Edge Condition
Tracing the negative chain reaction resulting from the construction of the wall in Qalqilya, Palestine

Rosie Elvin
University of Lincoln
UK
The construction of the separation barrier in The West Bank has had an enormous impact on the day-to-day lives of Palestinians in Qalqilya, a town bordering Israel. Once described as ‘The West Bank’s Fruit Basket,’ serving Israel and the West Bank as an affluent market town, the people of Qalqilya are now geographically cut off from their farms, schools, universities, places of work, medical care, friends and family.

Qalqilya is unique to the West Bank, in that the separation barrier surrounding the town is made entirely of concrete sections, with no fences allowing views of the landscape. It is a Palestinian policed city, with one entrance and exit, guarded by Israeli soldiers. The road leading in to the town is often closed, or blocked causing traffic congestion.

The negative chain reaction that has resulted from the construction of the wall can be seen in the visual interruption of the landscape, the sharp rise in unemployment, shop closures and the shrinking market size.

This paper explores the construction of the wall, documenting the structures and defence mechanisms. The networks and the logistics of occupation and disruption are visually represented with diagrammatical maps and collages. The work expresses the negative chain reaction the wall has had on individual’s lives in Qalqilya, including the farmer’s separation from their land and the shrinking of The West Bank.
The impact of the construction of the wall in Qalqilya, West Bank

The West Bank is located in the Middle East and borders Israel and Jordan. The West Bank ranges from the lowest point (on earth) in the Dead Sea on the Jordan border, of -408m. And the highest point being Tall Asur at 1,022 m above sea level.

The construction of the 450 mile long barrier, or apartheid Wall, in the occupied Palestinian Territories began in 2003. The motivation for the construction of the wall was to protect Israel against Palestinian terrorist attacks. The original proposal for the wall was to follow the 1967 agreed green line, separating Israel and Palestine. However, the reality is that it separates Palestinians from their land, Schools, hospitals, clinics, medical supplies and places of work.

The town of Qalqilya, which is situated in the west of the west bank approximately 33 kilometres from Tel Aviv, is unique in that the town is encased on three sides by the 8m tall concrete wall with Israeli military watch towers. On the fourth side of the wall is an electrified fence.

This is what first interested me geographically in the area. From an analysis of the many complex maps of the West Bank, I found Qalqilya to be the most unfortunate and city to be effected by the unforgiving solid barrier. I spent several days in Qalqilya experiencing the vibrancy of the market, the hospitality, generosity and balanced views of the Palestinians I was introduced to by my guide. I also spent a relentless day travelling around the various types of checkpoints with the women from the charity checkpoint watch, where I felt equal levels of apprehension and respect when the women stopped to continuously pull the soldiers up on issues regarding blockades and other inconveniences that Palestinians are faced with on a daily basis.

Along the wall, there are several agricultural gates and one main checkpoint terminal in the North for people entering the West Bank from Israel. The main entrance from the West Bank in to Qalqilya is via a small checkpoint along a narrow road on the east side of the town. It is described as the bottle neck.

Qalqilya is one of the most fertile parts of the West Bank with arable land and is used heavily for agriculture. Qalqilya is within Zone C of the West Bank, meaning it is a Palestinian only Territory, although there are Israeli Soldiers in charge of the main entrance in to the city. Sorkin (2005) pg. 108

Although there are sites available to build in the developed areas of Qalqilya, it is on prime agricultural land and therefore, the expansion of buildings on to this land could jeopardise the growing of crops. Palestinian construction companies operating in the West Bank have either had to use Palestinian resources or apply for the necessary permits in order to obtain equipment or supplies from Israel.

Qalqilya once served Israel and the rest of the west bank as a market town. The olive oil produced is some of the best in the world due to the fertility of the land. The chain reaction of events preceding the construction of the wall lead to a high rise in unemployment due to the fall in the price of fruit and vegetables. Shops have had to close and the market has considerably reduced in size, now only serving Palestinians.
Qalqilya has suffered greatly due to the construction of the wall and as the majority of work in the area is agricultural, the wall has brought the city to an economic stand still.

**Figure 1. Road map, showing Qalqilya connections**

This is mainly due to the closure of certain roads, or the roads being cut off from Israel. In some areas, the wall cuts right through the residential areas and therefore cuts people off from their friends and family, with very limited access, unless they are able to obtain permits. Palestine Primer: Wall (Separation Barrier)

The wall surrounding the West Bank does not follow the proposed 1967 agreed line and is currently twice as long, covering 709 Kilometres. The entire separation barrier is either built, under construction or in development and varies from fences to concrete wall sections. UNRWA (2003)
Figure 2. Mapping the negative chain reactions of the construction of the wall
The disruptions that the farmers face regarding access to their land, selling fruit and vegetables, and harassment from Israeli settlers hinder their livelihood.

**Figure 3. Disruption of wall Construction diagram**

These maps show the devastating effects that the wall has had on different people in Qalqilya.

The wall itself was constructed using sections of 10ft interlocking concrete panels. The panels were constructed in Israel and transported to Palestine where Palestinian workers assisted in building the barrier. Agricultural land was confiscated and many people were separated from their homes, places of work and education.
The process of construction

Initially, checkpoints were made up of large tin barrels filled with stones and later on they were filled with concrete to make them more permanent features. Following this, the barriers were replaced with plastic road blockades and then filled with concrete themselves. Larger concrete cubes were added to the structures and barbed wire fences were introduced. The structures that the soldiers initially sat at were rudimentary with the same slow process occurring, where the outdoor tables were replaced with steel towers and later, the construction of the concrete prefabricated sections emerged. Cities eventually became fortified and the technology became far more sophisticated.

Figure 4. Layering of the wall

The majority of the construction of the wall in Palestine has been completed, in some parts it consists of 8-10m tall freestanding interlocking concrete sections and in other places it is a three layered fence system with patrol road running around the perimeter, or layers of razor wire.

The system of security layering is complex. Initially, a trench was dug along the proposed line of the wall. Next to the wall, or fence, a path of sand was laid in order to imprint footprints of intruders. In some places the same has electronic detection sensors beneath it in order to detect an intruder. A military patrol road runs next to this, which is strictly reserved for the Israeli Army, the purpose being to get to any trespassers within one minute of a call. (Israel's diplomatic network. The anti terrorist fence. Saving Lives: Israel's Security Fence)

There are various types of gates and buildings acting as bridges between Israel and Palestine. The Agricultural gates are reserved for Farmers, and sometimes used by school children whose schools, or in the farmer’s case, land is on the other side of the fence.

The gates have restricted opening times, and permits for the Palestinian workers are essential for passing. The gates are heavily secure, with razor wire, or electrified mesh attached to posts on top of the gates, the whole system is approximately 3m high. To the sides of the gates, is a fence with electric intrusion detection (or in some cases, the continuation of the wall) and additional razor wire above it.
Razor wire is used as a physical and psychological technique for preventing intruders. With in the West Bank, razor wire is either used as barriers on the ground, with three coils together measuring 1.8m in height, or above fences or gates.

The type of razor wire used in Qalqilya consists of a central core of high tensile strength galvanised wire with steel tape punched in to shapes, creating short barbs with razor edges. The two are cold crimped tightly together. The wire comes in coils which can be separated and attached to fences, or left on the ground as a trespassing deterrent.

Palestine Primer. Wall: Separation Barrier

Although there are sites available to build in the developed areas of Qalqilya, it is on prime agricultural land and therefore, the expansion of buildings on to this land could jeopardise the growing of crops.

Although the west part of the wall was built along the agreed 1967 green line, there is plenty of Palestinian land in the North and South of Qalqilya which has been cut off by the wall and has either been confiscated by the Israeli Government or is only accessible to the Farmers of Qalqilya (who are unable to hire any help) for limited periods of the day.

Transportation is another major concern, as Palestinians can only access Israel if they have the correct permits, which in some cases can be up to 6 separate documents.

Following the construction of the wall, many Palestinians lost their jobs in Israel.

Palestinian construction companies operating in the West Bank have either had to use Palestinian resources or apply for the necessary permits in order to obtain equipment or supplies from Israel.

Another concern is the transportation of goods in to Qalqilya, with only one checkpoint from the West Bank queues can be huge, with very lengthy waits and possible refusal of entry.
On 19th September 2004, Israeli soldiers decided to detain every man named Mohammad. This type of erratic decision making makes life very difficult and unpredictable for Palestinians to plan a daily routine.

There is also potential for random Military road blocks, or ‘flying checkpoints’ which are military checkpoints which pop up in places which are not agreed checkpoints. This can delay journeys massively or the drivers can be sent home. Weizman, 2007 pg.146-147

Machsom (checkpoint) watch – women against occupation and for human rights, is a Female run organisation who monitors checkpoints in Palestine. I spent a day with the women driving to various checkpoints around Qalqilya and the surrounding towns. There were numerous disagreements and conversations with Israeli soldiers including concerns of blockades in the road which meant that one major route in to Qalqilia town was inaccessible. The women record every event they experience and upload the information on to their website daily. Entries include:

**Qalqiliya (Eliyahu Passage)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>07:00 – 07:40</td>
<td>The pace of inspections is very slow today. When we arrive number 115 is next in line. In other days number 150-200 reaches its turn at this hour. The inspections started at 05:00 and the total number of workers each day is 250-300, which means that the last workers will pass after 09:00, meaning also that they will lose a workday. We talk to a woman officer of the Military Police and to the checkpoint commander, a Border Police man. We ask them to open another inspection post (as was done in the past), but to no avail.</td>
</tr>
</tbody>
</table>

**Anabta, Ar-Ras, Jubara (Kafriat), Qalqiliya, Wed 24.9.08, Morning**
Figure 6. Disruption to Farmers

As well as children and workers, farmers have been mainly affected by the wall construction. The maps show the increase in Farming prices which includes the rise in the cost of fertiliser, insecticide, maintenance equipment and the price of water has also increased for farmers. Sorkin (2005) pg.108

Due to some Palestinian farms being on the Israeli side of the wall, there is potential for settlement expansion and disruption of existing crops. If the farmers are not allowed to cross the border, their crops are left unattended and result in potential damage of the whole harvest. This is particularly problematic during the olive picking times when timings are crucial. If a farmer is not in good health, or cannot work on the farmland, the land is neglected due to the complexities of gaining permits for a family member or friend to assist with the harvest. (Keating, Washington Report on Middle Eastern affairs October 2004 p 48-49)
Figure 7. Disruption that has resulted from the lack of water

The scarcity of water

There are eight ground water basins in Palestine and Israel

There are three main water aquifer basins in The West Bank, supplying the whole of the Palestinian Territories and Israel. Water, however, is in the control of the Israeli Government. Western, Eastern and Northern Aquifers are situated in the West Bank. The Coastal Aquifer Basin is located in The Gaza Strip.

There are 325 Wells in West Bank producing 65.46 Mcm/Yr. In Israel there are 38 Wells producing 56.9 Mcm/Yr. (Palestinian Hydrology Group, 2010)

The Palestinians face many challenges with the sustainable development of water solutions within the West Bank. Israeli Settlers have been reported to pollute the Aquifers; there is poor sanitation service and over application of fertilisers and insecticides within the agricultural sector. There is a massive lack of wastewater treatment in the area, resulting in years of neglect. The cess pools are inadequate and there is a problem with waste dumping.
According to the centre for economic and social rights, Israel is in control of 100% of the water that is produced from the Jordon River basin and 80% of underground water resources from the aquifers, which are mainly located in the West Bank. (The right to water in Palestine, a background)

Water tanks are used for the individuals who are completely without water, however, the cost of these are around 3-4 times the price of a normal water tank. Often there are delays at the check points for transport delivering the water, thus leading to an increase in price. Palestinians are unable to source their water naturally due to a ban of drilling for water, which has an enormous impact on farmers who are also required to gain permits for using Palestinian wells. (McCallin, 28\textsuperscript{th} October 2002)

In Israel, it became the law that every household should have two photovoltaic panels and a water heater on their roof. The same law applied in Palestine, although now it is essential for Palestinians to have another method of water collection due to the lack of water supplied to them by the Israeli Government.

There is also a growing problem with flooding in Qalqilya; this is a common issue with agricultural land which is separated by the wall. Heavy rain is common in Qalqilya, especially between November and March. During the heavy rainfall periods, the farmer’s crops, greenhouses and infrastructure can be seriously damaged or destroyed. With the water being unable to flow as it has been, the wall acts as a barrier against drainage. There are flood hatches inbuilt in to the concrete walls, but they are not always open to allow water to escape.

(Atef Saad, 2005)

\textbf{Figure 8.} The flood barrier within the wall: The Author
The wall construction has also had a huge impact on water distribution in Qalqilia. The existing wells were metered and usage quotas have been set.

The positioning of the wall has been carefully constructed to not only annex land, but also the existing wells in order to divert the water to the illegal settlements. Palestine Primer: Water, Road and the land

**Figure 9.** Settler’s temporary homes: The Author

**Figure 10.** Developed settlers town: The Author
**Jewish Settlements of the west bank**

One of the main problems surrounding Qalqilya is the expansion of Jewish settlements. With little control of the land on the Israeli side of the wall, there is a lot of apprehension surrounding their farms. Wiezman, (2007) pg.1

There are approximately 267,000 Jewish settlers within the West Bank.

After the signing of the first Oslo accord in 1993, which was intended to be the beginning of the end of the Palestinian/Israeli conflict. It became very difficult for Israelis to gain permits to build on Palestinian land. Weizman, (2007) pg.1

The creation and expansion of Israeli settlements is subtle, Eyal Wiezman describes a particular series of events that resulted in an established settlement. A group of Israeli settlers complained that there was no mobile reception on a particular bend between Jerusalem and their settlement. Orange, the mobile phone provider agreed to erect a new mobile phone mast that overlooked the bend on the top of a hill.

Although the land that the phone mast was being erected on was owned by Palestinian farmers, it was thought that not having reception in this area was a security issue, so the mast was erected.

Electricity and water supplies were added to the site and eventually, a security guard was moved on to the site to keep an eye on it. The guard moved in to a cabin, which connects to the water and electrical supply. Eventually, his family also moved in to the cabin.

A year later, more families moved on to the site and the area became the outpost of Migron. Donations from abroad and the Israeli ministry for construction helped to build synagogues and nurseries. Ariel, which is the biggest settlement, is built on illegally confiscated Palestinian land. The town consists of around 18,000 Israelis with schools, universities, shopping complexes etc. Wiezman, (2007) pg.2

Hill tops are the favoured places for Israeli Settlements as a way of protection and being able to see on coming trouble. Alternatively, the settlers surround Palestinian villages, so the expansion of their village is impossible. As you can see from the images, a settlement may start with a few static homes and increase to dozens, even hundreds. Gradually, more permanent structures are built with electricity and water connections and then a more established infrastructure is put in place. Some Settlements have their own schools, Universities and shopping centres. Palestinian Primer: Hilltops

Israeli settlers continue to occupy Palestinian land and although there was a short freeze on settlement development, this was lifted and construction continued. Qalqilya will continue to struggle with little support from outside as the discussions continue to create a two state system for Israel and Palestine. Politically, the Israel / Palestinian conflict is a mind field, but geographically, it is even more bewildering and complex.
Biography of Author

Rosie Elvin is a Lecturer and Researcher at the School of Architecture at The University of Lincoln. Year 1 Coordinator (BA) hons Interior Architecture and Design, and (BA) hons Design for Exhibitions and Museums. Studio Tutor for all levels of (BA) hons Interior Architecture and Design, dissertation supervisor, Lecturer in history and Theory and studio tutor in Architecture

Experienced architectural and Interior designer, working in London, Ireland and Lincoln since 2000. Academic interests include The Palestinian Territories and the structures of the occupation, Utopian and Dystopian Theories, gated communities and Slum dwellings in developing countries.
Bibliography

Delegation Trip: Qalqilia strangled by Israel’s wall
Michael J Keating

Ground Water resources in West Bank and The Gaza Strip
Palestinian Environmental Non-Governmental Network “PENGON”
Saleh Rabi
Location: www.rightsresearch.org

Israel’s Security Fence, Ministry of Defence
Location:


McCallin, Jessica, Israel bans new West Bank Wells (28th October 2002)
Sunday Herald

Monitoring Israeli Colonisation Activities In The Palestinian Territories
Applied Research Institute – Jerusalem
Location: http://www.poica.org/index.php

Oxfam: Harvesting prosperity in the West Bank
http://www.oxfam.org.uk/oxfam_in_action/where_we_work/opt/gaza-olive-harvest-slideshow.html

Palestine Primer
Location : http://www.palestine-primer.com/Palestine_Primer/Homepage.html

Palestinian Non Government Network
Location: http://www.pengon.org/


Saad, Atef, 2005
Separation Wall: A water and drainage disaster
Location: http://www.vtjp.org/background/wallreport7.htm


Stop the wall campaign
Location: http://www.stopthewall.org/

The right to water in Palestine: A background
Centre for economic and Social rights
Location : http://www.cesr.org/
UN Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) (2003) The impact of the first phase of security barrier on UNRWA-registered refugees

Unicef
Location: http://www.unicef.org/infobycountry/oPt.html


Water in the West Bank and Gaza. Palestinian Hydrology Group

Women against the occupation and for Human Rights
(Daily reports from Israeli checkpoints)
Location: http://www.machsomwatch.org/en