Boycott Toolkit:
Collaborative Research for Collective Economic Action

by

Joshua Sable Levinger

BS, Aeronautics and Astronautics
Massachusetts Institute of Technology
Cambridge, MA
2007

Submitted to the Program in Media Arts and Science, School of Architecture and Planning, in partial fulfillment of the requirements for the degree of Master of Science in Media Arts and Sciences at the Massachusetts Institute of Technology September, 2010

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Abstract

Many modern social movements advocate boycotts as a mechanism to pursue social change. However, these campaigns are often broad in scope and limited to committed activists as potential adherents. This thesis describes a web-based platform to organize highly targeted boycotts, perform collaborative research, and disseminate information through social networks. The approach differs from current boycott lists by allowing for community contributed content and by linking specific geographic contexts with potential individual actions.

To better understand the needs of a real-world boycott campaign, the author traveled to Israel and the West Bank to meet with human rights advocates, international aid workers, journalists and activists. This field work suggested an appropriate structure in which a better boycott could be developed. After fully developing a tool that addressed these needs and constraints, the tool was broadened to demonstrate wider applications.

The Boycott Toolkit was deployed to an international network of activists with seven campaigns that follow several major ongoing boycotts of today. These focused on a diverse set of issues: immigrant rights, environmental justice, marriage equality, reactionary media, and the ongoing Israel-Palestine conflict. The project was released to media attention, and a user survey indicated an appreciation for the careful differentiation between targets, revealing an enthusiastic, though small, set of active contributors.

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Boycott Toolkit:
Collaborative Research for Collective Economic Action

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My moms and sister
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Introduction

I was brought up in a religiously conservative but politically liberal Jewish community. While I was interested in politics, I didn’t consider myself an activist. Like most Americans, I was aware of the ongoing Israeli-Palestinian conflict and lamented the inability of both sides to reach a conclusion through the “peace process.” I thought the two sides were equal participants in ongoing negotiations, but that an agreement that satisfied both parties simply had yet to be reached. A trip to Israel and the occupied West Bank challenged that preconception and redirected my career path forever.

In 2007, I signed up for a free trip to Israel sponsored by Taglit-Birthright. A joint project of the Israeli government and Zionist donors, the aim of the trip is to engage young Jews from the worldwide diaspora with their “homeland” in Israel. The trip aims to “to diminish the growing division between Israel and Jewish communities around the world.” With a group of twenty other American Jews, I went to Israel for the first time and attempted to connect with my cultural and religious heritage. We met soldiers, visited Yad Vashem and the military cemetery at Mount Herzl, stood at the Wailing Wall and cried for the thousands of years and millions of Jews who never prayed at the last remnants of the Temple. We climbed Masada at dawn and surveyed the beautiful land that was once promised to our people and was now ours. We did these things and more, and they meant something to me. I tear up even now, as the emotions I felt come back to me. I was not ungrateful for the experience.


However, while walking through the Old City of Jerusalem or driving along highways to the Dead Sea, I could see physical manifestations of the conflict. From a vantage point atop the ancient stone walls, a new concrete wall can be seen snaking across the landscape. Two of my traveling companions, friends from high school, wanted to see the Palestinian side and urged me to go with them. Our bus was protected by an armed guard at all times, and he warned us sternly not to venture into “enemy territory.” Danger waited there, kidnapping or lynching was possible, hatred and discrimination were a certainty. He could not have been more wrong.

After the planned activities of the trip were over, we were released from the protection of the tour guides and guards. We returned to Jerusalem and took Arab bus to the Bethlehem checkpoint. One of the largest gates in the Separation Barrier, the checkpoint is reminiscent of airport security immediately after September 11, only more stringent, more dehumanizing, and with an unconcealed acceptance of racial profiling. The forty foot concrete structure rises over a neighborhood, with the only approach through a wire corridor. The traveler first goes through a metal detector and their possessions are scanned. Identification documents are checked at a second station by young women with alternately bored and aggressive demeanors. Instructions are shouted in Hebrew through a crackling intercom system. Palestinians are required to show two forms of identification: a green card from the Palestinian Authority, and a blue card from the Israeli Ministry of the Interior to gain entry into Jerusalem. The blue

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3 Separate public transit systems serve Jewish and Palestinian areas. While there is not explicit segregation, there is little intermingling between the ridership.

4 The wall is called different names depending on the speaker’s political perspective. The Israeli Ministry of the Interior, who built the wall, calls it a “Security Fence.” Many activists and Palestinians call it an “Apartheid Wall.” I will stick with the preferred by the BBC, “Separation Barrier”, which is both accurate and neutral.
cards are restricted to residents of East Jerusalem, difficult to get, and can be
confiscated by soldiers at any time.\(^5\)

As we approached the identity check, a loud siren went off. The soldiers stopped
processing papers, reached under their desks and pulled on large padded vests. My
companions and I tensed, fearing an explosion was imminent, but the Palestinians
waiting in line didn’t seem to react. After a minute of alarm, the sound ceased and the
line began to move again.

At the identity check, I opened my passport and placed it on the glass. Putting
my hand to a biometric scanner, I was curious to see how it would sense the vein
pattern. The young female guard gave me a withering look, as if it should be clear that I
wasn’t subject to the same rules as everyone else in line. After waving me along
dismissively, she went back to chatting with the strapping young soldier who sat
slouched in her booth, feet up on the desk, an automatic rifle slung across his lap. I
collected my belongings, passed through a final turnstile and emerged on the other
side. As an American, my foreign passport allowed me to pass without a second glance.
This sort of racial profiling may be effective, but it made my stomach churn.

Leaving the checkpoint, we entered a different world. While the Jerusalem side
has a proper bus turnaround, in Bethlehem the road dead-ends into the wall where a
throng of taxi drivers stand waiting for business. We were approached by a man with a
yellow Mercedes, a baseball cap, and large weary eyes. We paid him a small amount to
take us to the religious sites, pretending to be pilgrims to the fields where Jesus was

http://euobserver.com/9/27736
born. Communicated through his broken English and our minimal Arabic, we learned about the town, its millennia of history, and how it had changed since the wall was built. We passed numerous shuttered stores once crowded with pilgrims when tourism was more frequent. At the insistence of the driver, we were taken to a souvenir market that opened just for us. As the business owner turned on the lights, the flickering illumination revealed rows of dusty shelves filled with olive wood figurines, pottery, and Christian icons. I bought ornaments I didn't need to show my gratitude.

We only spent a few hours in Bethlehem that first time, and were relieved when we crossed the checkpoint back to Jerusalem. We would never see the city the same way again, knowing that an entirely different world lay on the other side of the wall. I have since returned to Bethlehem many times on subsequent trips to Israel and the West Bank. Crossing checkpoints still gives me the sense that I am in a land divided against itself, and that injustice is being done in my name.

On my return to the United States and my enrollment in the Media Lab, I knew I had to use the academic resources at my disposal to bring attention to the situation I had seen. The Computing Culture research group allows students pursue technical projects that stem from personal experiences, and I took advantage of that freedom to explore several approaches to bring the feelings and knowledge I gained through my travel to Israel and Palestine to a wider audience. In this thesis, I will describe two projects that aim to inform users about the some of the realities of the situation on the ground, and provide an avenue for the possibility of political action.
Introduction

A traveler to Israel who relies on official information systems will remain uninformed of the true depths of the security apparatus. Airport security at the Ben Gurion International Airport is strict: the guards ask direct and sometimes personal questions. But this is not much worse than it was in America after September 11th, and perhaps is to be expected in a country that feels a constant terrorist threat. Readers of an official tourist map are shown a country that is uninterrupted from the Mediterranean to the Dead Sea, with modern roads connecting new Israeli cities to Tel Aviv, without mentioning that Palestinians are forbidden from using these roads built for Israeli settlers. Major Palestinian cities are listed with Hebraicized names, while others are omitted entirely, and the entire West Bank is referred to as Judea and Samaria. Hertz provides their customers with a map that shows no distinction between Israeli and Palestinian areas and renders all of Gaza, a city of 1.5 million, as blank.

A search on Google for directions between Ramallah and Bethlehem, two major Palestinian towns on opposite sides of Jerusalem, suggests a direct route with a travel

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7 Ramallah, Qalqilyah, Tulkarem and Jenin are omitted. Nablus is listed with the biblical name Shechem. Hebron, Bethlehem and Jericho are listed, as they are all sites of Jewish religious significance.


time of forty-five minutes. It does not note that this road is passable only by Israelis or Palestinian residents of East Jerusalem, and that millions of Palestinians are forbidden from entering the city that is one of their major population centers and has deep religious significance in Islam.

Israeli drivers on Route 1 are stopped briefly at the Hizma checkpoint, a modern facility that resembles a highway tollbooth. This checkpoint is another instrument of the security state that uses other technologies of control to great effect. License plates are used to differentiate drivers by national origin. A car with yellow Israeli license plates, takes only a few seconds to pass through one of the three gates and be smoothly back on the road to Jerusalem. Cars with green Palestinian plates are forbidden from crossing at Hizma, and must take an alternate route through the Wadi el Nar, the Valley of Fire, that can take over two hours. This two-lane road winds circuitously, taking switchbacks that cling to the sides of a canyon without guard rails, lane markers, or any of the safety features of a modern road. The route is entirely to the east of the Green Line\(^9\) but is punctuated by several Israeli military road blocks. All drivers must stop at a chaotic checkpoint that contrasts sharply with the smoothly operating tollbooth at Hizma. At the Container checkpoint, traffic in both directions is funneled towards a single gate on a gravel road. Armed soldiers inspect every passing vehicle, often boarding buses to check passengers identification documents. Long delays are possible and a reason is seldom given. This is the sole north-south road in the West Bank open to Palestinians, and all traffic between major cities across the territory is funneled through a choke point.

\(^9\) The 1949 armistice lines between Israel and Jordan that mark the internationally recognized boundary between Israeli and Palestinian territory.
The system of checkpoints, road closures, surveillance towers, and Jewish-only settlements bisects the landscape and pervades Palestinian life. The policy of national separation extends to communications services, the news media, education, and the online realm. This information asymmetry obscures the reality of the occupation from the world at large, keeping the Palestinian population sequestered behind yet another wall. I will address only one of these systems of control, but their full depth must be understood to develop effective countermeasures.

*VirtualGaza*

In January 2009, after the breakdown of a ceasefire with Hamas, Israel launched a war against the Gaza Strip known as Operation Cast Lead. Frustrated by the news coverage in the United States which seemed to treat the two sides as equal antagonists in an inevitable, unsolvable conflict, I wondered what the war was like for the 1.5 million residents of Gaza. In a collaboration with the Harvard Alliance for Justice in the Middle East, I built a website to aggregate civilian testimony through photographs, video, and narrative text. Because there were very few international journalists in Gaza at the start of the war, and none were allowed in for the duration of the conflict, we set out to enable citizen journalists to tell their own story and break the information blockade. The project grew through a literal social network and we soon received stories from across the Gaza Strip: from men and women, in cities and farmland, from practicing doctors, mothers and students. Their stories were tagged with the location of the author, and the

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main interface to the website was a map that overlaid streets\textsuperscript{11} and a damage analysis by the United Nations\textsuperscript{12} with the contributors’ personal narratives.

Because of my physical distance from the authors and their testimony, I was unable to fully check the veracity of each submission. After I showed the site to my former Hebrew tutor, now a rabbinical student, he commented on one story that he thought seemed exaggerated, and expressed his doubt about the believability of the whole project. He and others whose opinions I respect were concerned that I was being misled by sources on the ground, and potentially “being used as a tool to spread biased propaganda.”\textsuperscript{13} With that advice in mind, I set out to travel again to Israel and Palestine to meet with local experts and learn more firsthand.

\textit{Research Goals}

By traveling to Israel and Palestine for detailed field research, I hoped to gain a deeper understanding of the daily reality of living in the West Bank. Palestinians living under the Israeli occupation are subject to an array of restrictions on their movement, urban growth and livable space. These conditions are well documented separately, but it is hard to get a sense of the full scope of the occupation without seeing it in reality, and being personally subject to the “matrix of control.”\textsuperscript{14}

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\textsuperscript{11} OpenStreetMap WikiProject Gaza. \url{http://wiki.openstreetmap.org/wiki/WikiProject_Palestine_Gaza}

\textsuperscript{12} UNITAR-UNOSAT, 15 January 2009, \url{http://unosat.web.cern.ch/unosat/asp/prod_free.asp?id=120}

\textsuperscript{13} Author email exchange with David Siff, 1 February 2009.

\textsuperscript{14} Jeff Halper. “Dismantling the Matrix of Control.” Middle East Report Online. 11 September 2009. \url{http://merip.org/mero/mero091109.html}
I set out to build a community-driven map of the occupied Palestinian territories that would unite disparate datasets and tell the whole story. Many maps already exist that show individual parts of the situation, including those from the United Nations Office of Coordination of Humanitarian Affairs (UN-OCHA), the Israeli human rights organization B’Tselem, and the Foundation for Middle East Peace. However, all of these maps are static and updated less frequently than the situation changes.

Other projects explore the difficulty of travel in the West Bank from an artist’s perspective, including the work of the Italian agency Multiplicity\(^{15}\) and Palestinian-American Emily Jacir.\(^{16}\) While these cast a powerful critique of the effects of the occupation and work in a gallery setting, they are not of daily use to the Palestinian population.

I set out to create tools and features that would yield a deeper understanding of the situation on the ground, a build a dynamic map that could fuse authoritative data sources and community submissions. I was guided by the user experience presented by other online “slippy maps,” such as Google Maps, Bing Maps, and OpenStreetMap. In these applications, users expect to be able to interact with an online map by zooming, searching, and delving deeper into data, and often have the ability to share and embed the map into other websites. Using the OpenLayers javascript library, I built a map that met these criteria and enabled others to build new functionality by reusing the open source code and open data that underlies the map.

http://www.attitudes.ch/expos/multiplicity/road%20map_gb.htm  
http://www.multiplicity.it

http://www.sfmoma.org/artwork/128708
I intended to extend this work by building further applications that could be useful in Palestinian daily life. Before performing field work, I imagined a system that would forecast wait times at checkpoints, collecting reports submitted by users’ cellphones. I drew inspiration from Machsom Watch, a collective of Israeli women that monitors checkpoints and reports on human rights abuses. I also considered extending the story-mapping system developed for VirtualGaza to a wider application in the West Bank. However, wary of prejudging the problem space and limiting my creative response, I set off on field work to assess the functional needs of Palestinians.

Field Work

Securing Permits

With the help of Nitin Sawhney (Media Lab PhD '03), I attempted to gain entry permits to Gaza through the United Nations Refugee Works Agency (UNRWA). This was ultimately unsuccessful, as we were denied an entry permit to Gaza by the Israeli government, and I redirected my planning to visit the West Bank instead. After securing funding from the Center for Future Civic Media, I learned that any travel to Israel required a waiver of MIT’s travel policy from the Institute administration. This policy forbids travel to areas subject to warnings by the US State Department. Israel and the West Bank have been under a blanket warning since October 2003,17 and while there have been few reported incidents involving Americans in recent years, I required a legal waiver. I met with MIT Chancellor Phillip Clay on May 8, 2009 to discuss my travel

itinerary, local contacts, and safety procedures. I was eventually granted a waiver on June 19, just in time for my departure in early July.

*Interviews*

Upon my arrival in Israel, I set out to learn more about the situation on the ground by interviewing local experts. I conducted 10 interviews, including representatives from Israeli and Palestinian human rights organizations, journalists who cover the conflict from both sides, private companies pursuing local development, and international activists who came to support the Palestinian cause. These interviews gave me often conflicting advice, but provided insight into the diversity of problems and many potential solutions.

At the start of my field work, I assisted briefly with the Voices Beyond Walls youth video project,\(^\text{18}\) conducting a spatial mapping exercise in which children were tasked with showing the adults their favorite parts of the city. They took digital photographs of their waypoints, which we printed out and they pasted on hand drawn maps. The purpose of the exercise was to engage the students with the space they live in, and to get them thinking about the relationship between a physical space and the story that it tells. The resulting maps are a good demonstration of the difference between cartography created by humans and machines. The GPS unit is precise, saving a location every five seconds, but was unable to maintain a signal in the narrow alleys of the Old City. The children's maps are crude, but contain all the necessary information to

After being in the West Bank for less than a week, it was already time for me to show someone else around. I met Di-Ann Eisnor, the originator of the term “neogeography” and the former CEO of Platial, an early user-generated cartography website that aimed to make a “people’s atlas.” We were introduced through a mutual friend who suggested we go on a cross-border mapping excursion. This was an opportunity for her to get out in the field again, and for me to meet someone with deep experience in building social geographic systems. We met on the morning of July 6 by the Jaffa gate to the Old City of Jerusalem. I directed us to a bus from East Jerusalem, through the checkpoint to Shufat refugee camp, which was not currently well-mapped in the OpenStreetMap dataset. Di-Ann noted the jarring distinctions between Jewish West Jerusalem, Arab East Jerusalem, and the camp itself, all within a physical distance of less than 10 miles. The clean streets of West Jerusalem gave way to the dirt of the Palestinian East and the rubble of the refugee camp. The municipal government of

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Jerusalem spends less than 10 percent of its budget on East Jerusalem,\textsuperscript{20} although it contains 35 percent of the population.\textsuperscript{21} Di-Ann later made a map of these discontinuities and presented her findings at a TEDx talk in December 2009.\textsuperscript{22}

To shift directions physically and philosophically, we went to Ein Kerem, a trendy neighborhood on the other side of Jerusalem. Descending into a lush and tranquil valley, we met an artist who was beginning her residence in a former convent turned media center.\textsuperscript{23} She told us some of the history of the area: ‘Ayn Karim\textsuperscript{24} was an Arab village with a population of 3,180 in 1944, and intended to be part of the internationally controlled \textit{Corpus Separatum} in the 1947 UN Partition Plan. Two kilometers north, at the village of Deir Yassin, members of the Jewish Irgun group massacred 107 Palestinian residents on April 4, 1948. The civilian population of ‘Ayn Karim feared another massacre when Israeli forces attacked, and the village was taken with most of its buildings intact.\textsuperscript{25} The village was eventually incorporated into the municipal boundaries of the city of Jerusalem, and became one of it’s “most picturesque neighborhoods.”\textsuperscript{26}

\begin{itemize}
\item \textsuperscript{22} Di-Ann Eisnor. “War, Peace, and Borders.” TEDx Talk. December 12, 2009. \url{http://www.youtube.com/watch?v=TjXSQsZxRys}
\item \textsuperscript{23} Daneila Passal Art and Media Center. \url{http://mamuta.org}
\item \textsuperscript{24} Note the spelling change from Arabic to Hebrew
\item \textsuperscript{25} Walid Khalidi, \textit{All that Remains: The Palestinian Villages Occupied and Depopulated by Israel in 1948}. Beirut: Institute for Palestine Studies. 2006.
\item \textsuperscript{26} Israeli Ministry of Tourism. “Ein Kerem.” Gols Israel. Accessed July 16, 2010. \url{http://www.goisrael.com/Tourism_Eng/Articles/Attractions/Ein+Kerem.htm}
\end{itemize}
Whether or not there was physical violence in this village, people did not leave their houses without coercion. The charming old homes of Ein Kerem were built by the vanished occupants of ‘Ayn Karim. Those families now live in refugee camps like Shufat, far from their old homes. The tragic irony here was overwhelming, and I could not help but bring it up with the artist. She quickly changed the subject.

Di-Ann introduced me to her colleagues at Waze, an Israeli startup that collects “real-time maps and traffic information based on the wisdom of the crowd.”27 Given my interest in developing a checkpoint monitoring system, I thought it could be fertile ground for a technical collaboration. I set up a meeting at their suburban office north of Tel Aviv on July 10. Due to a delay at a checkpoint, I was left without enough time to take public transportation from Jerusalem, so I negotiated for a taxi. The Palestinian driver agreed to take me, on the condition that I navigate, and for an exorbitant price. He was unwilling to ask for directions from Israelis, and we circled the mall a few times before we found the industrial park where the office was located.

Upon entering the office, I felt as if I had been transported to Silicon Valley. Fresh fruit lay in bowls by the conference room; Linux servers churned away in the air conditioning. I met with Amir Shinar, Chief of Research and Development, for perhaps half an hour. He informed me that their mobile tools are open source, and that I could rework them for my own research, but that Waze had no interest in helping a project for Palestinians. He blamed this on market forces, and that as a startup they had little free energy and capital to spare. I noticed tension in his voice, but left without further

discussion. In a later conversation with Di-Ann, she paraphrased that he was upset about a system that would “aid the enemy.” This was of course not my intention, I had merely suggested that we extend the system that can so ably predict traffic backups in Tel Aviv to also handle checkpoint wait times in the West Bank. I was dismayed at his perception that a project purely for improving civilian access would somehow be detrimental to the security of the state of Israel.

With the high-technology community unwilling to assist, I turned to a well-known human rights organization. I met the press officer and mapping coordinator for B’Tselem\(^{28}\) at their Jerusalem office on July 14. Sarit Michaeli shared data from their extensive mapping projects, giving me hundreds of megabytes of ArcGIS files, including the borders of settlements and outposts, the location and operating hours of checkpoints, and the path of the Separation Barrier. She also showed me several gigabytes of recent aerial imagery of settlements, but could not give me a license to redistribute this data. She said that there was an informal sharing of files between people working in the area, but that legally B’Tselem did not own the copyright.

This demonstration gave me insight into the power of overhead photography to document rapidly changing situations on the ground, and the need for it to be in the public domain. Jeffery Warren and I eventually put this conviction into action on a subsequent trip. Jeff is developing ultra-low cost imagery techniques for his thesis on Grassroots Mapping, and in December 2009 we traveled to the West Bank after

\(^{28}\) The Israeli Information Center for Human Rights in the Occupied Territories, [http://www.btselem.org](http://www.btselem.org)
attending a conference in Amman, Jordan.\textsuperscript{29} We visited the Palestinian village of umm-Salamuna, whose farmland is being encroached upon by the Israeli settlement of Efrata. This is legally permissible due to the modern interpretation of an Ottoman-era law that classifies land that is not cultivated for three seasons as belonging to the state.\textsuperscript{30} Palestinian farmers were planting olive trees to establish their claim to the land, and we documented their plantings in case of destruction by settlers or soldiers, a not uncommon occurrence.\textsuperscript{31}

My connection with B’Tselem became quite productive, and I later met with photographer Yoav Gross and geographers Shai Efrati and Simcha Levental. Simcha is an urban planning graduate student at Tufts University, and the feedback he provided at our later meetings in Boston was vital to my understanding of the Israeli public discourse. He told me about his experience as an activist with Breaking the Silence, a group of soldiers that speak out about their service. He emphasized the ability of the government and media to diffuse dissent. Refuseniks, soldiers who refuse to serve in the Occupied Territories, are released for “incompatibility” and no longer called up for service from the reserves, effectively nullifying their protest by stopping it before it starts.\textsuperscript{32} He warned that I would have to work to ensure that my projects were not also compromised.

\texttt{http://civic.mit.edu/blog/warren/grassroots-mapping-in-palestine}


\textsuperscript{31} Makdisi. p 66.

On July 18, I presented my ongoing research to the Decolonizing Architecture collective in Bethlehem, demonstrating a few mapping experiments and gathering critical feedback on my research direction. In the audience was Dunya Alwan, cofounder and director of Birthright Unplugged, an "education and movement-building organization that aims to turn knowledge into action." The organization positions itself as an alternative to the narrative provided by Taglit-Birthright, and trains young activists to return to their home countries and organize for Palestinian causes. I approached Dunya to discuss how to reach out to young people who might not yet consider themselves activists but who, like myself, could be converts to the cause. She criticized this approach, and said that her organization was focused on deepening the resolve of committed activists. I disagree with this decision, and see more potential gains by opening a dialogue with youth across the political divide. However, I respect her assessment that as the leader of a trip that takes participants into Palestinian homes, she could not risk the friction that might arise from these discussions. We parted amicably, and I learned another lesson in the difficulty of working in this fraught political environment.

In addition to meetings with activists, I also connected with the International aid community. Jacob Korenblum, the founder of Souktel, a company that builds an SMS-based aid distribution system, offered technical and logistical support on processing text messages in Arabic. More importantly, his experience with deploying these systems was

instructive in the importance of connecting with extant social networks, and not relying on a purely technical solution. This feedback was critical in redirecting my plans for a tool for the Palestinian community.

In Tel Aviv I met Dan Rothem, chief cartographer for the Center for Middle East Peace,35 which provides data for international negotiators about possible final borders. He suggested aiming my work at the international and American domestic audience, because in his words, “there are traumatized people here on both sides, and neither is thinking rationally.” While there is large public support for the two-state “sketch” in theory, the actual political will needed to evacuate settlements is still lacking.36

Living with the Occupation

Along with expert interviews, I was able to learn about the daily pressures of the occupation simply by living there. I rode the bus from Ramallah to Jerusalem nearly every day, subject to some of the same dehumanizing experience at the Qalandia checkpoint as the Palestinian population. I was never detained, but was corralled in restrictive gates and was scanned like everyone else. During one crossing, an old woman noticed me speaking English and struck up a conversation. When I told her I was an American, she emphasized the importance of bringing the story of her people’s suffering to my country. While we waited in the screening line, she said again and again that we must resist, in our hearts if not with our bodies. It was a jarring experience, to be


harangued by an old woman, told that I bore responsibility for this situation and had an obligation to fix it.

By living under the occupation even for a month, I learned about the coping mechanisms that Palestinians have built over the last forty-three years, and how my preconceived projects were misguided. The status of checkpoints can be easily ascertained by asking taxi drivers, who if they do not know themselves, will call a friend until they determine the current travel restrictions. In addition to the capability of this existing social network to spread information, there is a considerable worry of being tracked by the Israelis, limiting the utility of an SMS platform. This is not an unreasonable fear, given the extensive network of Palestinian informants paid by the Israel Security Agency, known popularly as the Shin Bet. Asking users to submit their location, time of crossing and direction of travel to an untrusted web service, even anonymously, was unlikely to work in practice.

Other tools I had considered, a transit map and bus tracker similar to the NextBus system in the United States, also have functional non-technical systems already in place. While as a tourist, one might not know the detailed routes of the service taxi network, the men who congregate at the bus stations all do, and can assist a traveler who does not have much Arabic language skill. As there isn’t a defined schedule, buses and service taxis simply depart when full, making a full transit tracker not entirely applicable. Aside from tourists, this system would duplicate the already present network with little added functionality.

Deployment

Instead of building a tool for the Palestinian population, which presented challenges I did not feel equipped to tackle, the GroundTruth site\textsuperscript{39} aims to show the full extent of the occupation by presenting a map with layers of information uniquely important to the local geographic context.

The base layer of the map is built on data from OpenStreetMaps\textsuperscript{40} (OSM), contributed by a worldwide community of mappers under an open source license. This data is free in a way that Google and Yahoo maps are not. Both of those services license commercial data that restricts reuse. In addition, maps made with Google’s tools but hosted outside on external websites currently cannot display roads anywhere in Israel. This is due to a licensing agreement with their data provider, Mapa GISrael.\textsuperscript{41} This restriction was unacceptable for the project, and I set out to find a truly free dataset.

Mikel Maron and the OSM humanitarian mapping project had already approached the problem.\textsuperscript{42} The OSM community runs periodic “mapping parties” to train volunteers to contribute to the map, and he brought this technique to the West Bank with Jumpstart International in August 2008. They trained Palestinian mappers, created 2,500 person-days of work, mapped the complete road network and collected 14,000

\textsuperscript{39} GroundTruth. \url{http://groundtruth.media.mit.edu}

\textsuperscript{40} OpenStreetMap. \url{http://www.openstreetmap.org}


\textsuperscript{42} Mikel Maron, “Building Digital Technology for Our Planet.” \url{http://brainoff.com/weblog/}
points of interest inside a 6,000 square kilometer region.\textsuperscript{43} This data was released into the public domain in May 2009, and I merged it with the OSM central database on July 2nd.

With a complete base layer of roads, city names and international borders, I began to search for additional layers that are uniquely important to the context of the occupation. Excellent data on checkpoints and road closures are available from the United Nations Office of Humanitarian Affairs (UN-OCHA), collected by hand and updated every six months. However the resulting map is published in a PDF file which cannot be easily integrated, and the data itself is under copyright. B'Tselem provided me with a similar set of data, although it is not updated with the same regularity. After converting the geographic projection and format, the B'Tselem data was included on the GroundTruth website for public use. This included the footprints of 304 settlements and outposts, the location of 642 military checkpoints, and the path and construction status of the 723 kilometer separation barrier. This marked the first time that this information had been overlaid on a web map, free for reuse.

In January 2009, a comprehensive database of the settlements was leaked by Haaretz, a left-of-center Israeli newspaper. The database was commissioned by IDF General Baruch Spiegel in 2001 to support the legal defense of settlement construction in Israeli court actions brought by Palestinians and human rights organizations.\textsuperscript{44} It includes detailed building plans, noting which were built in accordance with legal

\textsuperscript{43} Jumpstart International. FreeMap West Bank. \url{http://jsintl.org/page/gaza-wb}


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restrictions. The database was translated from Hebrew by the CIA Open Source Center and released by WikiLeaks in May 2009.\textsuperscript{45} I incorporated much of this information in GroundTruth, and also included current and historical population data from the Israeli Central Bureau of Statistics.\textsuperscript{46}

Together these layers begin show a more complete picture of the occupation. Settlements dot the West Bank, checkpoints clog the roads, the separation barrier extends far beyond the Green Line. I made the map searchable so that users can find a settlement or town by its Hebrew or Arabic name or one of its many transliterations. I added a routing tool that takes national restrictions into account, giving correct directions for Palestinian travel throughout the West Bank. Building a prototype with the pgRouting library for the Postgresql database, I was able to produce a demonstration by removing all roads that are closed to Palestinians. However, I did not progress to building a fully functional system, as I was unable to find data on road closures that was sufficiently updated and free for reuse. The UN-OCHA data is encumbered by copyright, and unavailable in a digitally readable format.


\textsuperscript{46} Foundation for Middle East Peace. “Settlements in the West Bank.” \url{http://fmep.org/settlement_info/settlement-info-and-tables/stats-data/settlements-in-the-west-bank-1}

GroundTruth Examples

Barrier and Settlements

Checkpoints

Google Directions, Israeli ID Only

GroundTruth, Palestinian Routing
Evaluation and Future Work

While the GroundTruth site was not subject to a rigorous evaluation, I did receive feedback that shaped my future development efforts. At the J-Street Conference in Washington, DC, I showed the site to Hagit Ofran, the principle geographer for PeaceNow and the original author of the settlement layer that I had been given by B’Tselem. She was generally supportive and in later emails said it was "just what is needed."47 Deema Totah, a Palestinian student at MIT, has used the site to show her American college friends the area around her hometown. The ability to see surrounding settlements, checkpoints, and restricted roads revealed the full context of her home environment in a way that mainstream or generic maps did not.

The principal lesson I learned from the field work was the need to fully understand the current information strategies of a community before building a tool to address problems perceived from the outside. Had I begun to design in Cambridge, without spending time living under the policy of national separation, I might have built redundant infrastructure that would be unusable in Palestine. When I understood the coping systems that already existed, I learned that what was needed was not yet another system to document injustice, but one that could help build pressure for change.

Despite the positive feedback, the projects described so far suffer from a fundamental problem: the user is given information with no clear recourse to action. For my main thesis project, I set out to build something that could engage users to act.

47 Hagit Ofran. Email correspondence with author. 13 December 2009.
Related Work

The potential space of related work for this thesis is large, and some clear boundaries must be drawn. I will begin with a survey of current online advocacy tools, their effectiveness and limitations. I will discuss the collaborative approach of crowdsourcing, its appeal and potential pitfalls. Moving to the specific subject at hand, I will summarize the current state of activism around the Israeli-Palestinian conflict. Because my initial motivation stemmed from a cultural and religious affiliation with Israel, a short summary of Jewish and Israeli human rights advocacy is essential. However the entire history of Palestinian resistance, while interesting, is beyond the scope of this document. Then I will summarize the history of consumer boycotts, with a particular focus on lessons for today. Finally, I will review the founding of the Boycott Divestment and Sanctions (BDS) movement, its recent successes in Europe and the campuses of the United States, and the possible limitations to its widespread success in the American Jewish community.

Online Activism

Since the earliest days of the Internet, users have taken advantage of their ability to address a wide audience. The first instance of bulk email was sent on May 3, 1978, and was met with derision and occasional outrage by its 320 recipients. There were immediate calls from ARPAnet users to limit what was seen as a misuse of the government-provided network. Richard Stallman, then and still a resident of the MIT AI Lab, said that “I doubt that anyone can successfully force a site from outside to impose
censorship." This was the beginning of political speech on the internet, and it has continued ever since.

With the creation of newsgroups and the Usenet system, the network was opened to a wider public and political speech multiplied. In 1994, an infamous user with the handle Serdar Argic posted thousands of messages denying Turkish involvement in the Armenian genocide. The poster would reply to any message that included the word “Turkey,” including those concerning Thanksgiving, lending evidence to the theory that the poster was an automated script. A petition was circulated asking UUNet administrators to cut the offending provider off from the network. This effort was successful, and anatolia.org and the political spammer went silent.

As the use of the Internet has become mainstream, users continue to spread petitions, often without regard to their efficacy. The popular rumor debunking website Snopes has a long article on “slacktivism,” in particular petitions and boycotts that oversimplify a complex issue and convince readers that all they need to do is sign up to change the world. While these “have some small value as a way for signers to work off angst, as instruments of social change [slacktivism] fails miserably.” While e-petitions are a good measure of enthusiasm, without delivery to a clearly defined target who can address the problem, the aggregated actions often don’t lead to real change. Despite

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claiming 87 million signatures on “tens of thousands” of petitions, a leading petition site can point to only two press releases as evidence of successful actions.⁵²

Petition sites can have an impact when they are linked with their target and have a more purposeful design. Online petitions were added to the website of the UK Prime Minister in 2006 with the help of the non-profit mySociety. Drawing upon the rich British tradition of posting petitions to the door of the Prime Minister’s residence, the site built its functionality within the existing web infrastructure, gaining credibility and a user base that approaches 10 percent of UK citizens.⁵³ Every petition that meets their site terms⁵⁴ is hosted, and those that are not accepted are listed with the full text and a note on why the petition was rejected. This transparency increases public trust in the process. Many petitions receive a response from the Prime Minister, and several have been successful at achieving their goal.

Another petition site with a global perspective and a focus on real world action is Avaaz. Founded in 2007, it has grown to over 5 million members from 223 countries.⁵⁵ Petitions are printed out and hand-delivered to their target, and this physical action can have a significant effect on the issue in question. The arrival in the Ugandan parliament of signatures against a pending anti-homosexuality bill contributed to significant

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⁵⁴ The site terms prohibits “party political” speech, commercial interests, and defamation or libel. It calls for petitions, however radical, to be polite.

limitations in the final version.\textsuperscript{56} Avaaz has also impacted debate in the United Nations on listing elephants as an endangered species, and organized members in Brazil to call President Lula to reverse a law that would give stewardship of much of the Amazon to agribusiness. This international scope and tangible impact is a result of the extensive research that underlies each of Avaaz’s campaigns.

In addition to petitions, activists have turned to blogs as a method of disseminating information, building readership networks and soliciting comments. The rise of bloggers has begun to level the playing field between the “mainstream media” and citizen journalists and significantly changed political campaign strategies. Two prominent liberal bloggers call this phenomenon the “netroots” and predict that it will lead to a surge in progressive politics.\textsuperscript{57} Others see low credibility pablum that repeats rumors in an echo chamber and may portend the death of traditional journalism.\textsuperscript{58} In either case, the blogs are a new permanent feature of the media landscape.

With the phenomenal rise of social networks, advocacy applications have been created to tap into users’ friendship circles. One of the most popular of these is Causes, through which over 100 million Facebook members signed up for 390,000 causes.\textsuperscript{59} The low barrier to entry, just a single click on a “Like” button, makes it easy for users to register their support. However, less than one percent of users actually donate funds, and only a small number of the 179,000 non-profits using the network have raised more


\textsuperscript{59} Causes Exchange. “About Us” http://exchange.causes.com/about/
than $1,000. This disconnect demonstrates a gap that still remains between online discussion and real world action.

Outside of social networks, there are several notable examples of software that has been successful in raising tremendous amounts of money to advocate for political change. Software developed by the non-profit DemocracyInAction, called Salsa, bills itself as “ingredients for organizing.” Salsa provides organizers a central system for sending emails, gathering member contributions, assessing outreach effectiveness, and managing group events. Salsa is used by individual political campaigns, party coalitions, national groups like the Humane Society and the NAACP, and internationally by 350.org and Global Zero. These groups have used Salsa to raise millions of dollars for their causes, and collect hundreds of thousands of signatures for their petitions.

One of the largest online organizing groups, MoveOn.org, uses communal comment rating software called ActionForum to gather feedback from its five million members on progressive causes. Members are periodically asked to vote on the direction of the group’s lobbying work, particularly in response to major court cases like Citizens United. MoveOn raised $11 million for progressive causes and candidates between 1998 and 2004 from 300,000 members, with an average donation of $45.

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This aggregation of the contributions of many small donors was first pioneered by the Dean campaign in 2004, but was mastered by the Obama campaign in 2008 and is a permanent part of American politics.66

Apart from simply raising money, many online projects aim to aggregate the contributions of their users in the process of “crowdsourcing.” The term was first coined by Jeff Howe, writing for Wired magazine in 2006,67 and is now used by organizations ranging from multinational corporations seeking a cheap source of ideas to journalists sorting through a large dataset for evidence of official impropriety.68 The most famous and widely successful crowd project is Wikipedia, an encyclopedia built on the collaborative writing and editing of millions of users. Founder Jimmy Wales is a vocal critic of the term, and notes that a site must “provide a structure for users to collaborate, and that takes a lot of work.”69 The social platform is as important as the technical, and contributors must have enough structure to keep them honest, without being so restrictive that they lose interest.

Several activist sites enlist their users in the process of research with varying levels of success. Ryan McKinley’s thesis at the Media Lab, Open Government Information Awareness, was an early attempt at building a “citizen run database on our government.” A response the the perceived totalitarian surveillance of NSA’s Terrorism


Information Awareness, the system provided tools to facilitate citizen supervision of their government. The system watched C-SPAN to identify congressmen, matching their picture with a database of their campaign contributions, membership in fraternal organizations, and anonymously added personal information.\textsuperscript{70} Within hours of the system going online, it had the home phone number and a picture of the residence of John Poindexter, the principle architect of Terrorism Information Awareness.\textsuperscript{71}

After McKinley’s system went offline, other sites stepped in to take the information gathered and refine its scope. LittleSis, an “involuntary facebook of the powerful”, profiles the connections between people and organizations, focusing particularly on the personal relationships between politicians, lobbyists and business leaders.\textsuperscript{72} The relationships are gleaned in part from public databases, but many are added by users. These user contributions are vetted by the community, and all submissions must include links to sources so that analysts can check the research of others. This citation requirement aims to limit content on the site to “facts that can be supported by journalistic, academic, or government documents,” limiting out “inaccurate, firsthand, anecdotal, or editorial content.”\textsuperscript{73}

Buy It Like You Mean It (BILUMI)\textsuperscript{74} asks its users to rate companies on a slate of social and environmental criteria. Starting with the chocolate industry, BILUMI aims to build a database for ethical consumers to channel their economic activity to follow their


\textsuperscript{72} Public Accountability Initiative. About LittleSis. http://littlesis.org/about

\textsuperscript{73} Public Accountability Initiative. Site Guide. http://littlesis.org/guide

\textsuperscript{74} Clay Ward. Buy It Like You Mean It. http://www.bilumi.org
politics. Users are asked to quantitatively and qualitatively rate companies for their real world impact on transparency, human rights, global warming, and other issues of interest. The site is no longer actively maintained and has succumbed to spam, but the idea has been carried forward by other projects.

Citizens Market takes the user review model and extends it to the point of purchase with a mobile website and phone application. The site’s founder emphasizes the fairness of their rating algorithm, and intends to post it online when the site comes out of beta testing. Each company’s overall rating on the site is the product of several factors, which can mask significant issues. For example, British Petroleum received an overall score of four out of five stars as of April 28, 2010. This rating is calculated by averaging user submitted scores for three criteria: employee diversity, lobbying and corruption, and operations in conflict zones. The user did not rate BP on their environmental record, and so the site makes no mention of the catastrophe in the Gulf of Mexico, which had begun one week earlier and is ongoing at the time of writing. This method of merely averaging several scores to create one authoritative rating for a multinational corporation is insufficiently flexible for nuanced geopolitical issues.

KnowMore is a collaborative database of corporate and political information, providing ratings for most of the Fortune 500 companies. Started in 2004 by a pair of poets, the system is built on the MediaWiki software that powers Wikipedia. Each company has a page with contact information, praise and criticism in each issue area:


Last modified September 10, 2008.
workers rights, human rights, environmental impact, political influence and business ethics. These entries are written by contributors, who are asked to assume a neutral point of view and include their sources as inline citations. Companies are rated for each of these criteria by moderators, using “an evolving, unscientific method of quantifying corporate activity.”\textsuperscript{77} The site provides an innovative Firefox plugin that injects the KnowMore ratings into the user’s web browser whenever they go to a listed company’s webpage, see advertisements for that company, or search for products on shopping websites.

While the KnowMore site includes a tremendous amount of information, it seems to be infrequently updated and the ratings system is not transparent. The ratings are determined by moderators, not the community at large, and are focused only on the issues that have been pre-determined. Criticism for companies must fit into the currently existing criteria and a new issue cannot be raised. Additionally, the site’s sole avenue for action is a link in a sidebar to a wiki page that discusses various methods (including boycotts, strikes, and “revolutionary/guerrilla warfare”)\textsuperscript{78}, but does not organize these actions against the companies listed, or make any recommendation to users about which avenues to try.

These examples of advocacy and collaborative research projects show the realm of possibility of software for change. Many of these projects are incomplete, and some have issues with the reliability of their data. However, this is inherent in the process of crowdsourcing. Even with a large community of active participants, a crowd sourced


project will always have oversights, omissions and errors. But the aggregating of
knowledge and sharing it openly for reuse by others sets a powerful example for the
future direction of online advocacy.

**Cartographic Advocacy**

Maps have a unique explanatory power, and a claim to a universal truth with their
"God’s eye" view of the world. However in many situations, the information contained in
the map actually represents the anonymous author, not the people who live in the
depicted region. A call to make maps for change notes that map “function as
representations of power and control. To challenge the practice of privileging the
powerful on maps, and to create maps from the margins and of margins, therefore has
emerged as an important aspect as well as a tool of our fights against injustice in
society.” 79 Activist cartographers make their point of view explicit, and their maps aim to
represent visually the geography of disempowerment.

Several groups of artists and activists have made this kind of “radical
cartography”, which aim to “provoke new understandings of networks and
representations of power and its effects on people and places.” 80 Their collected atlas
contains maps and essays on areas and topics from the unofficial settlements of
Calcutta to the security cameras of New York, and includes work by Jai Sen, Trevor
Paglen, the Institute for Applied Autonomy, the Center for Urban Pedagogy, and other
researchers and activists.

79 Center for Internet and Society. "Maps for Making Change: Using Geographical Mapping Techniques to

Traditional geographers and social scientists have extended their work into the emerging field of human rights geography. One notable example is a map of massacres and state terror in Guatemala.\textsuperscript{81} This map combined traditional anthropological analyses of Maya groups, their common languages and indigenous heritage, and overlaid the locations of massacres of civilians from 1978 to 1995. While the locations of massacres was already known, transforming a list of villages into a map immediately made the information more meaningful. The maps show that the massacres were not random, but followed a prescribed pattern to intimidate and displace the rural population, where a small rebellion found the majority of its support. Indicating the geographic context of the massacres reveals the intent of their perpetrators, to ethnically cleanse the countryside of the Maya people.

The power of maps is particularly relevant in a region where the conflict is intensely geographic. Eyal Weizman has done detailed and insightful analysis of the role that architecture and geography plays in the Israeli occupation of Palestinian territory. In \textit{Hollow Land}\textsuperscript{82} and the book and exhibit \textit{A Civilian Occupation}\textsuperscript{83}, he documents how security, military or even archaeological justifications allowed settlements to be established in empty areas. Former prime minister Ariel Sharon had an excellent facility with cartography gained during his military leadership, and would use this to disguise settlement expansion when he was head of the Settlement Committee. By claiming the high ground above Palestinian villages, Jewish-only


settlements could serve as surveillance posts, their military use camouflaged by the trappings of suburbia. The government’s legal argument for settlement expansion before the Israeli High Court of Justice frequently depends on “temporary security necessities”: the domination of a major transit artery or strategic location, the ability to participate in regional defense, or the control of hostile population. An illustrator at Le Monde Diplomatique depicted this fragmentation with a biblical metaphor, mapping the Palestinian territory as an archipelago of islands in a sea of Israeli control.84

Jewish and Israeli Human Rights Advocacy

There is a long history of Jewish activism on civil rights issues. Almost half of the attorneys in the American South in the 1950’s were Jews, evidence of an alliance based on shared empathy with the black community.85 However, this empathy does not always extend to Palestinians. The American Jewish political landscape has until recently been dominated by conservative voices that demand unconditional support of Israel.86 While there is new strength in moderate groups like J-Street,87 many Israeli groups are vocal advocates for Palestinian human rights and equality.

Jewish tradition requires respect for the stranger living within the community, and the holiday of Passover calls for the liberation of all those who are enslaved. Rabbis for Human Rights maintains this tradition in Israeli society today, reflecting the “Zionist


commitment to the values of justice and equality, as expressed in Israel's Declaration of
Independence."88 The organization was awarded the Niwano Peace Prize in 2006,
which recognizes inter-religious cooperation in the cause of peace.89

B'Tselem, the Israeli Information Center for Human Rights in the Occupied
Territories, was founded in 1989 to “combat the phenomenon of denial prevalent among
the Israeli public, and help create a human rights culture in Israel.”90 The center
produces detailed documentation of individual abuses, systematic road closures, land
appropriation, and unequal legal proceedings for Palestinians. The reliability of their
reports is ensured by performing independent fieldwork and research. Their reports are
taken seriously by Israeli officials, and recently have lead to several investigations and
convictions.

Machsom Watch is an organization of women that focuses on bearing witness at
checkpoints and military courts across the occupied territory. They release periodic
summaries of activity at the major checkpoints, and individual reports of egregious
violations of Palestinian rights. While their work is as necessary as that of B'Tselem,
their reports are not always taken as seriously. Merav Michaeli, a prominent Israeli
television journalist, discussed the marginalization of the group at a panel discussion
titled “What Happened to the Israeli Peace Movement?” at the J-Street conference. She
noted that the media cast Machsom Watch as “naggy mothers”, Anarchists Against the

http://www.prnewswire.co.uk/cgi/news/release?id=170568
Wall as “nutjobs” and Breaking the Silence as “traitors.”\textsuperscript{91} In the face of media marginalization, liberal voices are stifled and silenced.

Hagit Ofran of Peace Now was another member of the same panel discussion. Peace Now is a long-standing organization, active since initially advocating for a treaty with Egypt in 1978. Ofran is the director of their Settlement Watch project, and personally collected much of the geographic data that goes into many of B’Tselem’s maps and my GroundTruth project. She didn’t accept the title of the panel, noting that “we are still here.” In her explanation of the disarray of the Israeli peace camp, she noted that there was no major political party advocating talks with the Palestinians since the Labor party formed a coalition with Likud in 2001. She was hopeful that information sharing might counter the “atomization of the peace movement.”\textsuperscript{92}

**Boycott History**

Activists have long recognized the power of the pocketbook, and collective economic action has been used throughout the history of social movements. American colonists were outraged at steep tariffs imposed by the Stamp Act of 1765, and halted importation of British goods to try and force its repeal, eventually leading to the Revolutionary War.\textsuperscript{93} The term boycott comes from an campaign to ostracize an Irish landowner in 1880. Captain Charles Boycott refused to lower tenants rents in a year poor harvest year and was opposed by the Irish Land League, a workers collective


founded by Michael Davitt. Tenants stopped tilling the fields, work stopped in his stables and house, and even the postman refused to deliver mail. The landowner’s name was used in newspaper coverage of the event in London and Paris and the term stuck.

In the twentieth century, boycotts were used effectively by several social and political movements. The Montgomery Bus boycotts lasted for the entire year of 1956, spreading across the southern states. The eventual Supreme Court ruling desegregating the bus system gave civil rights organizers an early victory and brought Dr. Martin Luther King Jr to national prominence. The California grape boycott in the 1960s, lead by Cesar Chavez and the United Farm Workers, fought for fair wages, the abolition of inadequate tools, and the ability to bargain collectively. Their victory after five years of struggle lead to the unionization of fifty thousand agricultural workers. Opposition to religious discrimination in Northern Ireland was codified in the MacBride principles, which set a corporate code of conduct for companies doing business there and were endorsed by cities across the United States and the Federal government itself in 1988.

With the development of transnational corporations, activists adapted to a new globalized world and begin to act on an international scale. Some posited the development of a world society or global polity that would disregard borders and band


together to confront nation-states. Richard Falk calls this "globalization-from-below" and contends that normative democracy will lead to coalitions between national social movements. However, the reality of developing transnational social movements was more difficult. States and institutions remain the principle target of coordinated social action, but that coordination is likely to arise out of local of national networks and identities. Some international actions and boycotts have developed, but their success has been largely symbolic and is often overstated by campaigners.

The international boycott most widely deemed effective was that against the South African policy of apartheid in the 1970s and '80s. Requested by the African National Congress, the boycott was extended to academics, sports teams, and lead to disinvestment by universities and pension funds. Despite the wide publicity, the overall effect on the South African financial markets and on non-compliant US companies was measurably smaller than campaigners perceived. This was likely due to the elasticity of demand for stocks, so that the boycott "primarily reallocated shares and operations from socially responsible to more indifferent investors and countries."

However, the casting of South Africa as a "pariah state", and the companies that continued business there as complicit in a policy of institutionalized racism, had a

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http://www.jstor.org/stable/2782801


100 Sidney Tarrow. "Beyond Globalization: Why Creating Transnational Social Movements is so Hard and When is it Most Likely to Happen?" Global Solidarity Dialogue. 2003.
http://www.antenna.nl/~waterman/tarrow.html

symbolic impact including and beyond the financial markets. This was particularly felt by academics, who were often unable to retrieve materials from foreign libraries or publish in international journals. A survey of South African university faculty found that 57 percent had experienced the effect of the boycott, but that it “was more of an irritation than a true obstacle to scholarly progress.”\textsuperscript{102} The primacy of non-financial impacts is typical of many boycotts; a public relations executive noted that “Very rarely is the impact felt at the cash register. You have problems with employee morale. Employees don’t like working for a company that is being attacked... You find that top-level executives spend an inordinate amount of time on the issue when they should be doing other things.”\textsuperscript{103}

An international boycott that has been seen as less effective is the one organized by the Arab League against Israel. A central list of companies doing business with Israel is maintained in secrecy by League officials with uneven enforcement among the twenty-three member states. In particular, Egypt and Jordan dropped their enforcement after peace treaties with Israel and gained duty-free exports to the United States for goods produced in joint industrial zones. Although many Arab states still reject visitors whose passports indicate travel to Israel, the concerted boycott of Israeli goods has been reduced to “lip service.”\textsuperscript{104}


The long history of domestic and international boycotts provides several lessons for the actions of today. One potential pitfall is the existence of a “big brother” state that will continue to accept the target’s exports and provide key inputs.\textsuperscript{105} The patronage of the Soviet Union made the blockade of Cuba difficult to maintain. The continued military support of the United States to Israel might do the same. For consumer goods, it is important to focus on a limited number of characteristic goods, because “the public cannot be overwhelmed with products which to shun.” Additionally, the secrecy of the Arab League boycott lists are no longer acceptable to grassroots activists.\textsuperscript{106} Modern boycotts must harness the power of new media to mobilize a global audience.

**Boycott, Divestment, and Sanctions Movement**

In 2005, a broad group of organizations from across Palestinian civil society released a unified call for an international boycott of Israeli goods, divestment from Israeli companies and sanctions against the Israeli government, as a non-violent response to the ongoing occupation. This call was aimed at international civil society and “people of conscience” across the world, making a clear analogy to the South African boycotts.\textsuperscript{107} The call also includes an academic, cultural and sporting boycott of Israeli institutions. In Europe, unions, solidarity groups, and activists slowly joined the call. By 2010, it had been endorsed by groups in the United Kingdom, Ireland, France,


Spain, Italy, Germany, Sweden, the Netherlands, Norway, Denmark, South Africa, India and elsewhere.\textsuperscript{108}

The impact of the BDS movement, like the South African boycott before it, is likely to be symbolic rather than economic. Bernard Avishai believes that BDS will silence Israeli liberal voices, particularly business interests that want to compete in the global marketplace.\textsuperscript{109} He instead advocates for the power of international capitalism to end the conflict.\textsuperscript{110} However, other Israeli liberals disagree and see the boycott as aimed not at the high tech enterprises of Tel Aviv, but at the exploitative industrial zones deep in Palestinian territory. One notable, though pseudonymous, liberal Orthodox Jewish blogger reminded his readers that "the BDS movement is there to embarrass Israel, to point out its flaws, to keep it in the news, and to reveal its nakedness. That it could seriously damage its economy is, at this stage, anyway, preposterous."\textsuperscript{111}

Within Israel, several groups support the international boycott. The recently founded group Boycott! hosts a petition for Israeli citizens to express their support for Palestinian rights and a boycott as a means of non-violent resistance.\textsuperscript{112} Their site hosts a petition with 157 signatures, most of which are from Israel and are signed with identifiably Jewish names. Much of the site is devoted to rebutting common accusations

\begin{footnotesize}
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\item Global BDS Movement. “Palestinian BDS National Committee marks five years of Boycotts, Divestment and Sanctions.” July 9, 2010. \url{http://bdsmovement.net/?q=node/755}
\item Boycott! Points of Unity. \url{http://boycottisrael.info/node/2/}
\end{enumerate}
\end{footnotesize}
made against the BDS movement, and uses their position as Israelis calling for a boycott to strengthen their argument.\textsuperscript{113} The site administrator emphasizes that the site is firmly based “on a context of the oppressed Palestinian call and campaign for it. It is their struggle for freedom and a legitimate way they have chosen to carry it out and invite others to join.”\textsuperscript{114} The Boycott! site does not include specific products or companies, and links to the WhoProfits project for more detailed information.

WhoProfits is a project of the Coalition of Women for Peace, and provides a centralized source of information on companies that do business in the Occupied Territories, are involved in the economic exploitation of Palestinian resources, and sell products and services for population control.\textsuperscript{115} The database is well researched, comprehensive, and frequently updated. It has been created by a dedicated team of researchers, and information is carefully vetted. It lists contact information for over a thousand Israeli and multinational companies.

While the WhoProfits database is a tremendous resource, it is more of a research tool than an application for political action. The site does not include individual product information or a map of where the listed companies operate. For a conflict that is so intensely geographical, this seems to be a serious limitation to fully understanding how companies profit from their position in occupied territory. Apart from digesting the short description of each company and their practices, there is no way to for the user to take action. Additionally, despite their exacting standards of research, few citations list

\textsuperscript{113} Boycott! Frequently Asked Questions. http://boycottisrael.info/content/frequently-asked-questions


the source of the information provided. The highly curated nature of the site makes it difficult for the community to add information, assist in new research, or reuse the information in other projects. While the research coordinator gave me permission to cite their work,\footnote{Merav Amir. Research Coordinator, WhoProfits. Email with Author. February 16, 2010.} the lack of a programming interface to their database made this difficult to do in any automated way.

In the United States, the BDS movement has a smaller base of support and is still growing to national prominence. Two organizations, the US Campaign to End the Occupation and the US Campaign for the Academic and Cultural Boycott of Israel, try to address a wide audience but remain on the edge of the political discourse. More centrist groups like J-Street, the “Pro-Israel, Pro-Peace” movement in American politics, are institutionally opposed to BDS. While they “note positively” the idea of a targeted boycott of the settlements, they refuse to institutionally participate.\footnote{J-Street. “Boycott, Divestment, Sanctions Movement.” Last accessed July 13, 2010. \url{http://www.jstreet.org/page/boycott-divestment-sanctions-movement}} Even representatives of the Israeli left-wing, Meretz USA and Americans for Peace Now oppose the BDS movement as being counterproductive because it is broadly targeted at all Israelis,\footnote{Americans for Peace Now. “APN Criticism of Israel and BDS - New Policy Language.” April 23, 2010. \url{http://peacenow.org/entries/bds_criticism_of_israel}} and stuck in a dualistic national paradigm that “unfairly casts Israel as evil.”\footnote{Meretz USA. “Draw a line at the Green Line: Israel is legitimate. The settlements aren’t.” Accessed July 13, 2010. \url{http://www.meretzusa.org/draw-a-line-green-line-israel-legitimate-the-settlements-aren't-a-policy-statement-meretz-usa}}

While national groups are not generally supportive, local groups like Adalah-NY, the Bay Area Campaign to End Apartheid, American Jews for a Just Peace, and many
others have built organizations dedicated to BDS. At the local and university level, they have achieved several notable successes. Evergreen College in Washington state, Hampshire College in western Massachusetts, and the University of California in Berkeley have all passed resolutions to redirect their institutional investments away from Israel. These student resolutions have often resulted in significant media coverage, but have limited economic impact and are often incompletely implemented.120

To gain a deeper understanding of the campus boycott movement, I attended the National Campus Boycott, Divestment, Sanctions Conference at Hampshire College in November, 2009. The keynote speaker Ali Abunimah praised BDS as a “tool to level the playing field,” “start the conversation” and “provide an alternative to violence.” However, in role-playing training provided by a Philadelphia-based campaigner, I was struck by the difficulty of convincing a shopper to change their purchasing habits and follow the boycott. The example offered by the trainers was to inform shoppers about to enter a Trader Joe’s that the Dorot brand garlic sold inside was grown in Israel, and that they should not buy it. In the thirty-second interaction between the pamphleteer and the shopper, it was hard to make connections between the fact that the garlic is grown in Israel, the oppression of Palestinians, and the call for an international boycott. It is a complex story to tell passersby, and one that I believe deserves a more nuanced discussion.

Labeling Of Settlement Goods

Independent from the Palestinian civil society call to boycott all Israeli goods, there has been some governmental action to restrict the sale of goods from settlements in the West Bank. These are widely deemed illegal under international humanitarian law,\textsuperscript{121} violating the prohibitions against population transfer in the Geneva Convention.\textsuperscript{122} The establishment of settlements and the security structures that surround them violate the rights of the Palestinian populace to self-determination, equality, property, an adequate standard of living, and freedom of movement.\textsuperscript{123}

Non-binding guidelines in the United Kingdom recommend labeling all products from the West Bank to indicate their national origin as Israeli or Palestinian.\textsuperscript{124} This is particularly important for assessing tariffs, as Israeli products are exempt from import taxes by the European Union. However, this agreement applies only to the “territory of the State of Israel”, which is not further defined.\textsuperscript{125} In 2005, a “technical arrangement” was reached to label the name and place of origin on exported products, so that duties can be assessed on those goods that are outside of formal Israeli territory. However, this system relies entirely on “good faith” labeling, and without independent investigative


\textsuperscript{122} Article 49. Fourth Geneva Convention. 1949. Available from the International Committee on the Red Cross. \textsuperscript{http://www.icrc.org/web/eng/siteeng0.nsf/html/genevaconventions}

\textsuperscript{123} B'Tselem. “Land Expropriation and Settlements in the International Law.” \textsuperscript{http://btselem.org/english/Settlements/International_Law.asp}


\textsuperscript{125} Delegation of the European Union to Israel. Agreements. \textsuperscript{http://ec.europa.eu/delegations/israel/eu_israel/political_relations/agreements/index_en.htm}
authority by the importing country is easily circumvented with false labels, repackaging, or resale through an Israeli intermediary.\footnote{126}

Some companies have improperly listed their place of business as being inside Israel, when in fact their production facilities are in settlements, where they receive tax benefits and investment incentives from the Israeli government,\footnote{127} and a source of cheap and exploitable Palestinian labor.\footnote{128} Analysis by the Adva center indicated that Israeli companies operating in the West Bank pay only 21 percent of the tax liability of those operating in Tel Aviv.\footnote{129} One notable example is SodaStream, a manufacturer of home beverage carbonation devices. Their corporate website lists their Israeli headquarters as located in Airport City,\footnote{130} but their manufacturing facility is actually in the Mishor Adumim industrial zone, eight kilometers east of the Green Line. The European high court ruled in February 2010 that these products are subject to tariffs, as they are not manufactured in an area subject to EU import agreements with either Israel or the Palestinian Authority.\footnote{131} This decision has implications for many other Israeli


\footnote{127} US Department of State. 2010 Investment Climate Statement - Israel. May 2010. \url{http://www.state.gov/e/eeb/rls/oth/ics/2010/138086.htm}


\footnote{130} SodaStream. Corporate Office Locator. \url{http://www.sodastream.com/officelocator}

\footnote{131} YNet News. "EU court: West Bank goods not Israeli" February 25, 2010. \url{http://www.ynetnews.com/articles/0,7340,L-3854620,00.html}
manufacturers; an estimated one third of the €12 billion of Israeli goods imported to the EU are fully or partially made in the occupied territories.\textsuperscript{132}

The Palestinian Authority has recently taken significant steps to remove settlement products from its stores. A law passed in April 2010 makes the sale of settlement products illegal, authorizes the seizure and destruction of these products, and penalizes their sale, storage and transport by fines and even imprisonment.\textsuperscript{133} Information on which products are banned was released on a website, Karama.ps, as well as by flyers handed out to each store owner in the West Bank. The site includes pictures of the boycotted products, but with little contextual information about why each particular product is banned. The printed material is not significantly more detailed, but does include information on non-consumer goods like industrial and construction supplies. A public opinion survey found support for the boycott enforcement at 85 percent, and Palestinian Prime Minister Salam Fayyad called it “empowering the people to resist the Israeli occupation without violence.”\textsuperscript{134}

\textsuperscript{132} Ralf Beste and Christoph Shult. “Will EU Penalize Exports from Israeli Settlements?” Spiegel Online. July 14, 2009. \url{http://www.spiegel.de/international/world/0,1518,636019,00.html}


Boycott Toolkit

While consumer boycotts are an established tactic for pursuing political change at the local, domestic and international levels, the decision on what companies and products to target is often removed from the people who put it into effect. A unified message is usually crafted at the top of an organization and disseminated through the hierarchy for implementation by activists on the ground. While this guarantees a consistent message, it glosses over any disagreement with an “all or nothing” approach.

For reasons elaborated previously, I believe that this rigid framework is overly constrictive for a boycott of the Israeli occupation. I propose a new approach built on open discussion, collaborative research, and the potential for respectful disagreement. This was implemented in the Boycott Toolkit and deployed to a community of activists worldwide.

Features

The Boycott Toolkit is a website for organizing collective economic action. Users can learn about the politics behind everyday companies and products, pledge to join a campaign, and share information with their friends. Actions are organized by campaigns that target companies and the products that they sell. Each company has

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136 Boycott Toolkit. http://boy.co.tt
location and contact information, and products have a listing and map of the stores where they are sold. The site is built on collaborative research, so that users can add their own local knowledge to the global discussion.

The site allows anyone to contribute new research on currently listed companies or products, add a new company, or start a new campaign. This open format enables a discussion on the parameters of each boycott campaign. Contributors are encouraged to cite authoritative sources when adding content, and the site prominently displays these sources for readers to ensure their veracity. In a situation where information is disputed, a moderated comments section allows for spirited, respectful discussion.

The site can be used for positive actions as well as negative. Each company or product action has a verb associated with it, by default either “support” or “oppose”. While these two verbs feed into a stereoscopic narrative, users can also input their own verb and with it their own viewpoint that breaks the dualistic mode. This allows campaigns that do not fit into the standard “buy/don’t buy” framework to still use the site.

Each action also includes a one sentence “reason” field that is displayed along with the name of the target and the desired verb. These reasons range from simple geography, to the business practices of the company, to an accounting of the business owner’s political donations. These short pieces of information give the user enough insight to join the campaign, while drawing them to the company page to learn more. The color of the reason box alternates depending on the verb, allowing the reader to visually distinguish positive and negative actions.

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A prominent search box on the front page allows users to quickly find companies, products, stores, and locations. The “find as you type” behavior enables iterative searches without reloading the page. This implementation was made possible by the jQuery javascript library.
The site includes a map of store locations with a location search so that users can determine the impact of a campaign in their area. Each listing includes the relevant products sold at that store, and a link to a specific page for that location which includes an address and contact information. At the time of writing the listing of stores was centered on the United States, but stores across the world can be displayed.

Because the site is built on user-contributions, the interface for joining is designed to be as simple as possible. Users can create an account with an email address and password, or use an existing Facebook account. This allows casual users
to start interacting with the site quickly, without waiting for an activation email or filling in a long registration form. However, registration is required to ensure that users maintain a consistent identity and to combat spam. Facebook users are linked with their real name and persistent identity, and get a personalized page within Facebook that lists campaigns they have joined and the companies and products that are targeted. Comments can be added without a site account, but are spam-checked and moderated if they violate the terms of service.

Adding content is similarly designed for ease of use. Users can start a campaign by defining the problem, setting a goal, choosing a verb, and adding optional tags. The goal allows the site to track when a campaign will be complete, to encourage users to think about approaching problems that have clearly defined solution criteria. Both the description and goal field ask for citations, which encourages users to show sources for specific information, and to include links where readers can learn more.
Once a campaign is started, anyone can add companies and products to it. Companies include a location field that users can fill in either by clicking on a map or writing an address. This location is later shown on a map on the company page. For companies in a specific geographic area, users can define extra layers to appear on this map. For example, the map of companies in the West Bank includes the GroundTruth layers of settlement outlines, while those in Arizona might include demographic or political information. Before saving the company to the database, the user must fill in the “reason” field, described earlier.
After adding a company, users can add the products that it sells. Products have a text description field and citations just like companies, but also include an image field so that readers can identify brands at a glance. Users are also asked to submit the Universal Product Code unique to each product, so that mobile devices can later search by scanning a barcode. The barcode includes the country of origin, and so may be preferable for international products. Other boycotts focused on Israel ask followers to look for the 729 prefix, which indicates that a product was made in Israel. However this is not always accurate, as many products which are made in Israel do not carry the prefix.

When adding a product, users are also asked to indicate an alternative. This allows consumers to redirect their spending and double their effect. This link can connect products between campaigns. For example, products listed in the “Boycott Israeli Settlements” campaign can have alternatives listed in the “Support Palestinian

139 Innovative Minds. “729 Barcode of Israel” http://www.inminds.co.uk/boycott-news-0073.html
Products" campaign. While not all products have a symmetric alternative, this feature allows users to track and shift spending on commodity products.

**Add the product details below**

- **Name:**
- **Description:**
- **Citations:**
  - Add
- **Tags:**
- **Company:**
  - Who makes this product?
  - Add a new company
- **UPC:**
- **Product Image:** [Choose File] no file selected

**Alternative:**
- What products make a good alternative? (Optional)

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**Platform**

The site is built with Django, the “web framework for perfectionists with deadlines.”¹⁴⁰ The framework encourages clean separation between the data models, the Python code that pulls records from storage, and the templates that render the

design. This philosophy of "loose coupling and tight cohesion"\(^{141}\) makes developing a large application easy without becoming needlessly complex.

The site is hosted by a virtual machine provided by the NecSys group at the Media Lab, using the Debian operating system. Web traffic is hosted by the Apache web server, an industrial strength open source product. The database is served by PostgreSQL, an object-relational database system, and PostGIS, which provides geographic extensions. This allows queries to be made in spatial coordinate systems, which is very useful for the GroundTruth project. While the site experienced some minor uptime issues when it got an initial burst of traffic, careful tuning has fixed the problem. Use of the Web Server Gateway Interface (WSGI) instead of the Apache mod_python module proved particularly useful. A high performance cache was implemented with memcached, which allows identical consecutive queries to be served quickly without hitting the database. Today the system is fast and reliable, and has served thousands of visitors from across the globe.\(^{142}\)

The Boycott Toolkit integrates with other projects from the Center for Future Civic Media and beyond. Each campaign can include arbitrary external HTML through an iframe. This field is not editable by anonymous users due to security concerns, particularly cross site scripting vulnerabilities, but trusted users have embedded relevant external content. Campaigns about Israel and Palestine include a geographic context from GroundTruth, which overlays the path of the separation barrier, the location of checkpoints and the boundaries of settlements. For a campaign targeting BP, an


\(^{142}\) Google Analytics. Last accessed 6 Jul 2010. For further discussion of web traffic, see Evaluation.
external map of their 13,000 BP and Arco branded gas stations across the United States was created and embedded in the company page, showing local economic targets of the boycott. Ryan O'Toole's Red Ink project\textsuperscript{143} is also embedded, allowing users of both systems to track their personal spending at various brands of gas stations, and potentially change their behavior. For a campaign against Arizona's recent anti-immigrant law, JD Godchaux of Nijel.org created a map of the voting record of each state senator,\textsuperscript{144} to emphasize the point that not all of the state was supportive of the controversial law. This type of collaboration is exactly what the Boycott Toolkit is intended to facilitate, and I am pleased to see it integrate with other sources that share the same commitment to nuanced discourse.

**Campaigns**

Although the site is built for user-contributed content, an initial set of information had to be present at the time of launch. This type of "bootstrapping" is typical in crowdsourcing initiatives. Wikipedia began with the public domain Encyclopedia Britannica of 1911, OpenStreetMap stared with TIGER data, and I started the Boycott Toolkit on the shoulders of others. I chose campaigns that are currently ongoing across the world, have a large audience of activists, and are constrained in some manner, geographic or otherwise. I found the central gathering point of information for each campaign, emailed the author to ask permission to scrape their data, and did so with their approval. At the time of the site launch in May 2010, there were seven campaigns.

\textsuperscript{143} Ryan O'Toole. Red Ink. \url{http://www.make-them-think.org/}

\textsuperscript{144} JD Godchaux. "Geography of the Arizona SB1070 Boycott. May 29, 2010. \url{http://nijel.org/blog/?p=226}
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<tr>
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<td>5</td>
<td>various</td>
</tr>
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<td></td>
<td>Don’t Buy From Bigots</td>
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<td>ColorOfChange</td>
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</table>

Campaigns at site launch. May 3, 2010

As the site developed an audience, several more campaigns were started by other users, and new companies and products were added to existing campaigns.

User Contributions

Before making the site public, I consulted with the Berkman Center for Internet and Society. With the assistance of Christopher Bavitz at the CyberLaw clinic, we developed a Terms of Use, DMCA Policy and Privacy Policy. The terms of service in particular were critical, as I received potentially inappropriate material almost immediately. The terms stated that "we reserve the right to delete, move, or edit any

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145 Terms of Use, [http://boy.co.tt/about/terms/](http://boy.co.tt/about/terms/)
Privacy Policy, [http://boy.co.tt/about/privacy/](http://boy.co.tt/about/privacy/)
DMCA Policy, [http://boy.co.tt/about/dmca/](http://boy.co.tt/about/dmca/)
 postings that come to our attention that we consider unacceptable or inappropriate,
whether for legal or other reasons.”

One user, named “femalegentile” started a campaign titled “Boycott Jews in Addition to Israel” that advocated gentiles “exclude Jewish people from [their] social and economic lives”, including “accountants, personal bankers, engineers” because of a perceived disloyalty to their own countries. Because of the open nature of the platform, and my desire to “walk the walk” on the issue of user contributions, I did not delete the campaign, despite content that borders on hate-speech. However, I did flag it as in violation of the terms of use, which notifies the user and asks them to confirm that they wish to view the material. The campaign is also removed from listings on the main page, although the campaign specific URL still works and is linked off the page of the user who created it.

In addition to user content submissions, there are also protections in place against disruptions in the comments section. The Disqus platform provides spam filtering, moderation tools, comment threading, and a persistent user profile. Disqus integrates with the Gravatar icon system, and can use external authentication systems like OpenID and Facebook Connect. These systems try to encourage respectful discussion by tying commenters to a persistent identity. However, we will see in the Evaluation section that this is not always the case.

Evaluation

Media Coverage

The toolkit was launched on May 1, 2010 and almost immediately received a media response. Palestine Note, a news site run by Palestinian-Americans for the Palestinian and international activist communities, ran an article on May 4. This piece was reposted on blogs across the world over the next few days. Posts came from Australians for Palestine, the personal blog of a lecturer at Al-Azhar University in Egypt, the Indonesian news site EraMuslim (driving a significant number of Asian readers), and aggregators Window into Palestine and the Israel Occupation Archive. A small activist group called North Texas BDS took the HTML code from the page of settlement products and pasted it right into their site with attribution. This large positive responses was exciting, and made me feel as if the project was already a success. However, a negative backlash soon occurred.

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After the immediate rush of positive blog posts, a more critical response came from a right-wing website. PajamasMedia, a blog network founded by Glenn Reynolds of Instapundit and Charles Johnson of LittleGreenFootballs, is a highly trafficked conservative news site, receiving an estimated 88,000 unique visitors per day. On May 7, Lee Kaplan, a prominent critic of the anti-zionist left, published an article titled “Boycotting Israel? There’s an App for That” on PajamasMedia. Kaplan heads the groups StopTheISM, which alleges that international solidarity activists are aiding Palestinian terrorists, and Defending America for Knowledge and Action, whose acronym DAFKA means “in your face” in Hebrew slang. His style is aggressive and combative, and the article used several quotes from my personal blog out of context. However, it was the comments section that truly showed the depths of anger that the project aroused in some readers. Despite a policy that forbids “ad-hominem attacks”, numerous commenters piled on Holocaust-era terminology, calling me a “putz sonderkommando,” a “kapo,” a “quisling enabler” and a “malignant narcissist.” Beyond comments on the website, I also received personal emails that further accused


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me of perfidy against my co-religionists, some from professional and academic email accounts.160

While these accusations were shocking and hurtful at first, I came to realize that the authors were utilizing a tactic designed to stifle discussion and dissent. I responded by correcting several factual errors, but refused to stoop to the same level of hateful discourse. Their attempt to shame me into silence failed, and only reflected poorly on themselves.

After the PajamasMedia furor, I took a week off from publicity to reflect and plan a next step. In that intervening time, a kind email arrived from Adam Horowitz, a co-founder of Mondoweiss, a prominent progressive Jewish news website. He sent his sympathy that I had to deal with Kaplan’s “craziness” and provided a link to a story where he attempted to infiltrate a conference disguised as a Pakistani by using a fake driver’s license.161 Needless to say, this diminishes Kaplan’s journalistic credibility.

A few weeks later, I published an article on Mondoweiss titled “Birthright to Boycott”162 explaining my personal conversion story and my thesis work. The comments here were more sympathetic, calling me a “mensch”,163 the project a “tremendously appealing idea”164 and thanking me for providing “comprehensive, clear information...

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that is lacking elsewhere." The post also appeared to drive some traffic to the site, as the daily number of unique visitors went from around twenty to over 150, for the week that the article was on the front page of Mondoweiss. These visitors exhibited a relatively low bounce rate (users who leave the site after looking at the first page) and moderate number of pages per visit, indicating that these interested users explored the site some before going elsewhere.

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Google Traffic analytics (April 20, 2010 - July 7, 2010)

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</tr>
<tr>
<td></td>
<td>Katherine Fuchs</td>
<td>Washington, DC</td>
<td>06/07/10</td>
<td></td>
<td>Institutionally opposed to boycott strategy</td>
</tr>
<tr>
<td>US Campaign to End</td>
<td></td>
<td></td>
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<td>the Occupation</td>
<td></td>
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<tr>
<td>American Jews for Just</td>
<td></td>
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<td></td>
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<tr>
<td>Peace</td>
<td>Hannah Schwarz</td>
<td>Arlington, MA</td>
<td>06/07/10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BoycottBP.org</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>SeizeBP.org (ANSWER)</td>
<td></td>
<td></td>
<td>06/03/10</td>
<td></td>
<td></td>
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<tr>
<td>Public Citizen</td>
<td>Glenn Simpson</td>
<td>Washington, DC</td>
<td>06/04/10</td>
<td>06/04/10</td>
<td>“Thank you very much”</td>
</tr>
<tr>
<td>Somos America</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AZ Boycott Clearinghouse</td>
<td></td>
<td>07/05/10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boston Coalition for</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palestine</td>
<td></td>
<td></td>
<td>04/30/10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adalah NY</td>
<td>Ethan Heitner</td>
<td>New York, NY</td>
<td>04/30/10</td>
<td></td>
<td>Language does not follow unified call.</td>
</tr>
<tr>
<td>Philadelphia Jews for a</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Just Peace</td>
<td></td>
<td></td>
<td>04/29/10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somerville Divestment</td>
<td></td>
<td></td>
<td>04/29/10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hampshire SJP</td>
<td>Tom Pessah</td>
<td>North Adams, MA</td>
<td>06/07/10</td>
<td>06/10/10</td>
<td>“Looks like a great tool. I shared it with our members.”</td>
</tr>
<tr>
<td>Cal SJP</td>
<td></td>
<td></td>
<td>06/10/10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nijel.org</td>
<td>JD Godchaux</td>
<td>Tempe, AZ</td>
<td>05/29/10</td>
<td>06/01/10</td>
<td>Embedded map of AZ Senate votes</td>
</tr>
<tr>
<td>ProArizona</td>
<td>April Bojorquez</td>
<td>Phoenix, AZ</td>
<td>07/05/10</td>
<td>07/12/10</td>
<td>Put link on blog</td>
</tr>
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<td>Boycott BP Facebook</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td></td>
<td></td>
<td>06/07/10</td>
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</tbody>
</table>

Outreach to Potential Deployment Partners
Activist Responses

I continued to try and reach a wider audience both through a network of activists. I contacted twenty-two organizations: eight international, seven domestic with a national scope, and eight domestic with a local focus. I did not receive a response from many of these groups, which is perhaps typical of “cold-calling” as an outreach strategy. However, I received interested and sometimes critical, responses from three groups: WhoProfits, Gush Shalom, and Adalah-NY. The work of each of these groups is described in more detail in the Related Work section; here I will focus on their response to my project.

WhoProfits, a project of the Coalition of Women for Peace, is an online database of companies that profit from the occupation. Their database is well researched and includes multinational corporations that do business in the settlements as well as local manufacturers that are based there. However, it is not editable and does not include product information. I inquired if they were interested in collaborating on my more open system, and while they were not, they gave permission to use some of their content with proper citation and a link to the original source. This was welcome, but not the full collaboration I had hoped.

Gush Shalom, the Israeli “peace bloc,” maintains a list of settlement products on their website. It includes a comprehensive list of factories in settlement industrial zones, but it also does not include product names and is presented in a long table that a shopper would have to print out and consult in a store. After an email informing them of

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168 Adalah-NY. http://adalahnyc.org/
the Boycott Toolkit, their initial response was quite positive. Beate Zilversmidt called it a “very interesting initiative” that is “much more visually sophisticated than our modest boycott list.” She considered adding a link in the footer of their weekly emails to members. This was the publicity assistance I was looking for: a recurring mention to a committed group of activists by a trusted source.

However, after a closer examination of the site, Mrs. Zilversmidt informed me that she was upset by the mention of the term “enviroNazi.” I was shocked, as this was not something I had written, and since the PajamasMedia response I was sensitive to the use of Holocaust imagery. In searching for its origin, I learned that a friend of mine at the Media Lab had chosen “enviroNazi” as his username, and it showed up on every campaign he supported. The name was picked as an attempt at internet humor, a critique of overly strict environmentalists in the United States who are perceived as quasi-fascist in their pursuit of protecting nature. It had nothing to do with the Holocaust. However, recognizing the sensitivity of Jews and Israelis to this reference, I asked for his permission to change it to a combination of his first initial and last name. He agreed when he learned of the impact it might have on my distribution. However by that point, the damage was done.

Mrs. Zilversmidt informed me that her group “operates in an environment which we want to influence, and which is extremely sensitive to the word Nazi” and that they would not do any promotion while this term was on the site. I informed her that it had been changed, but that due to the open nature of the site I could not guarantee that potentially offensive content would never appear. While the Terms of Use gives the site administration the authority to remove such content, submissions must be flagged as
offensive, and are not screened before posting. Putting a human filter in place would slow down posting, and make the system overly dependent on a busy administrator to approve submissions. While I appreciate the need for an advocacy group to control their message, that kind of content approval system would detract from the open nature of the site.

Adalah is a New York based grassroots campaign for the boycott of Israel. They have been active since the 2006 war with Lebanon, and regularly hold protests outside local Israeli-owned stores and developers.\textsuperscript{169} I contacted their leadership seeking assistance with research on stores in the New York area and to discuss a collaboration. Spokesperson Ethan Heitner took issue with the language used on the site because it did not fully follow the guidelines of the 2005 unified call. In particular, he pointed out that a boycott of settlement products was not a complete boycott of Israel, and that I did not endorse for the academic and cultural boycott.\textsuperscript{170} I replied that this was exactly the point, that users should be able to choose their level of involvement and contribute research on any part of the boycott, but I did not receive a response. I was surprised by this level of dogmatism and the requirement for an “all or nothing” commitment.

In addition to the outreach at the national level, I also discussed the project in the campus community. I was asked to speak at the annual MIT Palestine Awareness Week by Deema Totah, and received warm words and helpful feedback from the students, faculty and community members who attended. Because many of the students are


\textsuperscript{170} Ethan Heitner. Email to author. April 30, 2010.
Palestinian, I received offers to help translate the site into Arabic so it could be readable in their home context. I was grateful for the offer, but decided against spending too much time on translation as that space is already well served by Karama.ps, described in the Related Work section. Karama has the backing of the Palestinian government, wide distribution in stores, and the threat of fines and jail time behind it. My voluntary project, while perhaps technically and visually more sophisticated, did not have these deep community and governmental connections.

I also spoke to the MIT rabbi, Michelle Fisher, and Hillel coordinator, Eliad Shmuel. They contacted the co-director of the Center for Future Civic Media, Mitchell Resnik, to discuss my projects in late May 2010. He urged them to meet with me in person, and we did on June 23. It was a pleasant meeting, and I was happy to describe my personal background, how I came to these projects, and the direction I intended to grow them. The rabbi was sympathetic, and actually pleased at the experience I had taken away from the Birthright trip. It certainly did get me more involved in Israel, and she viewed that as a success. Hillel coordinator Eliad was more critical; in particular he was concerned that the site was overly focused on Israel, and did not direct enough scrutiny at other worldwide human rights concerns. I reiterated that the site is open for contributions, and that I had focused on campaigns that have an audience and network of activists.

**User Community**

Without the institutional support of any large activist groups, I continued to build a user community independently. Using social networks like Facebook, Twitter, and
MEPeace171 I reached out to numerous peace related groups. This was more successful, and I made many connections with individuals worldwide who joined the site as users and contributors.

As of the time of writing, the community had 74 registered users. Many visitors did not register, which is required to submit or edit content; those non-contributing visitors are not included in the following analysis. Of the 74 registered users, 18 joined a campaign. This action allowed them to show their support, build a personalized list of targeted companies and products, and enables the campaign originator to contact them with updates. The relatively low rate of campaign joins (24 percent) may indicate that these benefits were not well understood by users, or not made sufficiently clear in the interface.

Of the 18 users who joined a campaign, most did not submit new information. Of the seven who did, none other than the author submitted more than a single company or product. This may indicate that users did not know that they could contribute, or that they did not have additional information to add. Two of the users who did contribute, femalegentile and Menachem, did so to intentionally disrupt the site by eroding its credibility, and so cannot be considered serious members of the community. The following table summarizes the number of targets added by contributing users, and the number of revisions submitted to existing content.

<table>
<thead>
<tr>
<th>Username</th>
<th>Campaigns</th>
<th>Companies</th>
<th>Products</th>
<th>Stores</th>
<th>Revisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>bartips</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>VictorHoelscher</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>josh</td>
<td>7</td>
<td>57</td>
<td>31</td>
<td>14</td>
<td>169</td>
</tr>
</tbody>
</table>

171 MEPeace: Connecting the network of peacemakers. [http://mepeace.org](http://mepeace.org)
<table>
<thead>
<tr>
<th>Username</th>
<th>Campaigns</th>
<th>Companies</th>
<th>Products</th>
<th>Stores</th>
<th>Revisions</th>
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</thead>
<tbody>
<tr>
<td>femalegentile *</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>adolmd</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>temax</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Menachem *</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>cxu</td>
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<td>0</td>
<td>0</td>
<td>1</td>
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<tr>
<td>rob1211989</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

* This user added false or defamatory information.

**Contributions per User**

These findings are disappointing, but perhaps not atypical. The phenomenon of participation inequality in social media is often characterized by the 90-9-1 rule. This postulates that ninety percent of users will simply read the site, nine percent will contribute from time to time perhaps by editing existing content, and one percent will account for most of the contributions.\(^{172}\) The users of the Boycott Toolkit exhibited a very similar distribution at 88-11-1.

To quantitatively measure the community's experience with the site, users were asked to fill out a short anonymous survey.\(^{173}\) This survey included questions on how the respondent found out about the site, whether they learned anything from the site, whether and how they shared this information with their friends, and some basic demographics. The survey was kept intentionally simple to improve response rates. A link to this survey was placed on the front page, and was sent to all registered users on


June 7. At the time of writing, 14 responses had been received. The results are summarized below, and are listed fully in the appendix.

First, the survey asked users which of the ongoing campaigns they were interested in. Respondents could choose more than one, so the total number of answers is greater than the number of respondents. Reflecting the amount of content available in the campaigns and the overwhelmingly American audience, the most popular campaigns were about Arizona SB1070, Israeli settlements and Palestinian alternatives, and the Gulf oil spill. Despite the initial focus on Israeli products and my experience with the BDS movement, the tool is clearly applicable to other contexts and users are interested in multiple political topics. While the majority of my outreach efforts were not focused on the Arizona or BP, there was still user interest in these campaigns. This suggests that while the current audience does not sustain a critical mass of interest in the Israeli and Palestinian campaigns, more receptive audiences might exist elsewhere.

Respondents were most interested in reading more content, but largely did not have more to add themselves. As I designed the user interface and personally added most of the content, I am perhaps too close to the problem to determine the flaws in the submission process. I received feedback that the site design does not emphasize enough that the content is editable, or that it was hard to find new information to add. However, most users indicated that they did not have further content to add, or that they did not have time to do more in depth research. This finding mirrors the participation inequality ratio described above, and emphasizes the need to attract super-users who will further build the content base.
The survey revealed that the majority of respondents learned about the site either from my personal outreach efforts or through face-to-face contact from their friends. Traffic from media coverage was ephemeral, most users who signed up and filled out the survey came from activist networks. Most users (85 percent) told their friends about the site, but did so either face to face or by email. Facebook and Twitter were less frequent methods of communication, hindering viral distribution to a wider audience.

The survey asked what other consumer research tools users were familiar with and where they currently get their boycott information. Most respondents used Wikipedia, but none had used other tools that I considered direct competitors (BILUMI, CitizensMarket, KnowMore, etc). Given the group’s relatively high self-reported internet savviness, they could be expected to know about other sites or know how to find them. This indicates that competitor sites also suffer from a small audience, and that the problem of user engagement in collaborative research is not unique to this project.

**Future Work**

Potential improvements to the site are numerous. Attracting a vibrant user community with more contributors is clearly the first priority. The participation distribution is unlikely to change significantly, so the only way to increase the amount of content is to reach a larger audience. This outreach work is ongoing, and I hope to find success in the future.

Other technical additions to the site were considered but not implemented due to time and resource constraints, and a lack of knowledge of their utility to users. A mobile
interface, printed output, and automatic news parsing were all considered and exploratory research was done to determine their feasibility.

The most technically interesting and challenging addition to the project would be a mobile application. This would extend the utility of the site into a user’s daily consumption, allowing them to check products while shopping. This could be done with an iPhone or Android application that scanned barcodes, or a more simple SMS interface that asks the user to send in the UPC number via text message. This mobile interface was intended to be included in the site launch, but was delayed due to a lack of development time. I could not have known how widely used such an interface would be, and I decided to focus on building a community rather than a smartphone application.

An opportunity for collaboration in this area arose from an email by Abe Greenhouse of the Palestine Freedom Project.\textsuperscript{174} He suggested integrating with an open-data UPC database, or purchasing one available commercially. This is a possibility, but many of the free sites do not include the small manufacturers the site currently includes. I had hoped to have users fill this information in on their own, but never developed a suitable interface for doing so.

Another method to link the site with real world activism was suggested by the Innovative Minds BDS site.\textsuperscript{175} They offer stickers that activists can place on boxes in stores, informing other consumers of the context of their purchases. The Boycott Toolkit site could customize stickers for each product, company, and store. Flyers with a

\textsuperscript{174} Palestine Freedom Project. About Us. \url{http://palestinefreedom.org/about}

\textsuperscript{175} Innovative Minds. Boycott Israel Campaign. \url{http://www.inminds.co.uk/boycott-sara-lee-letter.html}
specific list of products could be automatically generated for pamphleteers to hand out at store entrances. The Django template system makes generating non-HTML output easy, and integrating with a PDF generator or print-on-demand system could make this a one-stop process for a “protest in a box.”

These potential new features were all posed as areas for expansion in the user survey. However, the most frequent request was more content, and as many users seemed confused by the existing capabilities of the site, further interface developments seemed perhaps unwise. Extensions may be developed in the future, either by myself or the open-source community. Andrew Dougherty, an accomplished AI programmer, offered to write an automatic news parser so that articles about companies could be aggregated and added to our database.

While there is more to do on the Boycott Toolkit, the project lacked a vibrant user base and is limited in its potential uptake with its current content. Despite my efforts at distribution through activist groups, I did not find a large audience. I plan to continue my efforts at developing nuanced and effective software for online political action at the Citizen Engagement Laboratory. Their projects already have a combined group of hundreds of thousands of users active in community politics, and I look forward to applying some of the hard-won lessons from this project to other spaces ripe for change.

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Survey Results

Note that due to a bug in Google forms, results labeled “Other” also includes users who chose not to answer optional questions.

**Toolkit Specific Questions**

Which boycott campaigns are you most interested in?

- Arizona SB1070
- Closed Computing...
- Glenn Beck Advert...
- Golan Heights Wines
- Gulf Oil Spill
- Indigo Books and...
- Israeli Settlements...
- PF Changs / Pei Wei
- Prop 8 Financiers
- Sustainable Cloth...
- WalMart

What improvements in the Boycott Toolkit would you find useful?

- Printed Output
- Mobile Interface
- Barcode scanning
- More content
- Automatic news pa...

**Media Distribution**

How did you learn about the Boycott Toolkit?

- Face to Face
- Email
- Email from Josh L...
- Mailing List
- Facebook
- Twitter
- Blog Post
- News article

Did you experience any barriers that stopped you from adding content?

- I didn't have any...
- The interface was...
- I didn't have time.
- I disagree with t...
- No. I added many...

Did you tell anyone else about the Boycott Toolkit?

- Yes
- No
Media Distribution (continued)

How did you tell others about the Boycott Toolkit?

- Face to Face
- Email
- Mailing List
- Facebook
- Twitter
- Blog Post
- News article
- Other

What other consumer research tools do you use?

- Wikipedia
- Group Blogs
- Ethiscore
- Citizens Market
- Buy It Like You Mean It
- Corporate Critic
- KnowMore.org
- Other

Where else do you get your boycott information?

- Activist Websites
- Product Labels
- Email Lists
- Physical Mail
- News Media
- Online Social Network
- Other

Demographics

How Internet Savvy are You?

- How old are you?
- Where do you live?