sacrifice the comfort of light and air for safety by replacing their glazed windows with metal shutters, not wanting to deal with the next wave of shattering. Window frames, glazing, and curtain walls—absences made excruciatingly present—have come to demand an increased awareness of what this presence means in anticipation of possible imminent danger.

It is this embodied knowledge, built up by years of crippling conflict, that allowed those who were afforded the time or who were farther from the reach of the pressure wave, an opportunity to shield themselves from injury. Some mirrored what their fathers had done years ago with their own children, pulling them back into the confined, windowless spaces of the home: corridors, bathrooms, and staircases. Others took shelter under desks, beds, or tables and behind partitions—their first instinct being to move as far away from the soon-to-be-shattered windows as possible. The tactics of engaging with glass have thus become acts of forced awareness—of turning away, staying back, ducking, hiding, and shielding.

Because when the blast happened, the difference between where you were sitting or standing was the difference between life and death or between a serious injury and a mild one. At around 5:45 pm, when videos of the large smoke plume began to flood the internet, most people were near their windows or at their glazed balconies, present and participating, observing their city through the transparencies these windows afforded. It was only at 6:07 pm that the sound of the first blast was heard. The main explosion came less than a minute later. Their curiosity at the spectacle of disaster for their city proved deadly to some.

It takes a speed of around 20 meters per second for an untreated glass shard flying through the air to pierce the human skin.[39] The speed of the pressure wave created by the Beirut blast began at 312 meters per second, slowing down as it pushed its way through the city's density. As it ripped through space, surfaces, and bodies across the uneven urban fabric, glass discriminated. In the further extents of the blast radius, where the wave slowed, the social disparities of untreated versus safety glass were exposed. Beirut's geography of corruption was revealed by the fragility of this material state through the sounds it made, the way it scattered across floors, and the injuries it inflicted on its victims.

“...for the next explosion.”

In transcending its molecular composition of silica sand, soda ash, and limestone, glass has created a complex enclosure that often governs the lives of people within its invisible bounds. Its material life cycle embodies countless cycles of institutionalized crime—the existence and promotion of illegal dig sites, the corruption of the development industry, the garbage crisis, the electricity crisis, the general failure of an entire state—while its narrative life is entangled with cycles of sectarian violence and subjugation. Although some have surrendered to this pattern as an inevitability, human-made catastrophe should neither be deemed natural nor beyond accountability and reform. If glass can tell us anything, it is how to question these foregone conclusions. At a time when the unthinkable happens over and over again, quick fixes and

anticipation of storms and hurricanes in the US. It is, however, a myth and act of false security, since the tape doesn't actually prevent glass from shattering in any way. Another common practice after the civil war was to leave windows open. In the case of a blast, closed windows that disrupt a shockwave are more likely to shatter under pressure than an open window that would otherwise let the wave propagate through the space. This was common knowledge when explosions were an everyday occurrence, also the case in the string of car bomb political assassinations from 2004 to 2008.

[39] P. T. O'Callaghan et al. *Forensic Science International* 117 (2001): 221–231.

cover-ups are increasingly visible, and resilience will not suffice. In the wake of a disaster, a suffocating pandemic, an unprecedented economic collapse, and the absence of a government, Beirut has been rendered nearly as breakable as the windowpanes that shattered in August: a city governed by a fragile politics of glass.