Article

# Containing absence, shaping presence at ground zero

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#### Abstract

This essay analyzes the dynamics of absence and presence at the 9/11 memorial and museum in New York, as elements of their design and aspects of the haunting of the site. Of the 2753 victims, 1113 have never been identified, despite a huge and expensive forensic identification process, and this absence has been a shaping force at the site. While the designs of the memorial and the museum both evoke absence, both also attempt to render the dead present, through naming at the memorial and through an array of media, most effectively audio, in the museum. This essay examines the complex forensic identification of the 9/11 dead and the effect of the disappearance of so many, and analyzes the strategies through which the memorial and museum aim to render the 9/11 dead present.

#### **Keywords**

9/11, absence, DNA, media, memory, presence

Almost 20 years after the terrorist attacks of 11 September 2001, Ground Zero in lower Manhattan has become a destination for tourists and shoppers. The rebuilding of the site took many years of political debate and wrangling, cost billions of dollars (much of it public funding), and was fraught with political machinations, failed visions, and architectural and real estate power politics. It is now approaching a level of completion, with the opening of the 9/11 memorial in 2011, the 9/11 museum in 2014, the Oculus shopping mall/transportation hub in 2016, five office buildings, and a large shopping complex, with a performing arts center under construction, all of which function to pull tens of thousands into the area every day as a site of global tourism.

Tourists take pictures and selfies at the memorial, an activity that is encouraged by its two vast pools of cascading water, and they buy souvenirs at the museum gift shop. They look at the mangled artifacts in the museum exhibit, and they listen to the moving stories of those who died and survived that day. As they exit the memorial or the museum, they can move seamlessly into the Oculus shopping mall/transportation center, designed by Santiago Calatrava. It is a cathedral-like space that inspires Instagram posting as well as high-end consumption. Yet, within the museum's walls, they may weep while hearing the words of those who died there. The range of activities

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shaped by the spaces at Ground Zero is thus necessarily contradictory, demanding different and potentially conflicting experiences and emotions.

In this essay, I focus on how the tensions between the modes of presence and absence constitute a kind of undercurrent to this perceived seamlessness at Ground Zero. In this, I argue that Ground Zero's contradictions continue to erupt through the smooth fabric of its architectural spaces, that even in its completion as a site of renewal, it nevertheless cannot contain the ghosts that live there. Here, I am not referring literally to ghosts, imagined or real, but to the ghostly presence of the buildings and people who were shockingly rendered absent on 11 September 2001. As Avery Gordon (2008 [1997]) has written, haunting

alters the experience of being in time, the way we separate the past, the present, and the future. These specters or ghosts appear when the trouble they represent and symptomize is no longer being contained or repressed or blocked from view. (p. xvi)

Every aspect of design, memorialization, and even commerce at the rebuilt site of Ground Zero aims to mediate the contradictions of the site's many meanings, to contain the dead, the event, and its consequences within familiar tropes and narratives, yet the specters of 9/11 continue to disrupt. We can see this in the tensions at the site of absence and presence.

## Shaping absence

From the very beginning, absence was a primary narrative about the space of Ground Zero, a central preoccupation that needed to be resolved. Initially, this resulted in a preoccupation with the absence of the twin towers in the New York skyline, one that produced a kind of mourning for the buildings themselves. This is a confounding mourning—why mourn buildings? Yet, the towers kept percolating up, from initial attempts to re-insert them into the skyline with images around the city, to the design proposals that emerged afterwards, with architects proposing rebuilding in pairs of two, in the continued proliferation of souvenirs and postcards of the twin towers, and also in the selling of merchandise in the museum gift shop that evokes the modernist gothic facade of the buildings as design motif. The construction of One World Trade Center, a security girded, modernist banality of a building that rises to the kitschy height of 1776 feet, while it may succeed in anchoring the downtown skyline, has appeared unable to stem the feeling of loss of the twin towers.

The strange haunting of the site by the absence of the twin towers thus led to an architectural preoccupation with the aesthetics of the void. The 9/11 Memorial, designed by Michael Arad (with additional design on its plaza by landscape architect Peter Walker), was originally named *Reflecting Absence*. Its primary feature of two enormous black granite voids cut into the former footprints of the original twin towers, which are filled with cascading water, inscribes this absence spatially at the site—a feature of the memorial that in effect removes two large areas from public space. The voids are designed to mediate absence, with the waterfalls creating an atmospheric effect, yet their modernist minimalism and overwhelming scale have a muting effect on the affective responses possible at them.

The pervasive sense of absence at Ground Zero is derived from much more than absent buildings. It is also, and primarily, about the absence of those who died at the World Trade Center that day, more than half of whom have never been recovered. The violence of the events of 9/11 in New York, in which two airplanes crashed into two 110-story buildings that collapsed inwardly and with great force, rendered all materiality at the site altered. The powerful steel of the buildings was twisted beyond recognition, and everything from computers, desks, file cabinets, tables, and papers were turned into dust amid piles of debris. Within this, most of the bodies of those who died were either obliterated, vanished, leaving no discernable trace, or rendered into fragments. Both states are, it needs to be said, horrific and both pose problems for mourning. These are bodies whose status remains largely unresolved, in their liminal state as vanished or never found.

The numbers tell the story of absent bodies. There were 2753 victims killed at the World Trade Center that day (though it is believed by many that the actual number was higher, with undocumented workers unreported by their families). Of those, 1113 have never been identified. Of the 1640 who have been identified, only 293 were found intact (Aronson, 2016: 1). The remaining 1347 were identified in bits and pieces scattered in the broad pile of debris that was left at Ground Zero after the destruction, which was sifted through at the site and in later months at the Fresh Kills landfill on Staten Island, where the debris was relocated. A massive effort of DNA identification followed, led by the New York City Office of the Chief Medical Examiner (OCME) and which has continued to occasionally identify remains (identifying Scott Michael Johnson from a bone fragment in July 2018, for example; Pager, 2018: A21).

The lack of identified remains has not impeded the designation of death for those who died. The Chief Medical Examiner, Charles Hirsch, designated all of the dead, through death certificates, as homicides, regardless of whether or not their remains were found and identified. Thus, legally (and in terms of compensation, which the families received) there was an affirmation of death separate from actual bodies. In the aftermath of 2001, the conflict over memorialization, identification, and the debris from the site was thus not about uncertainty over whether these people had died, or even the need to confirm death in a legal sense, but rather about the search for the material proof of death, and the presumed emotional comfort that verification would provide.

And, where are the bodies of those who died? We could say that those for whom there is no trace, whose bodies were likely turned to ash by the intense fires, have been disappeared. As such, they acquire the complex and troubling social status of those who were deliberately disappeared in recent history, such as *los desaparecidos*, those disappeared through state terrorism in Argentina in the 1970s/1980s or in Ayotzinapa, Mexico in 2016, or many other sites of conflict, genocide, and state terrorism (Rosenblatt, 2017). In those contexts, disappearance is a specific strategy to erase subjectivity and un-make the world. In Argentina, for instance, government officials would often say that the disappeared had run away or never existed. Yet, who made these 9/11 victims disappear? Al-Qaeda? The modern technologies of airplanes and skyscrapers? While their deaths were intentional (thus, homicide), their corporeal disappearance is unlikely to have even been considered by the hijackers and those who planned the attacks. In the face of physical obliteration, the legal and compensatory mechanisms intended to recognize them cannot provide affective compensation for their disappearance.

This state of disappearance was troubled, rather than mediated, by the presence of the dust that covered lower Manhattan in the aftermath of the towers' destruction. Lower Manhattan was filled with dust, a strange and uncanny substance covering the streets like snow, filled with bits of paper and (we now know) toxic particles. The dust was an indicator of a world undone that day, yet it was also a substance, like ashes, of bodily aftermath. Was it body or refuse? (Sturken, 2007, Chap 4; Yaeger, 2003). The city attempted to mediate the recognition that there would be many victims for whom there would be no remains by staging a ritual with the dust. On 14 October, they placed dust in small urns engraved with 9 November 2001 and gave them to family members in a ceremony in which the urns were covered by American flags, given a police escort, and blessed by a chaplain (Sturken, 2007: 165). Such a ritual would seem to acknowledge that the dust did actually contain the ashes of human remains.

Nevertheless, the vast majority of the dust was taken to the Fresh Kills landfill on Staten Island, where its status was clearly designated as one of refuse. The cataclysmic violence of the destruction

of the World Trade Center produced a vast field of debris, well beyond the central area of the twin towers. With the demand (economic and political) to clear the site in a timely fashion shaping the recovery effort in the months following 11 September, the carting away of debris to Fresh Kills, where it was then sifted through for remains, became a source of anxiety for many family members. Were bodies being treated as refuse, relegated to the dump? What worse fate for a body than the garbage? Was it possible for the dust and debris to be fully sifted for remains? These concerns were as much about a perceived lack of regard for how remains were treated as they were about desperate attempts to mediate the status of the disappeared.

The primary organization to contest the status of the refuse at Fresh Kills was the World Trade Center Families for Proper Burial (WTCFPB), whose 2005 lawsuit demanded that the dust from the World Trade Center site be placed in special containers and returned to Ground Zero (it was dismissed on July 2008). Led by a family whose son's wallet and remains were found at Fresh Kills, WTCFPB contested, with supporting testimony from workers and experts, that a significant amount of the debris at Fresh Kills had not been properly sifted. The plan to turn Fresh Kills into a park, with an area designated as a memorial site, has not allayed the sense of injustice over the likely existence of remains at the landfill (Aronson, 2016, Chap 2).

In addition, the sense of remains being lost in the rubble was affirmed by the "new finds" that took place many years later, long after the site had been cleared and transformed into a construction site. In 2006, for instance, several manholes were cleaned out by Con Edison crews, who found hundreds of bones as well as personal items including wallets (Aronson, 2016: 210). As late as 2013 remains were being found, with 1845 remains recovered between 2005 and 2010, and 89 additional remains recovered since (Aronson, 2016: 226). Ongoing negotiations between the city and family groups continued to fester as these processes moved forward, with families contesting the city's claims that it had done all it could to account for remains.

## Forensic identification

These kinds of contestations over the status of remains must be seen in relation to the extraordinary effort to identify the 9/11 remains. The intense demands for the 9/11 remains to be positively identified were fueled in many ways by a contemporary belief in science, specifically the science of DNA identification. As Jay Aronson, whose book *Who Owns the Dead?: The Science and Politics of Death at Ground Zero* is the definitive work on the story of the remains of 9/11, writes, "The World Trade Center was attacked just as large-scale DNA identification efforts were becoming possible." New York City's Chief Medical Examiner, Charles Hirsch, promised the families that his office would do everything they could to identify all remains. As Aronson (2016) notes,

The primary goal, of course, is to link even the tiniest fragment of human remains to a person in an effort to provide proof of death for those families that hunger for such knowledge. But the massive forensic effort was also undertaken to demonstrate that Americans, as individuals and as a society, were dramatically different from the terrorists who so callously disregarded the value of life. It was as much a political and moral statement as it was a scientific and legal one. (p. 2)

Science is a very powerful discourse, one that tends to overshadow competing discourses. In a process such as the forensic identification of remains, science also intersects with loss in ways that fuel the need to search further; science feeds the belief that ultimately all remains can and will be found and identified, and prolongs the affective desire to never give up searching. In those parts of the world where DNA identification is available after catastrophes, it has effectively altered how remains are thought of, and how people lay to rest, or do not lay to rest, the dead. Science thus creates the promise of certainty in a situation of unknowingness, ambiguity, and absence.

This was a massive and enormously expensive effort, finally costing US\$80 million of federal funds. The official statistics of the OCME states that 21,906 remains were recovered of which 14,254 were identified. The OCME set up a large facility behind the old psychiatric wing of Bellevue Hospital, with 24 refrigerated trailers, eventually calling it Memorial Park. The process of identification was paused in 2005, but then resumed when new techniques became available. The constant changes in DNA science mean that new techniques of identification are almost certain to emerge, thus justifying preserving remains in the hopes of further identification. In a general sense, many factors are used to identify the dead in addition to DNA, including personal items, fingerprints, tattoos, dental records, and x-rays. Nevertheless, DNA carries enormous power in this process; in New York, there were several stories of misidentification where, in the end, the DNA contradicted (and ruled over) other presumed identifying factors, such as personal items.

The victims of 9/11 were individuals, yet in the moment of their death, they were rendered into a mass subject, as defined by Michael Warner (1993), "an already abstracted body, assembled in simultaneity" (p. 248). Families and friends of those who died have often resisted this mass body, in particular when it has been nationalized (even the remains were draped in American flags) given the diversity of those who died quite arbitrarily that day, across the range of class, race, and citizenship (several hundred were not US citizens). In the identification of remains, that mass body was rendered painfully, often gruesomely, material, with an intermingling of body parts and the need for intense scientific inquiry to render those parts both individual and distinct. The identification process made visible in many ways the brutality of the violence of that day, the body literally in pieces. This would seem to indicate that one of the things we desire of remains is that they be individual-no matter how small. This had a particular inflection in relation to the potential intermingling of the remains of 9/11 victims with those of the hijackers, implying a certain kind of bodily intimacy between those who were killed and those who killed them. A concern that the remains of victims might be comingled with those of the terrorists was present at each of the three sites of 9/11, and in New York, this meant that the remains identified as those of the hijackers are held in a separate and undisclosed location (Aronson, 2016: 7-8).

The delicate relationship between the OCME and the families, in a situation in which there were so many small remains of so many victims, many comingled, resulted in the establishment by the OCME of a series of protocols. As I have noted, the OCME made the decision to produce death certificates within a short time period, without waiting for the confirmation of remains. The OCME notified families of the identification of remains, and families were actively discouraged by the OCME from actually looking at the remains. They also gave those families the option to not be told of further identifications. This was because some families told them that it was difficult to go through the experience of burying remains, only to be told that there were additional remains, and then to have the experience of re-grieving. For some, the desire to know as much as possible was key, yet others chose not to be notified at all—presumably, the knowledge these remains would potentially provide to them about how their loved one died would be too devastating to learn (Aronson, 2016, Chap 3). This is why there are remains now classified as unclaimed rather than unidentified, including an almost complete body (Aronson, 2016: 108).

Yet, the immense labor, emotion, and extraordinary price tag of this effort raises a significant number of questions, in particular, if we compare it to many other instances of mass death in which such resources have not been available or deployed. Is it actually the case that such identification achieves its goals, of providing not only proof of death but also comfort for families? Aronson (2016) writes,

it is an open question whether the extreme measures taken to analyze miniscule and highly damaged remains were worth it. Have families benefited from continual identifications? Is it really therapeutic to receive a bone fragment the size of a thumb or even a thumbnail? Might it not have been better to bury the remains that could not be easily identified together in a respectful common grave? (p. 109)

While it provided some families with proof of death, one could argue that the enormous identification process could do little to allay the absence of the dead, that, in fact, it only affirmed how many had vanished without a trace. Yet, many families have stated that the identification of even a small remain provided some kind of comfort to what one family called the "vanish" factor. Other families buried symbolic objects or even a vial of blood, as a way of substituting for the absent body (Aronson, 2016: 98–105; Lipton and Glanz, 2002). Such processes indicate that some kind of indexical relationship to the body that is unrecovered can offer a mediation of the devastating effect of its disappearance.

On 10 May 2014, several weeks before the 9/11 Memorial Museum was opened, almost 8000 unclaimed and unidentified remains were placed in a repository behind a wall on the lower floor of the museum. The procession from the Office of the Medical Examiner to the museum included members of the Fire Department of New York (FDNY), the New York Police Department (NYPD), and the Port Authority Police, who saluted as the fire truck carrying the remains passed by, as well as many family members (Aronson, 2016: 227–228; Farrell, 2014: A20). A number of family members also came to protest the placement of the remains within the walls of the museum. As one protestor's sign read, "Human Remains Don't Belong in a Museum."

While it is unlikely that most museum visitors see the discrete sign for the repository or even know it's there, the presence of the remains within its walls has an impact at the museum. Placing the remains within the site pulls in both the scientific (as they are still under the protection of the OCME) as well as the funerary. The dual roles of the museum as an historical museum and a memorial museum are already in deep conflict, as the memorial function of the museum inevitably restrains and restricts the kinds of historical analysis it can engage in. The presence of the remains amplifies this tension. It is worth noting that at the Oklahoma City Memorial, the designers successfully argued (and families agreed) that the unidentified remains should not be placed within the memorial (they are interred at the State Capital) and that at the Flight 93 Memorial in Pennsylvania, the unidentified remains were placed in an area beyond the memorial that visitors are restricted from entering.

There were also debates between the families and the museum over the inclusion of objects in the exhibition that raised the question of remains. This focused, in particular, on the display within the museum of the "composite," a large object, about 4-feet tall that constitutes the compressed remnants of 4 to 5 floors of one of the towers. The composite is seen by the museum officials as a means to display the brute force of the violence of that day while also giving glimpses of the daily life of the towers, revealing carbonized paper and other materials. Even though the OCME had determined that it did not contain human remains, because of the high temperatures that created it, many family members were appalled by its inclusion, calling it a "tomb of trapped remains" (Aronson, 2016: 233). The museum has attempted to mediate the controversial and potentially uncomfortable status of the composite by placing it in an alcove with explanatory wall text. It is also accompanied by a nearby box of tissues. The composite troubles precisely because it is on display, meant to be viewed, yet with an acknowledged in-between status. It is presented in scientific terms by the museum, yet the box of tissues seems to also ask visitors to mourn it as if it does contain remains.

## Making presence

The forensic identification of remains was a process largely out of public view, shared privately with families, though occasionally reported in the news. The memorialization at Ground Zero, in the form of the memorial and the museum, is a very public form of recognizing the dead. Both use a number of strategies to render the dead present, rather than absent or disappeared. The memorial

aims to render the dead present through naming, and in the museum, an array of visual and audio media are deployed to render the dead present, individual, and known.

While the black granite voids and waterfalls are the memorial's most obvious design element, the names are its most powerful feature; the listing of names is elegant and understated, with a particular evocative quality at night when the names are lit from underneath. People can touch the names, and take rubbings of them, and the design encourages a kind of intimacy between the visitor and the names. Thus, the 9/11 memorial embodies a tension in scale between the two vast voids into the memorial plaza and the names that line their edges. Because the pools are so immense, they encourage the practices of looking into a vista, as the loud sounds of the cascading water rush over, and picture-taking of the view. The names, however, define a more intimate, focused looking, demanding a reflection on the dead as individuals. Even though their presence is overpowered by the immensity of the waterfalls, the names carry presence. The individual names affirm the individual out of the mass subject of disaster, asking us to reflect on each life lost as a unique entity.

The arrangement of names was the subject of intense negotiation between the architect and the various 9/11 constituencies, resulting in the grouping of names by location (those who died at the North or South Tower as well as the airplane flight the victims were on, the listing of employees within companies), with public servants such as the firefighters and police listed by division, as well as "meaningful adjacencies" that include familial relations, work connections, and other connections requested by families. A complex algorithm, created by media design firm Local Projects (which also designed the digital media in the museum) was needed to create these adjacencies, for which there were 1200 requests, some of which are only known to friends and families. One request, often shared by Arad, came from a woman whose father was on Flight 11 and whose best friend was in the North Tower, another of the widow of one man who was helped by a stranger to descend the staircase, and who asked that they be listed together after they both died (Shapira, 2013).

While the memorial renders the dead present through this physical naming, the 9/11 museum deploys a diverse array of media forms to give presence to the dead. Overall, the museum has dual purposes, to tell the story of the event of 9/11 (to historicize) and to memorialize those who died. Visitors are thus asked to participate in several different affective modes while visiting the museum, from historical reflection to awe at the artifacts (and space) to mourning the dead. Digital media is one of the primary ways that the museum aims to effectively reanimate those who died. In the Memorial Gallery, the walls are covered with photos of those who died and several display cases feature particular objects that were important to certain individuals on a rotating basis. The main feature of the Memorial Gallery is a digital archive where visitors can touch a particular person's image, call up the person's digital profile, and ask for it to be played in the gallery. Here, families and friends can record their memories of someone, to add to the digital profile. We see in these profiles the primary strategies through which people attempt to conjure the qualities of someone whose life was arbitrarily cut short, telling stories about them, discussing their likes and dislikes, and primarily talking about the people they loved.

The digital aspects of the Memorial Gallery provide an interactive and deeper level of portraiture than the more traditional medium of photography. Yet, the medium that emerges as the most effective in creating presence for the absent dead in the museum is audio. Within the historical exhibit crowded with images and text, there are several alcoves where visitors can sit and listen to audio testimonies of survivors and voice recordings of those trapped in the towers. These audio retellings are digitally sampled into groups of about six or more integrated narratives, as listening visitors see a map of the twin towers that locates each speaker. The low-light setting allows visitors to focus on the voices, telling stories of how they escaped from the towers, of arriving at the plaza with the sound of bodies crashing, of police and firefighters yelling at them to run and not turn back, or the faces of the firefighters climbing the stairs. The audio collage of Flight 93, in a separate alcove, is particularly chilling and dramatic, telling the story of this flight (which passengers took down in western Pennsylvania when they realized what was happening) with a map of the airplane's trajectory and audio clips from phone calls, air traffic controllers, and voicemail messages.

Here, we hear many voices of the dead, leaving messages on voicemail for those who are not home, speaking to 911 operators, trying to sound calm yet also saying goodbye. There are calls from those trapped in the North Tower, begging for help, giving information, describing the smoke, and hoping for rescue, and emergency communications between firefighters who were doomed. One flight attendant tells her husband she hopes to see his face again, another woman tells her husband "there is just a little problem on the plane," revealing an entire dimension of her personality in her intonation and attempt to sound upbeat, to shield him from the reality. Some voices are extraordinarily calm as they narrate what they know are their last minutes. These voices of the dead, preserved in this recording media, seem to come alive, to be alive, and to allow listeners to hear their fear and resolve, their desperation, to glimpse into their humanity and hear their caring and expressions of love for those they know they are leaving behind. The simplicity of hearing these voices is deeply moving and emotionally devastating. The voices seem to render those speaking present; one feels their presence through the timber, intonation, and vibrations of their voices. And what one hears most often is that people who fear they are going to die want those who are still living to know that they loved them.

These strategies of presence-making provide a recognition of the humanity of those ordinary people who were caught up in a violence well beyond their control on 11 September 2001. Inevitably, it is one of the uncomfortable truths of 9/11 that this process of presence-making privileges those who died that day from all the dead who followed in that day's wake. In this, the museum is at its most problematic, in that as a memorial museum it is constrained in taking on all the histories that flowed from that day, and the consequences of the US war on terror. The 9/11 dead have been deployed in so many ways to serve nationalist and imperialist agendas that go well beyond the mourning of their individual lives. As the wars in Afghanistan and Iraq and the brutality that followed in the wake of 9/11 continue to destroy lives and create crises of refugees and responses of xenophobia and hatred, how can the dead be put to rest, not only the 9/11 deaths were used to justify?

Ultimately, the transformation of Ground Zero into a site of memory tourism and consumerism has allowed for facile and nationalist narratives about the meaning of 9/11 to remain unchallenged. As Aronson (2016) notes, the forensic effort was undertaken for moral and political reasons as well as scientific and legal ones, to demonstrate that "Americans, as individuals and as a society, were dramatically different from the terrorists who so callously disregarded the value of life" (p. 2). The same can be said for the implicit narratives of 9/11 memorial and museum, that they claim a position of moral superiority that effectively justifies the wars that were fought in revenge. This is why the discourse of memory at the site constrains any evaluation of 9/11 aftermath, because of all the ways that story undermines this moral position, and raises questions about the unequal valuation of lives. All of the rebuilding at Ground Zero, the aims for closure and completion, the vast labor of identification of the dead, the reemergence of tourism, and shopping as the everyday, have done the work of smoothing over this traumatic event, turning it into a packaged experience for consumption. Yet, in those moments of presence-making, of the testimony of people caught up in the violence of history who demonstrated kindness and care to strangers, we see glimpses into the fragile humanity of those who were facing death and they offer a kind of hope in a shared humanity.

### References

- Aronson JD (2016) Who Owns the Dead? The Science and Politics of Death at Ground Zero. Cambridge, MA: Harvard University Press, pp. 98–105.
- Farrell S (2014) In "ceremonial transfer," remains of 9/11 victims are moved to memorial. *The New York Times*, 10 May, A20. Available at: https://www.nytimes.com/2014/05/11/nyregion/remains-of-9-11-vic-tims-are-transferred-to-trade-center-site.html
- Gordon AF (2008 [1997]) *Ghostly Matters: Haunting and the Sociological Imagination*. Minneapolis, MN: University of Minnesota Press.
- Lipton E and Glanz J (2002) DNA science pushed to the limit in identifying the dead of Sept. 11. *The New York Times*, 22 April, A1.
- Pager T (2018) Keeping its promise to families, New York identifies another 9/11 victim. The New York Times, 25 July, A21. Available at: https://www.nytimes.com/2018/07/25/nyregion/9-11-victim-nyc.html
- Rosenblatt A (2017) Aparición con vida: disappearance and the politics of the counterfactual, from Argentina to Ayotzinapa. In: Paper presented at the Latin American Studies Association Annual Meeting, April, Lima, Peru.
- Shapira H (2013) Reflecting absence: an interview with Michael Arad. Public Books, 20 August. Available at: http://www.publicbooks.org/reflecting-absence-an-interviewwith-michael-arad/
- Sturken M (2007) Tourists of History: Memory, Kitsch, and Consumerism from Oklahoma City to Ground Zero. Durham, NC: Duke University Press.
- Warner M (1993) The mass public and the mass subject. In: Robbins B (ed.) *The Phantom Public Sphere*. Minneapolis, MN: University of Minnesota Press, pp. 234–256.
- Yaeger P (2003) Rubble as archive, or 9/11 as dust, debris, and bodily vanishing. In: Greenberg J (ed.) Trauma at Home: After 9/11. Lincoln, NE: University of Nebraska Press, pp. 187–194.

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