

## Concretising Conflict

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Contemporary warfare is urban warfare. Conflicts across the world target sites of urbanity - public spaces, cafes, and schools – and the infrastructure that makes urban life possible, basic urban services, such as electricity, water and roads. The wars raging across the Middle East that have decimated historic urban centres, such as Aleppo and Baghdad, are often cited by analysts as illustrations of how conflict has been urbanised. In response to the urbanisation of conflict, militaries around the world are engaging with how to conduct operations in urban areas. Armies are not only focusing their efforts on learning how to destroy cities more effectively but also how to operate, plan, control, and build the urban battlefield. The US military, for instance, has recently established its first urban warfare planners' course.<sup>1</sup>

War does not just enter the city. Conflict creates, acts through, and transforms it. Recent scholarship on the urbanization of violence and conflict stresses that to comprehend this phenomenon we should not only be attentive to how war destroys the built environment but how it constitutes the urban form. This literature has shown how urban warfare can include a range of policies and practices that construct, design, and organise the built environment, including discriminatory planning and building regulations; restriction and use of certain materials; introduction of surveillance systems; emplacement of 'steel rings' or checkpoints; and the construction of infrastructure and logistical systems, such as roads and tunnels.<sup>2</sup> Warfare can not only result in the destruction or eradication of urban life; it can lead to the organisation, extension and intensification of urbanisation and the transformation of built fabrics. This has implications for how we think about how war is waged but also urban processes in conflict settings, such as reconstruction. I have written, for instance, on how reconstruction should not be thought of as a process that simply arrives in the aftermath of conflict, but a process deeply embedded within it.<sup>3</sup>

In thinking about how war is not merely the destruction of urban contexts but the planning and organisation of it, urbanists should be attentive to how the very materiality of the city can be part of war. Concrete (a mixture of cement, water, and aggregates) – the

foundational component of the modern city – is also a pivotal to the conduct of modern war. In conflicts raging throughout the Middle East, the importance of concrete as a weapon of war has been stressed by those who have been engaged in active fighting. Concrete was “the most effective weapon on the modern battlefield,” according to John Spencer, the Chair of Urban Warfare Studies and the Modern War Institute at West Point, in reflecting on his time as an infantryman in Iraq.<sup>4</sup> The centrality of concrete walls to the conduct of the war is articulated, Spencer notes, by the miniature concrete barriers given to senior leaders as gifts to represent their tours: ‘Concrete is as symbolic to their deployments as the weapons they carried.’<sup>5</sup>

### **Concreting the Battlefield**

The US military constructed the urban battlefield in Iraq. They did so through the utilisation and strategic emplacement of vast quantities of concrete. Concrete barriers have been key to the conduct of war. ‘No other weapon or technology had done more to contribute to achieving strategic goals of providing security, protecting populations, establishing stability and eliminating the terrorist threat,’ Spencer writes.<sup>6</sup> The concrete barriers that the Americans implanted as it transformed and moved to control Iraq’s urban context came in various shape and sizes. Spencer details how in his deployment in Iraq, he and his fellow soldiers soon became experts in concrete during their combat tours. He recalls how he became familiar with how much each concrete barrier weighed, its cost, the types of cranes needed to lift different concrete barriers and how many could be moved before a military vehicle’s hydraulics failed. Each type of concrete barrier was named after an American state. The New Jersey was the smallest (three feet tall; two tons) and was initially developed by the New Jersey State Highway Department to divide highway lanes. The Colorado (six feet tall; three and a half tons) is the medium sized barrier. The largest concrete barrier is the Texan (six feet eight inches tall and six tons). In a different category are the blast walls or T-walls that also became known in Iraq as the Bremer wall; named after Paul Bremer of the Coalition Provisional Authority who helped ensure that they were Baghdad’s most distinguishing feature.

The soldier-consultant David Kilcullen - whose book *Out of the Mountains: The Coming Age of the Urban Guerrilla* is a key text for militaries seeking to adapt their

operations to urban contexts - detailed how in Iraq concrete barriers were key to ‘killing the city’ of Baghdad. ‘We shut down the city. We brought in more than 100 kilometres of concrete T-wall,’ Kilcullen notes.<sup>7</sup> In the battle for Sadr City in March 2008 the weaponisation of concrete was again powerfully articulated. The US military bounded and divided Sadr City with 3,000 T-Wall sections twelve feet high, in what became known as the Gold Wall, to restrict the ability of the Mahdi army to move supplies in and out of the city and conduct attacks. The American military credits the Gold Wall with the US and Iraqi government forces being able to regain control of the city.<sup>8</sup> The conflict in Iraq has been as much about the construction and emplacement of concrete as – what war is more commonly associated with - its destruction. The American and coalition forces have covered Iraq in layers upon layers of concrete. It has not only constructed thousands of kilometres of concrete walls and barriers but also reinforced existing walls within urban contexts, constructed bunkers and guard towers, and military bases. Unsurprisingly, as Spencer notes, ‘Getting concrete became as important a mission as emplacing it.’<sup>9</sup>

### **“L’affaire Lafarge”**

There was much frustration among Iraqi industrialists that most cement used in the concrete blast walls forming the new urban Iraq came not from Iraqi cement factories but those located in Kurdistan and Turkey. Cement is a lucrative trade, one central to war economies, and has been a rapidly growing sector in the Middle East over the past decade. The increased regional demand for cement might have prompted the Syrian regime in identifying this sector as a lucrative area in which to open the country’s economy to foreign investment. In 2004, the Syrian regime allowed private investment in the cement sector for the first time breaking the decades-old state monopoly. In 2007, the French cement corporate giant Lafarge bought Orascom Construction Industries’ cement unit for \$US12.8 billion which included cement factories in Egypt, Algeria, the United Arab Emirates, and Syria. Lafarge now owned the Jalabiyya cement factory that it renamed Lafarge Cement Syria (LCS). Lafarge invested US\$680 million in upgrading LCS, representing one of the largest foreign investments outside the oil sector and enabling it to produce three million tons of cement per year, far exceeding the capacity of the six other government owned cement plants. By 2010, LCS was churning out 8,000 tons of cement per day (with an estimated value of

US\$500,000).<sup>10</sup> This increased cement capacity was not insignificant in a country about to descend into a brutal conflict.

As in Iraq, cement (as a key ingredient of concrete) has featured heavily as a central weapon of warfare in the Syrian conflict. One observer of the war in Syria has described it as a war of moles against hornets.<sup>11</sup> The hornets denote the Syrian army's bombardment from the air – that has been synonymous with the notorious barrel bombs – and the moles that refer to the vast network of tunnels constructed by the myriad of opposition groups. These tunnels rely on an enormous quantity of cement, and in turn concrete, for their construction. In an analysis of drone footage and news reporting in Northern Syria in 2018, Mark Bulmer detailed the vast amount of concrete poured to line trenches but also in the construction of observation posts and pillboxes.<sup>12</sup> Concrete walls, as they have been in the conflict in Iraq, have also been central to the Syrian war. In 2018 Turkey finished construction of an 828 km border wall composed of 414,000 concrete blocks, each 3 m high, 2 m wide and weighing seven tons, to block the flow of refugees and supplies for insurgents.<sup>13</sup> The Syrian conflict has been as much about the emplacement of concrete – the transformation and re-organisation of the built environment - as the destruction of it.

The centrality of concrete to the conduct of the Syrian war provides significant context to the ongoing French court battle against Lafarge (the company later merged with the Swiss company Holcim to become LafargeHolcim and more recently Hoclum Ltd). Eleven Syrian former employees of Lafarge Cement Syria (LCS) together with the European Centre for Constitutional and Human Right (ECCHR) and Sherpa filed a criminal complaint against Lafarge in the French court in 2018. They accuse Lafarge of financing a terrorist enterprise, complicity in war crimes and crimes against humanity, forced labour, and deliberate endangerment of people's lives. In the French media, the case has become known as the "L'affaire Lafarge".

In 2018, the French court indicted Lafarge SA for complicity in crimes against humanity and ordered the company to pay a €30 million deposit ahead of a possible trial. But in 2019 the French court of appeal dropped the charge of complicity in crimes against humanity (while confirming the charge of financing terrorism and endangering peoples' lives). However, following an appeal by ECCHR and Sherpa, the French Supreme Court (la Cour de Cassation) in September 2021 overturned this ruling and sent the case back to the appeals court – the case is ongoing. This charge of crimes against humanity against a large

corporation like Lafarge is seen in the legal world as a milestone for global corporate accountability for those profiteering in conflict zones.<sup>14</sup> This is not the first time a large corporation has been accused of complicity in such crimes, but such cases are rarely brought to trial.

The Lafarge affair begins with the Syrian revolt's violent turn. In December 2011, as the Assad regime turned its military apparatus against the civilian population, and many soldiers defected to join an increasingly armed popular uprising, the death toll began to rise – the UN declared that Syria was in a state of civil war. International companies began to leave. Total and Air Liquide (France's largest gas company) both halted operations. Lafarge, however, not only remained but continued to operate. Throughout 2011-2012 the LCS maintained a high production of cement despite the intensification of the conflict. It was not until September 2014 that the war took a turn that would eventually halt LCS's production.

In July 2012 violence in northern Syria escalated into full war around Aleppo and the Syrian army withdrew from the mostly Kurdish-populated area.<sup>15</sup> In August 2012 power in the north-eastern region of Syria fell to the Kurdistan Workers Party (PKK) and the Kurdish Popular Protection Units (YPG) now (precariously) controlled and guarded the LCS. The YPG did not shutdown the LCS and even encouraged Lafarge to continue production. Indeed, it is critical to stress that despite the LCS being caught between different and actively fighting factions, no warring side wanted the cement production to be halted. Meanwhile, the Syrian businessman, minor shareholder of LCS and regime interlocutor Firas Tlass now turned against the Assad regime and became a middleman between Lafarge and rebel factions. In response, the regime confiscated Tlass's property, including his part ownership of LCS. However, by this time the regime had lost control of this area and with it LCS. Lafarge meanwhile continued to pay all the different factions vying for control of the area to keep its operations going.

Lafarge reportedly continued paying taxes to the Assad regime in Damascus but also paid Tlass anything between US\$ 80-100,000 per month who in turn paid local opposition groups to protect LCS. Most of this money went to the YPG, then to various parts of the Free Syrian Army and finally to the rising powers in Raqqa: al-Qaeda's Nusra Front and ISIS. In total, in documents reported in the media (that Aron Lund notes appear to originate from an internal probe commissioned by LafargeHolcim), LCS paid an estimated US\$ 15.3 million to middlemen, suppliers or armed groups in Syria, which included at some point ISIS taking a

monthly US\$20,000 cut.<sup>16</sup> Lafarge is also accused of purchasing commodities, such as oil and pozzolan, from ISIS.<sup>17</sup> By 2014, the LCS was barely functional. Cheaper Turkish cement was being freely imported by rebel groups (previously it was illegal), and it was getting harder for LCS to obtain necessary raw materials and for workers to get to the factory. Although according to LCS employees their bosses at Lafarge still demanded they go to the factory to work despite ISIS and Nusra establishing checkpoints on the M4, the main road, and taking control of the area. Talking to two former employees of LCS, the *New York Times* reported that, at checkpoints held by ISIS and Nusra Front, ‘the factory’s suppliers had only to mention “Lafarge” to pass’.<sup>18</sup> But Lafarge’s payments to ISIS and Nusra and others, did not always guarantee safety and between 2012 and 2014 at least a dozen workers were kidnapped.<sup>19</sup>

In July 2014, ISIS began to seize vast areas of Iraq and Syria, including rebel held Raqqa and Manbij. LCS would by September be part of this ISIS takeover. But rather than shut down its operations, LCS’s senior representatives continued to negotiate with ISIS over the protection of employees, rights of passage, and raw materials. Even under ISIS’s growing regional control Lafarge was continuing to produce cement. But once ISIS moved to finish off YPG it was over. Finally, by September 2014, as ISIS secured control of the area and LCS employees finally fled, cement production halted. Without any property to maintain or protect, in other words without anything to terminate, Lafarge finally gave the order to stop LCS operations in Syria. According to a former LCS employee, ISIS tried to restart cement production and lure back local employees but without success.<sup>20</sup> Declassified French secret service documents, reported in the media, note that ISIS made at least \$11.5 million from the cement that it plundered from LCS and took control of \$25 million worth of cement.<sup>21</sup>

## **Conclusion**

Why was Lafarge so determined to keep a presence in Syria despite what must have been evident to the executives in Paris, the significant risk that it was undertaking by doing so? Perhaps Lafarge’s history is instructive here. The company has been accused of helping the Nazi’s build its ‘Atlantic Wall’, a sprawling fortification of 15,000 bunkers, constructed by 300,000 French workers, along the coast from the Netherlands to the Pyrénées. This historian Jérôme Prieur, author of *The Atlantic Wall: A Monument to Collaboration (Le mur*

*de l'Atlantique: monument de la collaboration*), noted that Lafarge had two factories producing cement for the Nazis and it provided the company with a competitive advantage following the war.<sup>22</sup> Prieur states that thanks to its economic collaboration with the Nazis, the war was not a down period for the company and it was best placed to undertake reconstruction efforts after the war. Aaron Lund speculates that despite the dangers and unprofitable operations of LCS, the board of Lafarge in Paris was determined to keep the cement factory running because they may have had Syria's post-war future in their sights.<sup>23</sup>

Syria's post-war future, however, continues to be elusive. Over a decade since the onset of the conflict, fighting continues to this day. Large-scale reconstruction that has been instigated by the Assad regime has been aimed not at a post-war future but the continuation of the conflict, what I have termed 'reconstruction as violence'. The court case and controversy around Lafarge has focused primarily on the exchange of money and (quite rightly) on the danger that the French corporation placed its workers in. Little attention, however, has been placed on the enormous amount of cement it was producing amidst an intensifying brutal conflict. The LCS distributed cement through a factory gate system, where it did not undertake the distribution itself but relied on customers picking up cement in bags (large and small) literally from the 'factory gate'. Lafarge cement bags were being sold and distributed on the frontline of the Syrian conflict in Manbij, Aleppo, Kobane, and Raqqa. If, as the military expert John Spencer reports, concrete is the most effective weapon on the battlefield, then Lafarge was producing vast amounts of these weapons and distributing to anyone who came to their gate with the required cash. Did Lafarge not also have a responsibility to prevent its cement falling into the hands of terrorist groups not only for their financial value but also military use? More broadly, and specifically in conflict settings, should cement manufactures be liable for how their materials are used and who they sell their material to?

For now the LCS lies in tatters. ISIS blew up parts of it as it withdrew. The USA, Britain, and France used it as a military base following their reimposition of control and expulsion of ISIS in the region. It has been reported that 80% of the plant is damaged.<sup>24</sup> Lafarge has written off the factory from its company's books and it is unclear who now owns it. In a context of an ongoing conflict - and its attendant reconstruction and destruction - that will continue to demand and require large amounts of cement the political, ecological, and economic stakes of the LCS are significant.

## Endnotes

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- <sup>1</sup> John Spencer, 'The US Army's first urban warfare planners course,' *Modern War Institute*, 29 October 2021 <<https://mwi.usma.edu/the-us-armys-first-urban-warfare-planners-course/>> [accessed 2 December 2021]
- <sup>2</sup> See *Cities, War, And Terrorism: Toward an Urban Geopolitics*, ed. by Stephen Graham (Malden: Wiley-Blackwell, 2004); Stephen Graham, *Cities Under Siege: The New Military Urbanism* (London: Verso, 2011); Eyal Weizman, *Hollow Land: Israel's Architecture of Occupation* (London: Verso, 2007).
- <sup>3</sup> See my own work in the context of the Levant: Deen Sharp, 'Urbicide and the Arrangement of Violence in Syria,' in *Beyond the Square: Urbanism and the Arab Uprisings* ed. by Deen Sharp and Claire Panetta (New York: Urban Research 2016); *Open Gaza: Architectures of Hope* ed. by Michael Sorkin and Deen Sharp (Cairo and New York: The American University in Cairo Press and Terreform, 2021).
- <sup>4</sup> John Spencer, 'The most effective weapon on the modern battlefield is concrete,' *Modern War Institute*, 14 November 2016. <<https://mwi.usma.edu/effective-weapon-modern-battlefield-concrete/>> [accessed 2 December 2021]
- <sup>5</sup> Ibid.
- <sup>6</sup> Ibid.
- <sup>7</sup> 'Strategist Kilcullen: Warfare Is Changing in 3 Ways,' *NPR*, 27 December 2013 <<https://www.npr.org/2013/12/27/257524634/strategist-kilcullen-warfare-is-changing-in-3-ways>> [accessed 3 December 2021]
- <sup>8</sup> Doreen Fussman and Tom Sills, "'One T-Wall at a Time": battle of phase line gold, Sadr City, Iraq, March – May 2008,' *Joint Center for Operational Analysis Journal*, 11.2 (Spring 2009).
- <sup>9</sup> Spencer, 'The most effective weapon on the modern battlefield is concrete.'
- <sup>10</sup> Aron Lund, 'The Factory: A Glimpse into Syria's War Economy,' *The Century Foundation*, 21 February 2018.
- <sup>11</sup> Cited in Sharp, 'Urbicide and the Arrangement of Violence in Syria.'
- <sup>12</sup> Michael H. Bulmer, 'Using EO to understand the Significance of Cement Production Infrastructure in the Syrian Conflict,' In *Advances in Remote Sensing for Infrastructure Monitoring*, ed. by Vernon Singhroy (London: Springer, 2021).
- <sup>13</sup> Ibid.
- <sup>14</sup> Lauren Chaplin and Louise Pech, 'Lafarge judgment paves the way for more companies to be held accountable for profiting from criminal organisations,' *Leigh Day*, 7 October 2021 <<https://www.leighday.co.uk/latest-updates/blog/2021-blogs/lafarge-judgment-paves-the-way-for-more-companies-to-be-held-accountable-for-profiting-from-criminal-organisations/>> [accessed 3 December 2021]
- <sup>15</sup> For a full account of the events surrounding the Lafarge cement factory see the remarkable account (that I draw heavily from here) by Aron Lund, 'The Factory: A Glimpse into Syria's War Economy.'
- <sup>16</sup> Lund, 'The Factory: A Glimpse into Syria's War Economy,' 18.
- <sup>17</sup> European Center for Constitutional and Human Rights, <<https://www.ecchr.eu/en/case/lafarge-in-syria-accusations-of-complicity-in-grave-human-rights-violations/>> [accessed 3 December 2021]
- <sup>18</sup> Liz Alderman, Elian Peltier and Hwaida Saad, "'ISIS is Coming!' How a French Company Pushed the Limits in War-Torn Syria,' *New York Times*, 10 March 2018 <<https://www.nytimes.com/2018/03/10/business/isis-is-coming-how-a-french-company-pushed-the-limits-in-war-torn-syria.html>> [accessed 3 December 2021]
- <sup>19</sup> Ibid.
- <sup>20</sup> Lund, 'The Factory: A Glimpse into Syria's War Economy.'
- <sup>21</sup> 'Islamic State made US\$11.5million from cement sales in Syria in 2014,' *Global Cement*, 11 July 2018 <<http://www.globalcement.com/news/item/7759-islamic-state-made-us-11-5m-from-cement-sales-in-syria-in-2014>> [accessed 3 December 2021]
- <sup>22</sup> Jérôme Prieur, *Le mur de l'Atlantique: monument de la collaboration* (Paris: Denoel, 2010).
- <sup>23</sup> Lund, 'The Factory: A Glimpse into Syria's War Economy.'
- <sup>24</sup> Bulmer, 'Using EO to understand the Significance of Cement Production Infrastructure in the Syrian Conflict.'