Architecture and Time

Visual Essay by Hugo James Hickey

Since pre-historic times, architecture has been at the very core of how civilization treats, records and manages time. The constructed element of architecture outlasts generations, empires and even entire peoples.

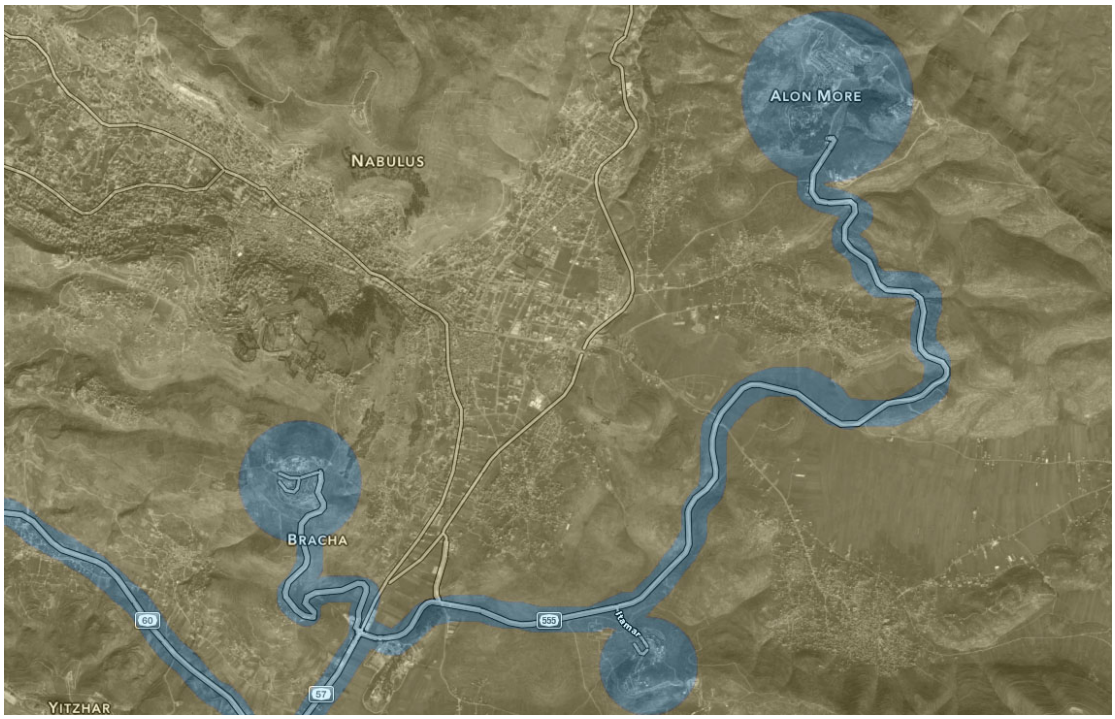
When we imagine architecture and its relationship with time, we invariably think of the effect of time on architecture. However, we rarely investigate the converse: how architecture can affect time. When analyzing the effects of time on architecture, we look to examples of architecture that have stood the test of time, often tend to be on a large scale, and are generally of urban and/or military construction. The effect of time on this architecture is closely researched in archaeology and recorded in history. The impact of architecture on time is a subject less examined. Yet, as we observe how this type of large-scale urban and/or military architecture is now being deployed in parts of the world where it affects time, conflicts and their outcomes, it is becoming more significant.

An analysis of large-scale architectural elements that use "time as considered factor" in the design of the urban landscape.

One of the most extraordinary examples of how large-scale architectural elements are used to impact on time is in the border area between Israel and Palestine. Architectural elements are deployed to impact on time on both macro and micro scales – on the rate at which people can carry out their daily lives. This example is well-chosen because of the contrast it presents. On one side of the border, social and commercial life is facilitated by architectural elements that reduce delays, that enhance communication and that generally make life easier for its inhabitants, maximizing their productivity and benefitting their way of life. On the other side of the border, movement is thwarted by architectural elements designed to impede, to slow down, to decelerate productivity and make free movement more difficult.

When we imagine this border between Israel and Palestine, we imagine a single instrument, a wall or fence, separating two peoples on two sides of a map. But in fact the architectural elements of control are far more complex than that. It is a perfect example of military-inspired modern master planning. In order to impose control on the land, planners with large input from the Israeli Defence Forces (IDF) create differentiation in speed of movement and in turn, control time. Highways are placed between Israeli hilltop settlements, increasing speed, and reducing time between them. However, the Palestinian valleys are surrounded by queues at checkpoints, layers of gates, twists and turns, designed to limit risk and imbue authority over time.

I believe the best way to analyse large elements of urban planning is from above so I intend to use satellite imagery and graphics with the help of photography to examine and reveal architectural incursions which contribute to the control of speed and time experienced by the inhabitants.



With good, modern infrastructure the life-blood of economic prosperity, the deliberate construction of an infrastructure that sets limits - with intended consequences on time – has resulted in daily life seeming to have taken a step back in time. Life is no longer lived in the modern fast lane, but is constrained by austerity. There are many studies that focus on the impact of certain types of infrastructure on individuals' time use. Analysis shows that the more time a person spends carrying out the basic tasks of everyday life, the less time is available for leisure. Inadequacies in infrastructure are quickly felt: power outages, lack of water, decrepit roads. These slow down all types of economic endeavor, even the most basic.

The following are just a few of the architectural devices that employ time as a considered factor in their design.

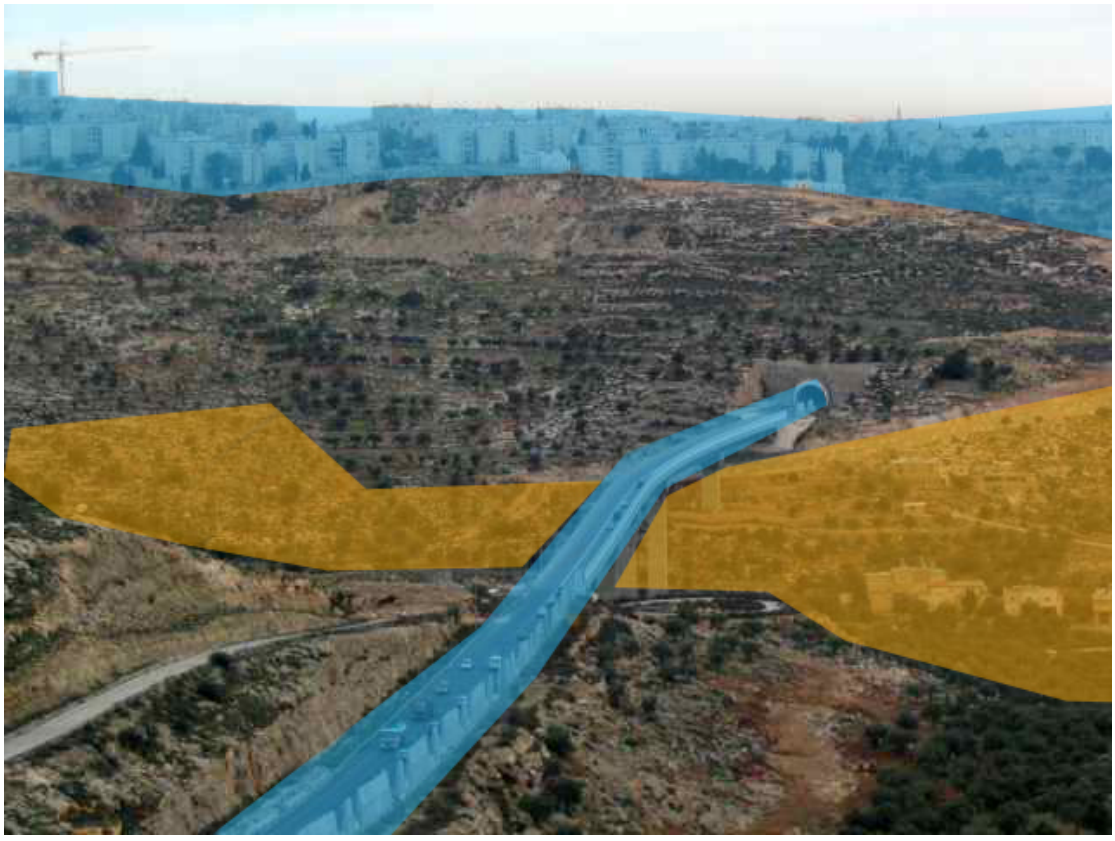
Built Element 1 – Hilltops and Valleys

In many of the aerial photographs taken over thresholds or borders between Palestinian lands and Israeli settlements, the general aesthetic resembles that of a keep and bailey. The Israeli settlements are built on hilltops, overlooking the Palestinians in the valleys between them, the main reason for this being self-protection and to dominate the surroundings. To obtain justification for expansion up to these lands, the Israeli government would have to convince the high court that the settlement was designed to meet "pressing security needs", an argument easily made for areas of high ground. These sporadic settlements are part of a greater defence plan utilizing "defence in depth" as a military strategy.[1] They are crucial nodes in the Israeli settlement network which

1 Weizman, Eyal. *Hollow Land: Israel's Architecture of Occupation*. London, UK: Verso, 2007.

surrounds entire Palestinian valleys. These valleys become effectively and sometimes literally walled-in, disconnecting them from other Palestinian lands. The Israeli settlement network seems to create Palestinian islands, slowing down trade, migration and everyday tasks.

Built Element 2 – Highways



"To control a space you need to create differentiation in speed of movement" according to Israeli Architect Eyal Weizman, in his documentary "The Architecture of Violence"[2]. He talks about how the construction of highways between these hilltop settlements creates acceleration in the space between (the valleys). However, these highways are not for Palestinian use. The improved connectivity and linkages between Israeli lands contrasts harshly with the limits on movement in the Palestinian valleys. Delays and unpredictably of access are common at checkpoints. They translate to economic and social handicaps, which are not experienced by Israelis at the same crossings. Article X of the Gaza-Jericho agreement states that Israelis are to be processed separately to

2 "Rebel Architecture – The Architecture of Violence." AlJazeera. September 2nd 2014, http://www.aljazeera.com/programmes/rebelarchitecture/2014/06/architecture-violence-201462911355664774 4.html.

Palestinians[3]. The acceleration that comes with Israeli highways cannot be seen in the valleys they cross over. A badly maintained road infrastructure slows traffic and a lack of ring-roads or bypasses decelerate traffic at the urban centres. The importing of building materials to improve road networks and similar is severely hindered by limits on the crossing of construction materials and goods into Palestinian land, mainly for security reasons. The time taken to carry out such acts is often seen as time wasted.

The necessity to get from 'A' to 'B' quickly in Israel is not limited to civilian highways. In 2002, Prime Minister of Israel, Ariel Sharon, ordered the occupation of the entire West Bank. Israeli forces encountered heavy resistance in the urban centres and so the IDF employed the use of armoured bulldozers to literally cut straight roads through to the centre of the dense Palestinian valley settlements. These roads were an extension of the encircling Israeli highways, slicing through to the centre of the valley providing a highway for Israeli forces[4]. This is one example of how the IDF considered quick city planning as a solution to their problem. In reality, the violence of the architecture is far slower and on a much larger scale.

3 Egypt. Cairo. Annex I, *Gaza-Jericho Agreement*. 1994. Protocol Concerning Withdrawal of Israeli Military Forces and Security Arrangements.

4 Harney MacDonald, Theodore. *The Global Human Right to Health*. Oxon, UK: Radcliffe Publishing Ltd, 2007.

Built element 3 – Checkpoints

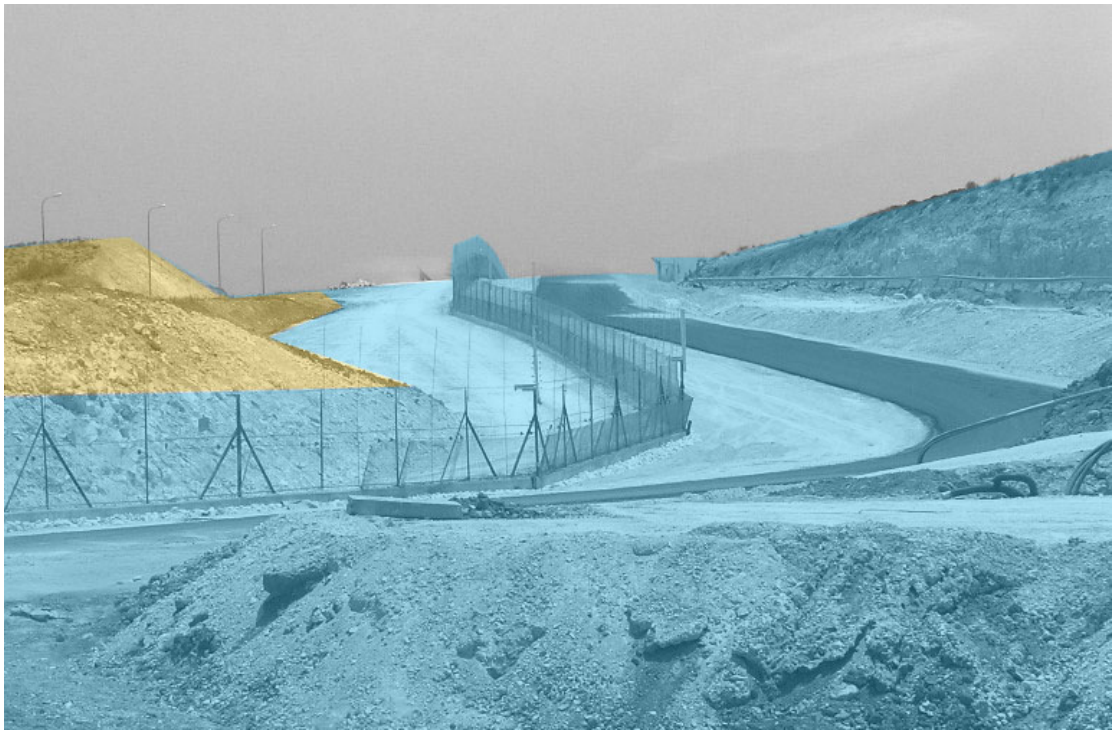
Classic examples of how architectural border devices shrink and expand the territory at will are checkpoints. These security measures create bottlenecks to improve the efficiency of processing. Checkpoints are the sole means of entering and exiting most if not all of the Palestinian territories. They are entirely controlled by Israel. When conflict erupts these checkpoints slow and then close down movement of Palestinians in and out of the localized area. Time is brought to a standstill within the conflict zone or valley, allowing time for the IDF to mobilise and enter into the valley from the civilian settlements above. The role of the checkpoint is on a smaller scale than many of the other architectural elements which define the borders, however it is often in closest contact with inhabitants. In the book "The Psychology of Peacekeeping", the existence of the checkpoint is described as often being the trigger for violence in an area, especially if the mission area of said checkpoint is tense. Checkpoints are also commonly seen as the most vulnerable physical manifestations of the occupying force, particularly if they

are populated with border guards[5]. As a result, there are a series of tactics implemented at these crossings designed to slow movement, maximize observation and limit risk. With considerable numbers of people needing to use these facilities daily, crowds develop and delays become a norm.

By maintaining an extremely high level of observation on border areas, the IDF can guarantee that the only crossings onto Israeli roads can be made at these checkpoints. Therefore, Israelis are not subject to checks at every settlement because of risks associated with Palestinians entering the highways or sterile areas, which are closely monitored by cameras and towers. Despite the obviously psychological effects these checkpoints have on the people using and operating them, they greatly influence the difference in time it takes for Israelis and Palestinians to cover the same amount of ground.

5 J. Langholtz, Harvey. *The Psycology of Peacekeeping*. Westport CT, USA: Praeger Publishers, 1998.

Built Element 4 – Walls and Fences

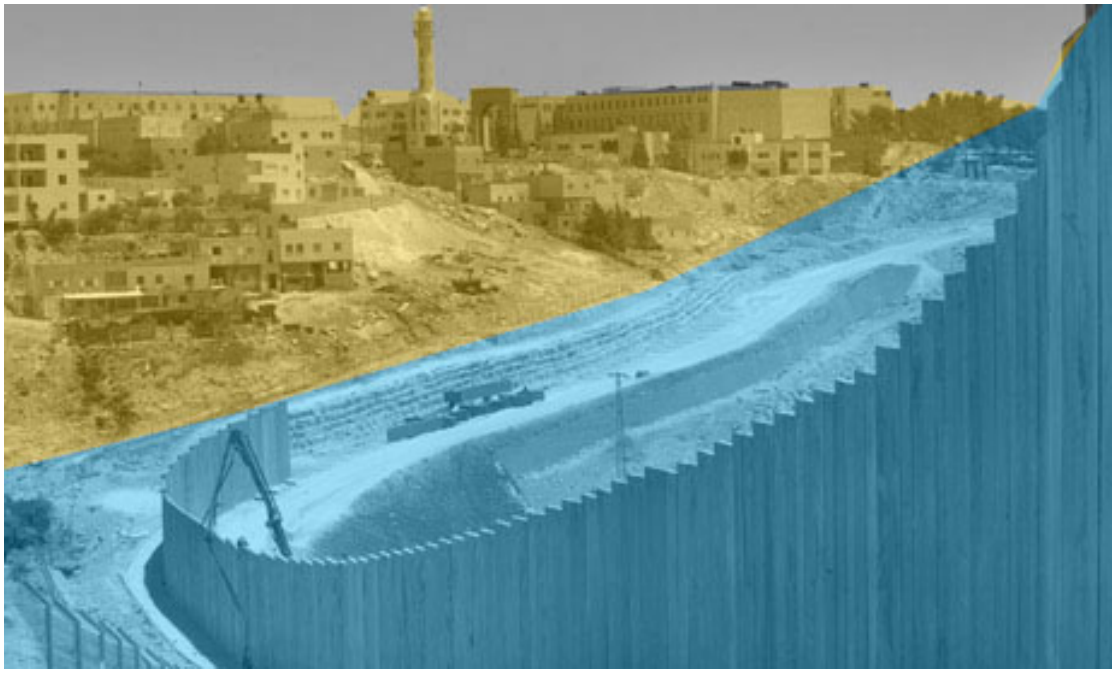


Weizman described the border in his book "Hollow Land" as follows; "Rather than a line of straight demarcation, the wall is more redolent of Scandinavian coastlines, where fjords, islands and lakes make an inconclusive separation between water and land".[6] He goes on to describe a "one-way hierarchy of vision" in relation to the border devices. Cameras are mounted on the walls in certain places, and observation towers designed to hide soldiers in others. The wall curves, starts, stops, transforms into checkpoints, or sterile areas or a series of fences.

There are many "layers" to the wall itself, although they are present in different combinations. If travelling towards Israel there is first a 6-foot high barbed wire fence made of triangular sections of wire. Then there is a large ditch, followed by a dirt road for military vehicles. After that comes the main wall or fence. The wall can reach up to 8

6 Weizman, Eyal. *Hollow Land: Israel's Architecture of Occupation*. London, UK: Verso, 2007.

metres high and the fences have advanced electronic sensors. Then comes a paved patrol road, with zones of fine sand on either side. These areas record the footprints of any intruder. After that can be further barbed wire and fences. All of this is overlooked by modern surveillance cameras harnessing the latest thermal and night vision technologies.[7]

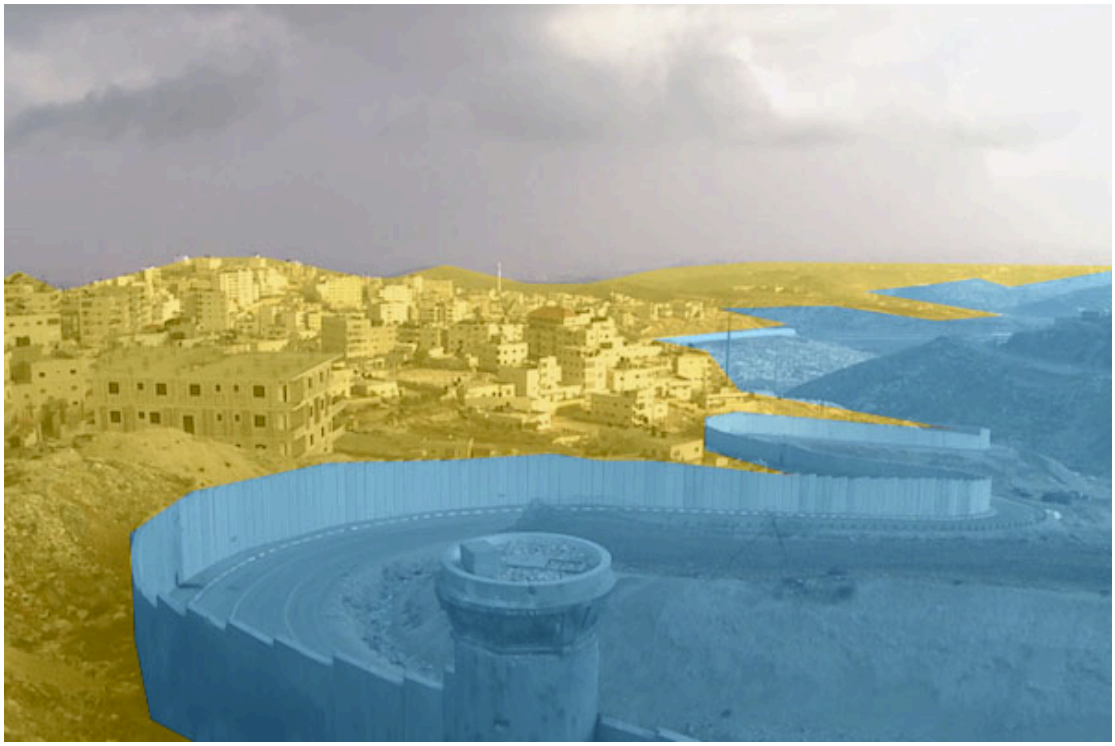


The "Separation Wall" does not resemble the traditional conceptual simplicity and material fixity as the common wall it may be imagined as. It has permeable elements, transparent mediums, and constantly changing size and shape. The irregular nature of the wall transforms the built environment into a flexible "frontier zone"; temporary, contingent and never complete despite its sophistication. This flexibility is a direct result of how time is used as a considered factor in the design of these border devices. Everything along the border appears almost temporary at first. Many of the incursions into the Palestinian landscape, such as the land that the hilltop settlements are built on, could only be condoned by the Israeli high court on the condition that they were in fact temporary, however the current reality is very different. It is the belief of most that these

7 "Israel Security Fence – Ministry of Defence." The State of Israel. January 31st 2007, http://www.securityfence.mod.gov.il/Pages/ENG/operational.htm

elements are to be permanent if not expanded, and in recent years the number of checkpoints has actually fallen(by about 75% between 2008 and 2010 alone), further squeezing the bottleneck of travellers at the remaining crossings.

The area between the Green Line (often referred to as the pre-1967 border) and the barrier - about 9.5% of the West Bank - is known as the "seam zone" and has been a closed military area since 2003, functionally detaching it from the West Bank and annexing it to Israel. Israeli officials insist that this wall is essential to preserve and defend Israeli security. In 2004, the case of the wall was taken before the International Court of Justice for an advisory opinion. The ICJ ruled that the wall is "disproportionate" and therefore constitutes a violation of international law.[8]



8 "Green Line (Israel) – Wikipedia" Wikipedia. October 22nd 2014, http://en.wikipedia.org/wiki/Green_Line_(Israel)

All of these elements, which come together to form a sort of architectural net or mesh over the landscape are carefully considered devices of occupation and defence which form the built environment of the settlement and border areas. Over time, they have undoubtedly had great psychological and physical effects on both the people and the geography of the area. The vast majority of the changes to the Israeli and Palestinian lands in recent years have been construction and demolition on the part of Israel. At the centre of Israeli decision making when it came to master planning was the Operational Theory Research Institute (OTRI).

The Israeli army's OTRI is where academically trained soldiers and civilians study such radical thinkers as Georges Bataille, Gilles Deleuze and Felix Guattari in the interests of rethinking urban military operations. The architects they study range from members of the Situationist International movement such as Guy Debord to architectural theorists like Bernard Tschumi. They analyse the theories of dérive and détournement in order to "think outside the box" when it comes to deconstructing the urban environment.

Shimon Naveh, a retired Brigadier General in the Israeli army, was the director of the OTRI. He once said:

"The ideas of disjunction (embodied in Tschumi's book Architecture and Disjunction) became relevant for us … Tschumi had another approach to epistemology – he wanted to break with single perspective knowledge and centralised thinking. He saw the world through a variety of different social practices, from a constantly shifting point-of-view he created a new grammar - he formed the ideas which compose our thinking. Our generals are architects… Tschumi conceptualised the relation between action, space and its representation. The Manhattan Transcripts gave us the tools to draw operational plans in a different manner than drawing simple lines on maps. He provided the useful notations to plan an operation." [9]

In the border areas and much of the West Bank, it is clear that the "single perspective" and "centralised thinking" of urban planning have indeed been reinvented. Architecture, or built elements, determine the movement of people and goods. For the Israeli settlers and the infrastructural master plan has focused on connectivity and underpinning economic activity. In contrast, in the West Bank movements of people and goods are strictly conditioned and governed by architectural elements that seek to arrest and impede. These are separation barriers, checkpoints that hinder, imposed limits on the natural extension of villages and segregated transport infrastructures. This type of infrastructure results in "time poverty", where the time burden to undertake even the simplest of daily tasks like getting to work, taking children to school, the health centre, or going to buy food is heavily time-consuming.

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9 *First name and last author First name Last name. "Conference lectured at the symposium "Arxipelago of Exception. Sovereignties of extraterritoriality" CCCB 10-11 November 2005*

Notes/Bibliography:

1. Weizman, Eyal. *Hollow Land: Israel's Architecture of Occupation*. London, UK: Verso, 2007.

2. "Rebel Architecture – The Architecture of Violence." AlJazeera. September 2nd 2014, http://www.aljazeera.com/programmes/rebelarchitecture/2014/06/architecture-violence-201462911355664774 4.html.

3. Egypt. Cairo. Annex I, *Gaza-Jericho Agreement*. 1994. Protocol Concerning Withdrawal of Israeli Military Forces and Security Arrangements.

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5. J. Langholtz, Harvey. *The Psycology of Peacekeeping*. Westport CT, USA: Praeger Publishers, 1998.

6. Weizman, Eyal. *Hollow Land: Israel's Architecture of Occupation*. London, UK: Verso, 2007. [Used Twice]

7. "Israel Security Fence – Ministry of Defence." The State of Israel. January 31st 2007, http://www.securityfence.mod.gov.il/Pages/ENG/operational.htm

8. "Green Line (Israel) – Wikipedia" Wikipedia. October 22nd 2014, http://en.wikipedia.org/wiki/Green_Line_(Israel)

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