# SOCIAL EXCHANGE:

A NEIGHBORHOOD NARRATIVE FOR THE TEL AVIV NEW CENTRAL BUS STATION

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FIG. 1 THE TWO WORLDS OF THE NEW CENTRAL BUS STATION, BY AUTHOR

# THESIS STATEMENT

The New Central Bus Station in Tel Aviv was conceived to create dynamic interconnections through multiple modes of occupation, but resulted in a labyrinth of vacant space housed in a looming megastructure, creating severe blockage within the neighborhood's urban fabric. This thesis explores the possibilities to reconfigure invasive infrastructure as a method to link and revitalize a community

— generating public space through negotiating differences.

social exchange / narrow

## **ABSTRACT**

Tel Aviv is a rapidly changing city. Since its establishment only a century ago, the city has developed into an innovation hub, rich with culture and architectural history. Part of its hasty evolution from the land of sand dunes to the current metropolis was the construction of the Tel Aviv New Central Bus Station, the largest bus station in the world at the time of completion.

Almost three decades after Israeli Architect Ram Karmi designed the station, it opened in 1993, already nicknamed the "white elephant" due to its scale and lack of integration into the surrounding neighborhood of Neve Sha'anan. The New Central Bus Station never met the architect's intended vision of "a city under a roof" and has significantly transformed over the years, as an attempt to create purpose within the large mass.

Neve Sha'anan, in south Tel Aviv, is the poorest area of the city, ridden with homelessness, prostitution and drug addiction. It is also the home to the majority of the African refugee and asylum seeker community in Israel, making up less than half a percent of the population of the country. The small community has been the target of recent refugee policy reforms, which frame them as "infiltrators" or "labor migrants."

The New Central Bus Station fractures the urban environment of Neve Sha'anan and causes spatial disorientation of a community already faced with cultural marginalization. Through an analysis of the impact that top down decision making causing cultural conflict has on architecture and place making, this thesis sets to develop a solution for intervention, which considers the users and urban context as a source for re-configuring existing infrastructure.

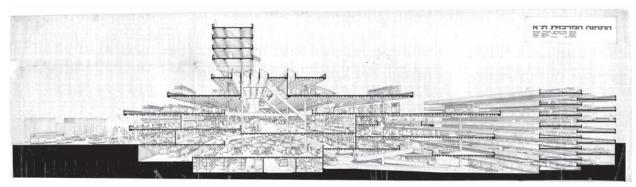


FIG. 2 SECTION PERSPECTIVE OF TEL AVIV NEW CENTRAL BUS STATION PROPOSAL, 1967

## **SOCIAL EXCHANGE:**

## A NEIGHBORHOOD NARRATIVE FOR THE TEL AVIV NEW CENTRAL BUS STATION

The Tel Aviv New Central Bus Station is a megastructure: a single building that holds all programmatic functions, with units to be interconnected and expanded, designed as a self-contained city. Generally, the megastructure is an attempt to address large urban systems, whilst simultaneously incorporating rapid change of globalization.

The 'city under a roof' in Tel Aviv failed within its urban context of Neve Sha'anan. The massive piece of infrastructure blocks and severs the urban grid of the neighborhood, fragmenting the diverse environment and community of foreign workers, refugees and poor Israelis, and restricting access beyond the crowded streets.

In TA-5000, the 2025 masterplan for Tel Aviv, the bus lines will be relocated to two existing terminals in the north and south of the city, Arlozorov Station for northbound buses, and Holon Junction for southbound buses. As the megastructure loses its role as the main hub for the city's bus system, the station becomes further obsolete, and adaptable to modification for the surrounding community.

We must reexamine the Tel Aviv Central Bus Station to better serve and revitalize the community. A solution to reconcile the political and cultural conflict of the refugees, labeled as 'infiltrators', is developed through reconfiguring the structure with an understanding of the history of the region and station design, exploring both theorized and realized megastructures, the social condenser as a means of spatial and programmatic organization, and analyszing of projects which employ strategies of place-making, intervention and connection.



FIG. 3 TEL AVIV EXPANSION 1917-PRESENT, BY AUTHOR



FIG. 4 REFUGEES MARCHING FOR EQUAL RIGHTS IN NEVE SHA'ANAN



FIG. 5 BOARDING PLATFORM OF THE BUS STATION RUN PAST DILAPIDATED APARTMENT BUILDING OF NEVE SHA'ANAN

#### THE HISTORY OF NEVE SHA'ANAN

The city of Tel Aviv was established in 1909 by 66 Jewish families, claiming it to be the first Hebrew city in Ottoman-era Palestine. Entering the land from the economically booming Arab port city of Jaffa, the Jews created a housing district just north, in present day Neve Sha'anan. They profited off of the industry Jaffa provided, but following the riots in 1936 between the Jews and Palestinians, the community began moving their commerce, declaring Neve Sha'anan as an industrial zone. The area created a stable economy, attracting the most influential element of the neighborhood to this day, the New Central Bus Station. In the 1960s, Tel Aviv's central business district developed northward, leaving the area of Neve Sha'anan and the site of the planned bus station behind. This new development began changing the urban systems at play. The New Central Bus Station never met the predicted occupancy because fewer people were using public transit by the time it was completed, as there was an increase of privately owned cars in the city. In Neve Sha'anan, property value decreased as the sex industry grew and drug dealing became more common, causing the more affluent population to leave the neighborhood.

The neighborhood attracted two waves of immigrants: refugees and labor migrants from Africa and Asia starting in the 1980s, and Jewish immigrants from the former Soviet Union in 1990. The African asylum seekers, refugees from persecution in their home countries, entered Israel through the southern tip, bordered with Egypt, were held at a detention center, then bussed north and dropped off at the Central Bus Station, without resources to leave. According to the Israeli government, 30% of foreign workers are in the country illegally, and 80% of the foreign population lives in south Tel Aviv, crammed into tenements near the New Central Bus Station.<sup>2</sup>

The community of Neve Sha'anan makes up the lowest income bracket in Israel, but contains the most diversity in the country.<sup>3</sup> The New Central Bus Station did not improve the living conditions of the inhabitants as predicted by the architect and planning team, but rather created environmental hazards due to poorly ventilated bus terminals and perpetuates the image of the area as a neglected slum. The enclave within the city is known for violence and crime by its surrounding neighbors and the municipality.

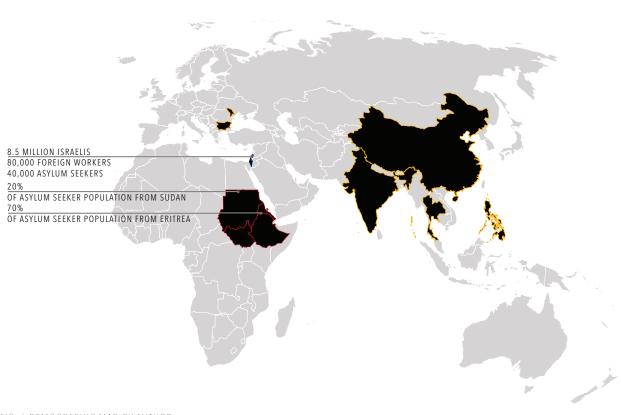


FIG. 6 DEMOGRAPHIC MAP, BY AUTHOR

Both the Asian and African migrants and Israeli inhabitants of Neve Sha'anan suffer discrimination at the hands of the authorities for resources and equal distribution of urban services. In 2013, Prime Minister Benjamin Netanyahu closed the southern border with Egypt and implemented multiple policies aimed at making life more difficult for those seeking asylum in Israel. The state policy for those who have already crossed the border is referred to as "group protection"; their only right is a temporary stay on deportation, and they must renew their visas every 1-3 months. These policies sanction businesses that hire illegal immigrants, and push "voluntary" departure to leave Israel for unnamed third countries in Africa. Prime Minister Netanyahu stated that "[the closing of the border] is a strategic decision to ensure the Jewish and democratic character of the state of Israel. Israel will remain open to war refugees but we cannot allow thousands of illegal workers to infiltrate into Israel via the southern border and flood our country." There is a shift in the social exchange of the population as the strategic plan and municipality policy evolves between the Israeli formal citizens and the refugees and labor migrants, who are regarded as "temporary" and a social threat to the "Jewishness" of the state of Israel. This shift creates tension between the two communities, resulting in fear and alienation.

The construction of the New Central Bus Station led to the area's further deterioration. The community of Neve Sha'anan has attempted to adapt to the megastructure, utilizing the bus station as a commercial center and place of gathering. Yet there is an architectural opportunity to formally reactivate the megastructure for the community.



FIG. 7 INTERSECTION OF LEVINKSY ST AND DAVID TZEMACH BY MAIN ENTRANCE OF BUS STATION



FIG. 8 AERIAL PHOTO OF THE NEW CENTRAL BUS STATION



FIG. 9 OLD CENTRAL BUS STATION. CLOSED IN 2009



FIG. 10 COLIN AND ZEHAVI PLAN FOR A 2 STORY STATION 1960

#### THE NEW CENTRAL BUS STATION

The idea of the Tel Aviv New Central Bus Station was first conceived in the 1950s. At this time, Tel Aviv was already a relatively large metropolitan center with 400,000 residents. The old station, which opened in 1942, was extremely crowded and considered inadequate for the needs of the growing city and new nation.

Originally, the Ministry of Transportation proposed renovating and expanding the existing station, but Israel's Minister of Transportation thought a new station was needed and promised to support it financially. Indecision on the station's location began in 1960. A committee was established and recommended a two-station model, one north, adjacent to the train station, and the other south, not far from the original station. This model was intended to connect various parts of the city, creating one continuous urban fabric. This scheme was contested, as the municipality believed it would be too costly. The mayor explored the possibility of building a new station where the old one stood. The engineering and transportation company Colin and Zehavi designed a two -tory station, which was quickly rejected in 1963 because the building seemed too modest to be the central station of a growing city. The municipality conducted a survey of bus station typologies in other developed countries and concluded that they needed a scheme which combined transportation and commerce.

Arie Plitz, an entrepreneur and contractor, started purchasing land in the neighborhood of Neve Sha'anan in the early 1960s. Plitz convinced the municipality to build the New Central Bus Station on his 10 acre open lot, only 500 kilometers from the old station, allowing for the development of the station to be at a scale appropriate to Tel Aviv. He offered to cover the cost of construction and consequently own the building and shopping mall. The municipality accepted the offer because it solved the financing dilemma, even though it privatized a national infrastructure project. A central bus station combining commercial activity with national transportation seemed fit appropriate architectural typology for revitalization of the neighborhood that lost its purpose as the business district, and was expected to bring the area large crowds of passengers and shoppers.

In 1964, Plitz, not satisfied with the most recent scheme designed by architect Joseph Werner Wittkower, hired Ram Karmi to design him "the largest and most advanced bus station in the world."<sup>7</sup>

"In many ways, the Tel Aviv New Central Bus Station's history is the history of a society's faith in the megastructure, a late 1960s contemporary architectural model that seemed to the planners of the time best suited to the task of advancing society."

- Eran Neuman

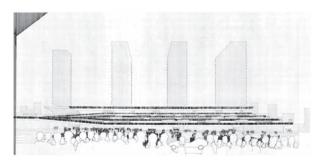


FIG. 11 ELEVATION OF SECOND PROPOSAL 1965



FIG. 12 INTERIOR PERSPECTIVE OF COMMERCIAL SPACE 1966

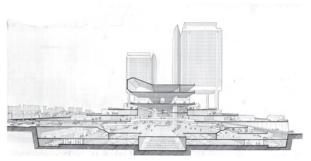


FIG. 13 SECTION PERSPECTIVE OF THIRD PROPOSAL 1966



FIG. 14 THE STATION UNDER CONSTRUCTION

Karmi graduated from the Architectural Association in London in 1956. During his time there, he was exposed to ideas of brutalist architecture, and adopted the Corbusian-French attitude to a new style, challenging the plasticity of concrete, its exposure, and reorganization of building functions. Karmi was intrigued by the emerging global architecture idea of the megastructure as an "urban structure for the future."

"The gate of the city is the carte de visite of the city... it wants to say what kind of society there is in the city."

– Ram Karmi

The initial planning phase with Karmi began in 1965, advertised by the station's entrepreneurs as 'a city under a roof.' The first iteration divided the station into two parts: the lower accommodating the buses and the upper to include residential, a high-rise hotel and office tower, and a rooftop garden, directly inspired by Le Corbusier's Unite d' Habitation. The second proposal grew in size, exploring the integration of the architectural functions, improving spatial qualities of the megastructure by externalizing the bus traffic, and expanding the internal commercial leisure area.

Plitz enacted a global campaign in 1965 to finance the project, selling 700 retail spaces to French-Jewish families wanting to invest in Israel, requiring Karmi to go back to the drawing board to design an even larger version of the station. The bus platforms were pushed further from the buildings edges, and the central commercial zone expanded to become the largest programmatic element, but Plitz was not satisfied.<sup>8</sup>

In the final iteration, Karmi designed an extension of the building with secondary and tertiary commercial systems in corridors parallel to the central hall. Plitz's yearn for the largest and most advanced station in the world resulted in a lack of clarity due to multiple and massive circulation systems, preventing the building's users from being able to perceive the structure in its entirety.

Today, the Tel Aviv New Central Bus Station occupies 7 floors and 220,000 square meters: 40,000 for retail, 25,000 for parking, and the rest for the two bus companies.<sup>9</sup>

It opened in 1993, 33 years after the conception of a new station and experienced commercial failure immediately, as the location was not attractive to the upper class Tel Aviv population. 70,000 passengers pass through daily but over half of the stores are vacant. The Central Bus Station's construction and operation is accompanied by public critique for the exaggerated size and detrimental environmental impacts on the surrounding neighborhood. The ultimate reason of why the station and neighborhood are disassociated is rooted in the paradox of parallel functions required of the station. The initial concept of a 'city under a roof' does not create the intended connectivity with the neighborhood, the environment, and overall metropolitan region of Tel Aviv.

With the Tel Aviv 2025 master plan, the municipality has acknowledged the need for a decentralized transportation system for the linear city, but has yet to figure out an alternative use for the Tel Aviv New Central Bus Station.



FIG. 15 CLASSIFICATIONS OF COLLECTIVE FORM BY FUMINKO MAKI



FIG. 16 UNITE D'HABITATION IN CONTEXT

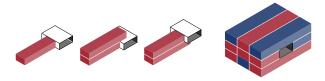


FIG. 17 MODULAR RESIDENTIAL UNITS, AND AGGREGATION OF MODULES, UNITE D'HABITATION, BY AUTHOR

### THE MEGASTRUCTURE

The megastructure is a post-modernism architectural concept of a city encased in a single building, popularized by futurist proposals and architectural experiments in the 1960s. The term references how one structure can create a frame for infrastructure, utilities and modular units to interconnect and expand. Ralph Wilcoxon distinguished megastructures to four characteristics in his 1968 megastructure bibliography. The megastructure is not only a structure of great size, but also a structure that is frequently:

- 1. Constructed of modular units
- 2. Capable of great or even "unlimited" extension
- A structural framework into which smaller structural units (for example, rooms, houses, or small buildings of other sorts) can be built
  - or even "plugged-in" or "clipped-on" after having been prefabricated elsewhere
- 4. A structural framework expected to have a useful life much longer than that of smaller units which it might support <sup>10</sup>

Fuminko Maki writes in Investigations in Collective Form in 1964, "The Megastructure is a large frame in which all the functions of a city or part of a city are housed... in a sense it is a man-made feature of the landscape."

When discussing the concept of the megastructure, the architectural critic Reyner Banham must be noted. In Theory and Design in the First Machine Age, published in 1960, Banham links modernism to build structures in which functionalism was the subject to the formal strictures, alluding to the notion of the megastructure. In the 1965 "A Clip-On Architecture", Banham reviews the futuristic utopian megastructure proposals, claiming the megastructure's combination of extendable supporting structures and modular, flexible contents as the paradigm of a renewed modern architecture. 12

Architect Ram Karmi references the famous megastructure, Le Corbusier's Unite d'Habitation, in the design of the Tel Aviv New Central Bus Station. Completed in 1952 in Marseilles, France, Unite d'Habitation is a large complex for 1600 residents, designed as a community that one would encounter in a neighborhood. It creates a communal living environment to shop, play, live and come together in a 'vertical garden city.' A villa is placed within a larger volume, allowing inhabitants to have private quarters, while providing the amenities of the public sector. Le Corbusier imposes the first element of the megastructure, constructed modular units, developing a system of individual cells to be aggregated to provide dwelling types of various sizes. Unite d'Habitation implies a utopia of the social unit, "an ordered ideal condition that should be striven for, both architecturally and socially." <sup>13</sup>

- "The megacities require megastructures... The megastructure does not yet exist, but it must, and it will. It will if the management is ready. It will if the public is ready. Above all, it will when our civilization is ready to create architecture."
- Phillip Johnson

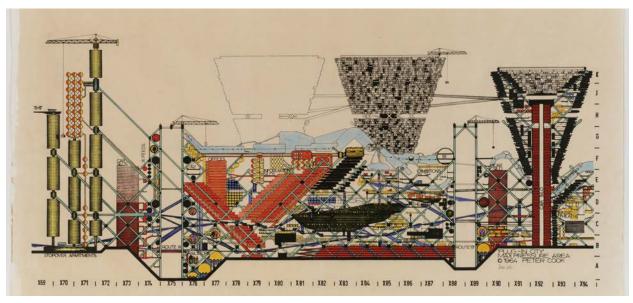


FIG. 18 PROGRAMMING ILLUSTRATION OF PLUG-IN CITY

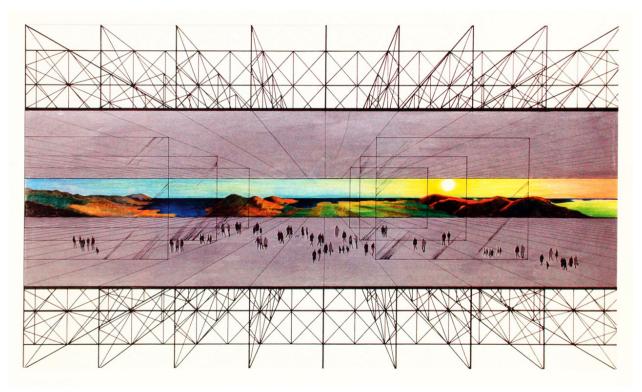


FIG. 19 SECTION ILLUSTRATION OF NO-STOP CITY

In the 1960s, radical architecture groups emerged, challenging cultural and architectural norms of the modernist movement through theoretical utopian ideals. Using illustrations and writing, the group Archigram produced a vision of a consumerist city, dynamic architecture inflecting contemporary culture of a faith in technology and optimism of resources. In 1964, Archigram created "Plug-In City", one of many proposals fantasizing a new approach to urbanism. It was a series of modular residential units, plugging in to a central infrastructural mega-machine. Archigram suggests a constantly evolving megastructure, incorporating residences, transportation and other essential services, all movable by giant cranes.

Archigram was formed at the Architectural Association in London in 1961.

Archigram influenced many other groups to challenge architecture to engage socially and politically, including the utopian group Archizoom. They produced a series of projects and essays that critiqued modernism and explored the idea that advanced technology could eliminate the need for a centralized city. Their ideals were most notably displayed in the "No-Stop City", a set of drawings and photomontages, showing an infinitely extending grid, subdivided by partial lines symbolizing walls and interrupted only by natural features.

Archizoom was established in Florence in 1966 by four architects, Andrea Branzi, Gilberto Corretti, Paolo Deganello, Massimo Morozzi, and two designers, Dario Bartolini and Lucia Bartolini. Archizoom responded to Archigram's consumerist logic, leading the anti-design or radical movement in Italy.

The fantastical designs from this movement, although never realized, mark a shift from architecture conceived as static building, to architecture as a form of cultural critique, as well as a social and political practice. The Tel Aviv New Central Bus Station must be reexamined and critiqued to adapt the megastructure into society. The reconfiguration of the megastructure must reference the theory of its systems to capitalize on its growth as an asset to the neighborhood.

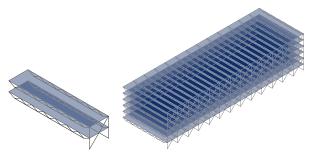


FIG. 20 MODULAR TRUSS SYSTEM, AND AGGREGATION OF MODULES, CENTRE POMPIDOU, BY AUTHOR

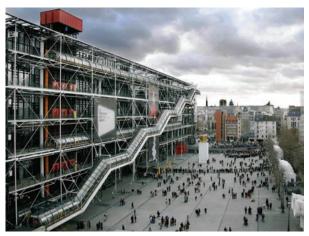


FIG. 21 PIAZZA OF CENTRE POMPIDOU

One of the most influential built megastructures is the Centre Pompidou, designed by Richard Rogers and Renzo Piano in Paris, France 1977. The competition resulted in a radical and controversial reinvention of an exhibition and cultural center. The design is an apotheosis of Archigram, questioning opinions on consumerism and heroism in design, as well as the concept of the megastructure. The Centre Pompidou reflects the supreme monument of technology as a single building, serving as a complex. The main gesture of the structure is the inversion of program, with service and structure on the exterior.

The Rogers Piano duo won the competition for the cultural center including four major programmatic elements: the Museum of Modern Art, a library, a center for industrial design, and a center for music and acoustic research, as well as a car park, restaurant and supporting services

The design expressed ideas of transparency, integrating the public's role and interaction with the building, in response to the student riots in France against capitalism, consumerism and institutions. The openness of the building and piazza provides a platform for residents and activists to voice concerns in an open forum. The French public in general is highly critical of the megastructure intent of the Centre Popmidou. To many, the monument is an example of what the establishment sees as its role in bringing culture to the French society. The critics propose a 'real innovation': to design a series of complementary cultural facilities covering a single or several needs, integrated into the district, creating a more dispersed cultural network. <sup>14</sup> The challenging of the configuration of the Centre Pompidou and subsequent proposal for a different formal approach to the megastructure highlights the lack of community engagement in the built design of the megastructure.

Only a decade after Banham wrote on the megastructure, he famously exclaimed, "Megastructure is dead. It is thus high time to place it within the history of architecture," characterizing megastructures as "dinosaurs of the modern movement," posing the question of how we integrate the existing megastructures that impede and block our societal systems back into the urban fabric, while acknowledging present day cultural and political conflicts. The main elements of the megastructure theory, the module on the infinite grid, can be tactically merged with the existing urban network, rather than replace it.

<sup>&</sup>quot;Had anyone set out deliberately to memorialize the Megastructure Age the rest must surely look like this."

<sup>-</sup> Architectural Review

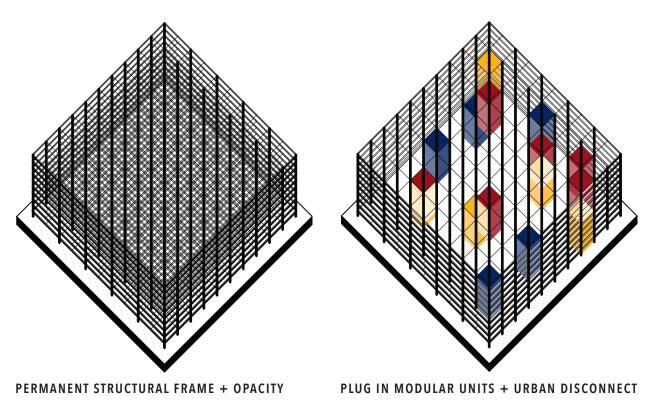
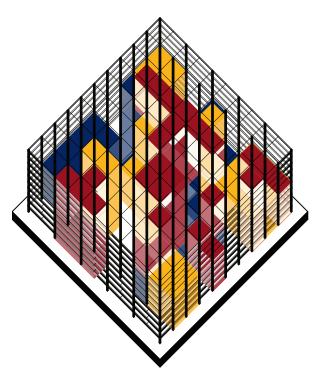


FIG. 22 THE MEGASTRUCTURE CONDITIONS, BY AUTHOR



ORGANIZED DISORGANIZATION

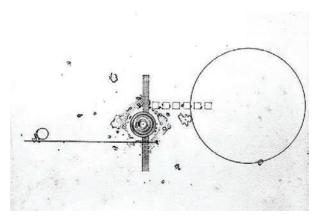


FIG. 23 IVAN LEONIDOV CLUB OF A NEW SOCIAL TYPE

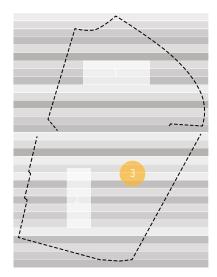


FIG. 24 OMA PARC DE LA VILLETTE DIAGRAM

### THE SOCIAL CONDENSER

The term "social condenser" originated in the early 20s in the post-revolutionary Soviet Union by a group of urban theorists of "The Association of Contemporary Architects", a Russian architectural organization. Derived from the constructivist movement, the social condenser identifies architectural or urban structures that will serve as a catalyst for the transition of the society. Moses Ginzburg, one of the most prominent figures of the constructivist wave declared that the goal of architecture had changed. Architecture was not merely the erection of buildings, but the transformation of the nation's way of life.

The social condenser was viewed as a 'mechanism for transforming habits' of various scales. In his thesis *Strategic Way of Design in Rem Koolhaas Parc de la Villette Project*, Ozay Ozkan identifies the multitude of forms the social condenser takes: "It could be a housing unit for a collective way of living (e.g. Ginzburg's Narkomfin Housing Block), a complex for communal cultural activities (e.g. Leonidov's Palace of Culture for the Proletarskii district of Moscow), and a city for a new way of urban life (e.g. Leonidov's Socialist Settlement at Magnitogorsk)." Although with varied program, all social condensers are loaded with program, which condense tools for reconstructing society, and attempt to collectivize activities.

Ivan Leonidov explored the mechanisms of the social condenser in his experimental design for the "Club of a New Social Type" in 1929. Leonidov claimed the existing club design as inefficient to solve problems of cultural organization of the working class and developed a new approach to the works club as a 'method of cultural organization' and 'the organization of consciousness.' The social club was conceived as a park, containing the ordinary cultural and educational facilities, with extended program of sports areas, winter gardens and open grounds. The club was designed in a linear formation with four specific programmatic sectors, each then subdivided using a gridiron pattern to further accommodated the proposed facilities.

Rem Koolhaas and his office OMA are known for producing many modern interpretations of the social condenser. Koolhaas studied Leonidov, and experimented and adapted the theory starting in his book Delirious New York. Leonidov designed for the social role that a condenser ought to play in a rapidly changing society, whereas Rem Koolhaas attempts to define the social condenser as part of a programmatic architectural process.

- "Like the electrical condensers that transform the nature of the current, the architects proposed the social condensers were to turn the self centered individual of the capitalistic society into a whole man, the informed militant of socialist society in which the interest of each merged with the interests of all."
- Anatole Kopp

- "Take the section of the typical skyscraper and put it on its side; now declare each floor a different program; distribute recurrent obligations mathematically across the site in intervals dictated by need; design one (or more) symbolic elements (1, 2, 3) to acknowledge" eternal" human values. Instead of treating "park as the opposite of the city- a programmatic non-entity, this approach demonstrates that the park can sustain program with superior ease."
- OMA "Content"

Koolhaas designates the term as "a layering upon vacant terrain to encourage dynamic coexistence of activities and to generate through their interference, unprecedented events." In the book Content, he claims a series of patents, labeled "Universal Modernization Patent", with social condenser as the first. The design methods and strategies suggested in the redefining of the term are implemented in the Parc de la Villete project. It "combines architectural specificity with programmatic indeterminacy" to design for program too large for the site. The social condenser works as a generator of various activities existing in harmony with each other. The design began by laying the section of a skyscraper, the most formal example of the condenser, on the site. The strips of the section are multiplied north and south to become the grid, the signifier of the system. Program is dispersed strategically across the site, causing congestion and collision with the environment.

The social condenser is intended to break down perceived hierarchy in an effort to create more equitable space. Program is intentionally overlapped to create moments of collision, which generate a circulation path and programmatic relationships. The nodes of collision create an environment for interaction of disperse social groups. The intervention of the Tel Aviv New Central Bus Station must dissect the megastructure to create a social condenser of networked program, both on newly carved out vacant terrain as Koolhaas suggests, as well as parasitically, reaching into the shell of the bus station, and multiplying modularly.



FIG. 25 PENN STATION GRAND HALL 1920



FIG. 26 PERFORMERS USING THE LOWER LEVELS OF THE BUS STATION AS THEIR STAGE



FIG. 27 'LA RAMPA' COMMUNITY GARDEN BY ONYA COLLECTIVE

# PLACE-MAKING, INTERVENTION AND CONNECTION

To combat the megastructures standing in today's society, we must adapt to the scale and reconfigure invasive megastructures to rejuvenate urban connectivity. Architects and community members have taken various approaches to the idea of intervention and place-making to generate a more suitable communal space within the megastructure.

Historically, transportation within any urban context is monumentalized by a central station for connection and passage. Transportation infrastructure "may be seen as the ultimate public space: it is generally paid for by public authorities, it is accessible to almost everyone, and it marks a common itinerary or a collective place."<sup>18</sup>

Transportation took on an urban image in the 19th century, as the popularization of train travel grew. Early train stations in large cities, such as Penn Station in New York, were designed as gathering places for passengers of different social strata. The generalized democratization of space shifts the articulation of the public realm. The grand hallways within the stations constituted important public spaces, creating the transition between the city and the voyage. Transportation infrastructure has continued to evolve in the age of globalization and technological advancement, but has resulted in failing infrastructure, lacking integration within the urban fabric.

Tactical urbanism has been applied to the Tel Aviv New Central Bus Station recently, temporarily dividing up the massive spaces, promoting creative place-making for the megastructure. 40% of the bus station is occupied and is home to a conglomerate of retail and services. The main atrium of the building is a Filipino market, with ramps sprouting from all sides, dense with clothing stores, sex stores and cheap eateries. Artists rent out the cheap, vacant retail space as studios. There are also four synagogues, three churches, a pet store, a tattoo parlor, a Yiddush library, a refugee advocacy organization, two clinics, a movie theater and a bomb shelter all within the megastructure. 19

A group of activists called the 'Onya Collective' are working to turn some of the residual space into a center for urban ecology. A community garden has been created on a ramp into the building, previously a trash-filled pedestrian passageway to a vacant lower floor of the station. Large murals and graffiti cover the walls of the upper two floors, and on the floor beneath them, a dance group rehearses. The station is still active for bus transport, but the majority of the building is through dynamic reconfiguring by the surrounding community.

- "The experience of place marks the beginning and the end of every architectural and urban design project."
- Kim Dovey



FIG. 28 A TRAIN RUNNING UNDER THE SCULPTURE PARK



FIG. 29 ENTRY OF IIT CAMPUS CENTER

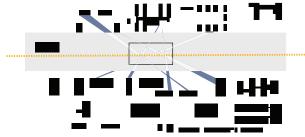


FIG. 30 IIT CAMPUS CENTER CONNECTIVITY, BY AUTHOR

As stated in *The Landscape of Contemporary Infrastructure*, infrastructure fails when it is solely the accumulation of a large object in isolation of its surroundings. Urban landscape and infrastructure must merge, and movement corridors must be reworked to become new vessels of collective life.<sup>20</sup> Infrastructure needs to enhance the quality of the urban landscape to function, fit and be accepted.

The Seattle Olympic Sculpture Park formulates a series of design mechanisms to unite urban landscape and infrastructure. It was "conceived as an artificial topography and as a landform, one which totally transforms the surface of the ground to create a public domain and a landmark within the space-endlessness of the megalopolis." The site is severed from the city from a railroad line and large thoroughfare on an oil transfer facility. The existing infrastructure was transformed into a vibrant civic area, bridging over the railway and street to provide a pedestrian friendly destination.

Another pertinent example of integration and intervention of infrastructure is McCormick Tribune Campus Center IIT by OMA. The campus center is situated next to the tracks of the Chicago Transit Authority commuter trains. The design of the center utilized the preexisting crisscrossing footpaths underneath the tracks to influence layout. The design required a solution to mitigate the raised train infrastructure from the campus environment. A steel-clad tube sits atop the building proper, encasing the tracks. It was designed to muffle the noise and vibration of the train, but is an integral feature of the overall campus complex.

The larger concept of place-making as an architectural, urban, anthropological, geographical, psychological, environmental and cultural factor is incorporated in the intervention and connection of infrastructure. 'Place' is defined as both a geographic entity, as well as an element carrying meaning. Place-making goes beyond 'placeperception', a passive understanding of place, to imply both an active and passive role of the place's maker and user. "Today's place-making represents a comeback for community. The iterative actions and collaborations inherent in the making of places nourish communities and empower people."22 Place-making began with the seminal works of people such as Jane Jacobs, Kevin Lynch and William Whyte, who in the 1960s, the same decade of the popularization of megastructures, promoted a new way to analyze public spaces by prioritizing people and communities rather than efficiency and aesthetics. Place-making seeks to nurture an authentic sense of place through a multitude of interventions of all scale, with goals to improve public space, generate public discourse, support communities, and grow cultural and social justice. The output of these efforts are broad and are intended to continue develop. The relationship of place and community is a 'virtuous cycle', "communities transform places, which in turn transform communities, and so on."23

<sup>&</sup>quot;Once married with architecture, mobility, and landscape, infrastructure can more meaningfully integrate territories, reduce marginalization and segregation, and stimulate new forms of interaction."

<sup>&</sup>quot;There is no logic that can be superimposed on the city; people make it, and it is to them, not buildings, that we must fit our plans."

Jane Jacobs

Understanding how the community of Neve Sha'anan has repurposed the Tel Aviv Central Bus Station serves as catalyst for future, more permanent reconfiguring to reconcile political and cultural conflict and create place identity through architectural intervention. The bus station evolved into the failed megastructure that stands today because of the convoluted spatial arrangement, the scale and magnitude, and complex socio-economic and cultural situation of Neve Sha'anan. The New Central Bus Station provides spatial expression for the social, political, and cultural issues surrounding the refugee conflict in Tel Aviv. The large urban scheme functions as an outlet, which reflects the society's spatial psyche, forcing Israeli society to face the difficult conditions of the neglected and violent area of Neve Sha'anan. By integrating the urban landscape through the megastructure, tactical place identity emerges, penetrating and transforming the 'white elephant' of Tel Aviv into part of the heterogeneous urban fabric.

### ENDNOTES

- 1. The Population and Migration Authority. *Policy Planning Division* Edition no. 2016/2.
- Goldstein, Evan. "Does Israel Have an Immigrant Problem?" Foreign Policy, 22 Jan. 2010, foreignpolicy. com/2010/01/22/does-israel-have-an-immigrantproblem/.
- 3. Fenster, Tovi, and Haim Yacobi. "Whose City Is It? On Urban Planning and Local Knowledge in Globalizing Tel Aviv-Jaffa." *Planning Theory & Practice*, vol. 6, no. 2, 2005, pp. 191–211.
- 4. African Refugee Development Center, Israel, www.ardc-israel.org/refugees-in-israel.
- Green, Andrew. "Inside Israel's Secret Program to Get Rid of African Refugees." Foreign Policy, 12 Oct. 2017, foreignpolicy.com/2017/06/27/inside-israelssecret-program-to-get-rid-of-african\_refugees\_ uganda\_rwanda/
- Neuman, Eran. "Ram Karmi and the New Central Bus Station in Tel Aviv." Architectural Theory Review, vol. 20, no. 2, Apr. 2015, pp. 202–227., doi:10.1080/ 13264826.2016.1146317.
- Amdur, Liron, and Marina Epstein-Pliouchtch. "Architects' Places, Users' Places: Place Meanings at the New Central Bus Station, Tel Aviv." *Journal of Urban Design*, vol. 14, no. 2, 2009, pp. 147–161.
- 8. Neuman, Eran.
- 9. Fenster, Tovi.
- 10. Whiteley, Nigel. Reyner Banham: Historian of the Immediate Future. MIT Press, 2002.
- 11. Ley, Sabrina van der. Megastructure Reloaded: Visionary Architecture and Urban Planning of the 1960s Reflected by Contemporary Artists. Hatje Cantz, 2008.
- 12. Banham, Reynar. "A Clip-On Architecture." *Design Quarterly*, no. 63, 1965.
- 13. Janson, Alban, et al. Le Corbusier: Unite D'habitation, Marseille. Edition Axel Menges, 2007.
- 14. Ley, Sabrina van der.
- Ozkan, Ozay. "Strategic Way of Design in Rem Koolhaas' Parc De La Villette Project." 2008.
- 16. Koolhaas, Rem. Content. Taschen, 2004.
- 17. Koolhaas, Rem, and Bruce Mau. S, M, L, XL. Monacelli Press, 1998.
- 18. Shannon, Kelly, and Marcel Smets. The Landscape of Contemporary Infrastructure. 2016.
- 19. Lidman, Melanie. "In Tel Aviv, a Concrete Elephant Goes from Blight to Bloom." *The Times of Israel*, www.timesofisrael.com/in-tel-aviv-a-concrete-elephant-goes-from-blight-to-bloom-2/.
- 20. Shannon, Kelly.
- 21. Frampton, Kenneth. Megaform as Urban Landscape: 1999 Raoul Wallenberg Lecture. 1999.
- 22. Silberberg, Susan. What's Your Place in the World?
  Building Community in the Heart of Every City. Mashable
  Social Good Summit, 2013, livestream.com/
  Mashable/sgs2013/videos/30705080.
- 23. Silberberg, Susan, et al. "Places in the Making: How Placemaking Builds Places and Communities." *MIT Department of Urban Studies and Planning*, 2013.

### **FIGURES**

- 1. Image by author
- 2. Azrieli Architectural Archive, Ram Karmi Collection
- 3. Image by author
- http://www.israelnationalnews.com/News/News.aspx /234788
- https://www.timesofisrael.com/in-tel-aviv-grotesquebeauty-at-the-end-of-a-bus-ride/
- 6. Image by author
- https://commons.wikimedia.org/wiki/File:Tel\_Aviv\_ Central\_Bus\_Station,\_Levinsky\_St.,\_Neve\_Sha%27 anan.jpg
- https://www.google.com/url?sa=i&rct=j&q=&esrc= s&source=images&cd=&ved=0ahUKEwj7upnjz\_XW AhXpylQKHTVcCjAQjhwIBQ&url=https%3A%2F% 2F99percentinvisible.org%2Fepisode%2Fstop-that-bus %2F&psig=AOvVaw1hHpE8CXYlrAALLwKIICu1& ust=1508259808803295
- http://www.museumsinisrael.gov.il/en/items/Pages/ ItemCard.aspx?IdItem=ICMS\_EIM\_MHZ99.2011.8
- 10. Azrieli Architectural Archive, Ram Karmi Collection
- 11. Azrieli Architectural Archive, Ram Karmi Collection
- 12. Azrieli Architectural Archive, Ram Karmi Collection
- 13. Azrieli Architectural Archive, Ram Karmi Collection
- 14. Ram Karmi Architects
- Maki, Fumihiko. Investigations in Collective Form. School of Architecture, Washington University, 1964.
- https://www.dezeen.com/2014/09/15/le-corbusierunite-d-habitation-cite-radieuse-marseille-brutalistarchitecture/
- 17. Image by author
- 18. https://www.moma.org/collection/works/797
- 19. https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&ved=0ahUKEwi28p\_4lPTWAhVI0YMKHXtUA9MQjhwIBQ&url=http%3A%2F%2Facademies.sectioncut.com%2Fcollections%2Fno-stop-city%2F&psig=AOvVaw1IUHmbrYrEzNmoThQK\_Dmf&ust=1508209653722772
- 20. Image by author
- 21. http://www.worldfortravel.com/2015/04/15/the-centre-georges-pompidou-paris-france/
- 22. Image by author
- https://i.pinimg.com/originals/75/5e/ d1/755ed19d3854846d9c868babb2b244f4.jpg
- 24. Image by author
- 25. http://wirednewyork.com/forum/showthread.php?t =16934
- 26. http://blogs.timesofisrael.com/10-cool-things-to-do-in-tel-aviv/
- 27. http://www.oekorausch.de/en/onya-collective/
- 28. http://www.archdaily.com/101836/olympic-sculpture-park-weissmanfredi/bb-aerial-01/
- 29. http://oma.eu/projects/iit-mccormick-tribune-campus -center
- 30. Image by author

# PRECEDENTS + CASE STUDIES

CITY EDGE

NO-STOP CITY

WEXNER CENTER FOR THE ARTS

BIO-CONNECTIVITY

SEATTLE OLYMPIC SCULPTURE PARK

WILLEM II PASSAGE

# CITY EDGE

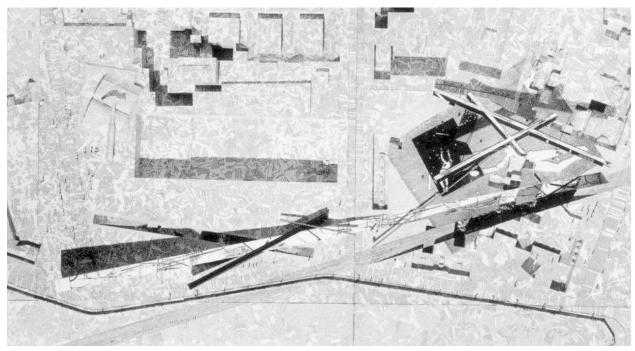


FIG. 1 PLAN DIAGRAM

# Daniel Libeskind - Berlin, Germany - 1987

"The project exploits the logic of that wall, the violent slicing up of territory. The bar is an abstraction of the wall, slicing through the city, breaking fragments of the old city structure. But then it subverts the logic of the wall by lifting itself up and creating a new public street below: it becomes a device for breaking down divisions rather than establishing them."

— Philip Johnson

The City Edge is a competition submission by Daniel

Libeskind for an office and residential development in the Tiergarten district of Berlin. The structure is a monumental bar, angled from the ground to reach a point, ten stories high, overlooking the Berlin Wall. The wall is dismembered, twisting and crossing over itself, intended to exploit the concept of conflict and its "ability to simply define enclosure." Libeskind designed a rational grid which was fractured by a series of decentered spaces, cut by aimless, folded lines, and scattered to dislodge from the orthogonal structure. The symbolic slicing of the wall, utilizing the Constructivist motif, created a

subversion of the walls that defined the bar itself. This project is relevant to the thesis, as it is a reconfiguration

of an existing structure to generate public space.







FIG. 2 COLLAGE DIAGRAMS

### NO-STOP CITY



FIG. 3 PROJECT PHOTOGRAPH

### Archizoom Assosciati - 1966-1972

"The real revolution in radical architecture is the revolution of kitsch: mass cultural consumption, pop art, an industrial-commercial language. There is the idea of radicalizing the industrial component of modern architecture to the extreme."

-Andrea Branzi

No-Stop City was a set of drawings by Archizoom Associti, an Italian avant-garde group founded in 1966. The project demonstrates that advanced technology could eliminate the need for a centralized modern city. It serves as a reaction against modernist architecture, "exploring the imaginative at the expense of the practical." The plans illustrate a fragment of a metropolis that can extend infinitely, using additive homogeneous elements, adapted to a variety of uses. Free-form shapes are placed, breaking the grid structure, allowing the urban fabric to subdivide and spread, which reveals a lack of a city centroid as well as periphery. The proposal, committed to the political intent, "questions the character of the existing city and defends new conceptions of life as expressed in revolutionary urban form." No-Stop City can be referenced in the thesis by utilizing the infinite grid and modular qualities of the design.

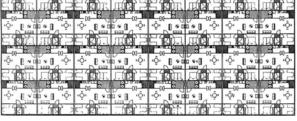


FIG. 4 PLAN DIAGRAM

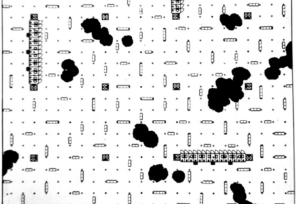


FIG. 5 PROGRAM PLUGGED INTO INFINITE GRID

# WEXNER CENTER FOR THE ARTS



FIG. 6 WEXNER CENTER IN CONTEXT

### Peter Eisenman - Columbus, Ohio - 1989

The Wexner Center, designed by Peter Eisenman, projects his ideals of the deconstructivist era. Like much of Eisenman's work, strong grid systems dominate the form of the building. He pulls from the mismatched street grids of the university campus and the city of Columbus to place the Wexner Center, alternating the grid it follows. The degree variation between the two grids results in an axial rotation within the museum, with corresponding tectonic elements. This creates jarring moments of intersection as the two systems compete. A 540-foot long "scaffolding" structure runs through the core of the building that extrudes the planar grid systems into a three-dimensional matrix. It is deliberately meant to look incomplete, rejecting preconceptions of solid and void as fixed properties of architecture. The structure plays a spatial role by delineating and projecting organization throughout the site, while also creating an axis of circulation. The Wexner Center addresses architectural challenges when designing within existing context, and provides methods for integration while intervening.

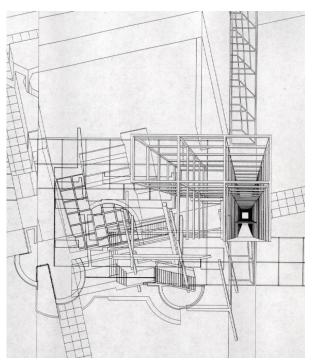


FIG. 7 AXONOMETRIC DRAWING

# BIO CONNECTIVITY - AN URBAN SCENARIO



FIG. 8 PERSPECTIVE RENDER

# Advanced Architecture Group - Rio de Janiero, Brazil - 2050

"Can we engage Hyper Regions with Slow Cities? How do we approach urban barriers and connection corridors?"

Bio-Connectivity is a project based on educated speculation of how the urban scenario of Rio de Janeiro will be in 2050. The project is an intervention of infrastructure at the urban scale, engaging the existing context while projecting future functions.

It starts with two guiding questions: "When a residential district mixed with degradation of industry has characteristics of a Slow City and a business district mixed with infrastructure cores resembles a hyper region, how do you make these work together?" and "How can we transform a limitation into a new possibility of public contact? In the close future, can we condense transport into a series of super efficient veins and make pedestrian movement better?"

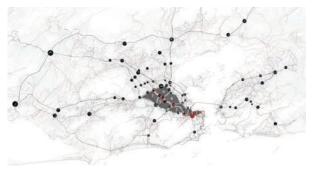


FIG. 9 NODES OF RIO DE JANIERO



FIG. 10 GROUND FLOOR PLAN

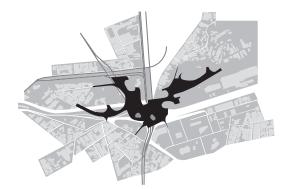
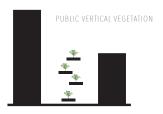
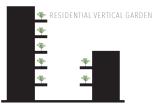
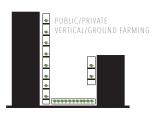


FIG. 11 FIGURE GROUND OF INTERVENTION, BY AUTHOR







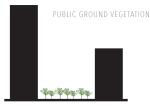


FIG. 12 TYPES OF BIOREACTORS, BY AUTHOR

First, the project speculates what Rio de Janiero would look like, and what the needs and lifestyle will be in 2050. There are speculations of new private transport with self-driving cars, a more efficient and personalized public transport system, new modes of food production, and evolved lifestyles. Second is a study of the main nodes of infrastructure, and how to maintain, demolish and reuse. Lastly, Bio-Connectivity analyzes the existing functions to understand how reliant to the area they are.

The project results in a structure that connects the areas of high intensity with the low, providing necessary functions, and fostering cooperation and openness. It seeks to overcome the blocking barrier of the heavy infrastructure, analyze and apply mobility patterns, create areas of multi-functionality coexistence, and delineate open public spaces to connect different functions, zones and realities.

The overall form of the project incorporates the speed of mobility and the spreading of different functions towards context. The program consists of a public plaza, museum, a residential community, offices, and connectivity branches. All program volumes are connected on the ground level, spread to reach the surrounding urban fabric on all sides. The volumes differentiate at the upper levels, separating functions and activities. The project features a series of bioreactors, consisting of open public space, microclimates, and a new housing typology. The bioreactors are utilized in the museum typology, open public space, tree canopy shade, vertical farming, and passive cooling systems.

This project is important to the thesis as it addresses transportation infrastructure in the development of urban life.



FIG. 13 SECTIONS THROUGH URBAN CONTEXT

# SEATTLE OLYMPIC SCULPTURE PARK



FIG. 14 OCCUPIED PARK

# Weiss/Manfredi Architects - Seattle, Washington - 2001-2007

"This is a unique site, and trains and roadway are part of the city, but with the vista of the Olympics, we wanted a superimposition of a new layer on to the city."
-Michael Manfredi

The Seattle Olympic Sculpture Park is the winning design of an international competition for the Seattle Art Museum. The project creates a new model for an urban sculpture park, situated on a waterfront industrial site. The park transforms an obsolete brownfield site, cut off from the urban fabric by a large oil transfer facility, into a civic space. The area was severed from the city by a railroad line as well as four lanes of traffic. The project is a passageway from high ground to the water, creating an open park of domesticated infrastructure in the middle of the city. "We designed a 'chameleon section' that tries to tie into every environment, from completely architectural to complete landscape, as it goes up the hill," says Weiss.

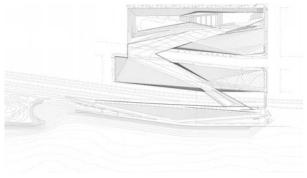


FIG. 15 PLAN



FIG. 16 RAILROAD CONNECTION

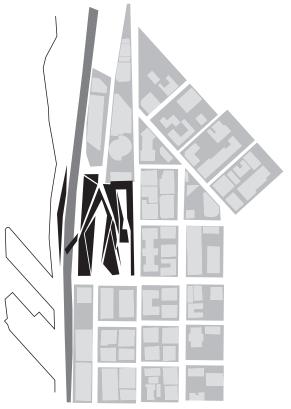


FIG. 17 FIGURE GROUND OF INTERVENTION, BY AUTHOR

The design creates a continuous constructed landscape for art with the 760 meter long Z shaped platform. The platform bridges, without hiding, the existing infrastructure lines. The new landscape ensures topographical continuity and geometric clarity over a 12-meter high difference of the inserted form, with strong converging and diverging edges framing different views. The project capitalizes on the views of the skyline and the bay, and rises over the existing infrastructure, reconnecting the urban core to the waterfront. The main programmatic element is an exhibition pavilion for art, performance and education. The pedestrian route descends to the water from the pavilion, bringing sculpture outside the museum as well as situating the park into the landscape of the city.

The design is deliberately open ended, inviting new interpretations of function, art, and environmental engagement. The Seattle Olympic Sculpture Park seeks to reconnect the fractured relationships of art, landscape, and urban life.

The thesis can utilize the formal tactics of connection and passage of the underutilized site, as well as the larger motives for infrastructural integration for the community.

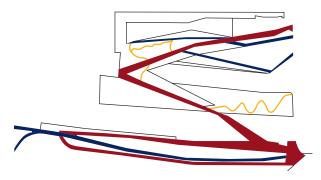


FIG. 18 PASSAGE THROUGH SITE, BY AUTHOR



FIG. 19 SECTIONS

# WILLEM II PASSAGE



FIG. 20 VIEW INTO PASSAGE

# Civic Architects - Tilburg, The Netherlands - 2017

"The architecture of the Willem II Passage leaves a lasting impression that is designed to be intriguing both in 30 days and 30 years after completion. Familiar, self-evident and robust. Innovative, rich and refined. The passage is built to last." -Design Boom

The Willem II Passage unites architecture, public spaces, heritage and circulation by creating a public passage under a railway track. The railway track runs through a former Nederlandse Spoorwegen Dutch Railways complex, which connects the inner city of Tilburg with De Spoorzone.

The design of Willem II is based on its public significance and cultural durability in the city. The route, an extension of the historical Willem II Street, serves as an inviting gateway to the previously inaccessible urban area, considered a forgotten city 'on the wrong side of the tracks.'

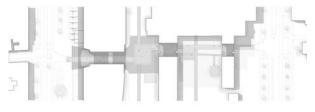


FIG. 21 PLAN



FIG. 22 CONNECTION TO URBAN SCALE

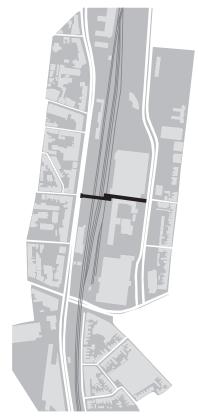


FIG. 23 FIGURE GROUND OF INTERVENTION, BY AUTHOR

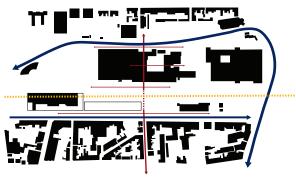


FIG. 24 PASSAGE THROUGH SITE, BY AUTHOR

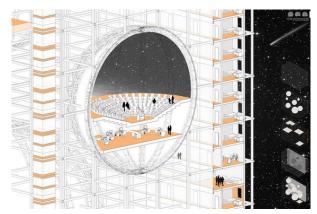
The passageway, programmed with a shopping arcade and public event space, is a catalyst for the development of De Spoorzone. It extends straight through a former railway workshop building and links a new restaurant, public terrace and the former workers garden to both sides of the city. The series of urban spaces is "dynamically lit and socially safe," drawing activity and enforcing the transit oriented reconfiguring of the area. It also enlarges and improves the public domain in Tilburg. The sectional composition of the plinth, the wall and its ceiling are a contemporary interpretation of the historic Willem II Street, turning the intervention into a natural part of the urban network.

A glass brick system covers the walls of the pedestrian and cycling passages with integrated LED lights. The brickwork creates a rhythm, mimicking the classical brick architecture of the surroundings. The design merges the familiarity with the traditions of the city with innovative materials and urban context. The light color and intensity adapt to the time of day, weather conditions, and the flow of pedestrian traffic. During the day, the walls are white and the bricks appear massive; at night the light increases and patterns appear.

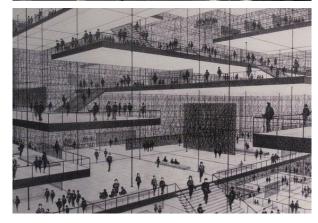
Willem II Passage, although small in scale, is relevant to the thesis, as it acknowledges the urban scale and the lack of connection of the urban fabric due to the railway track, to create a safe, pedestrian oriented intervention.



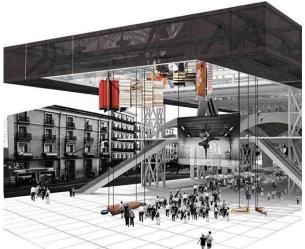
# INSPIRATION

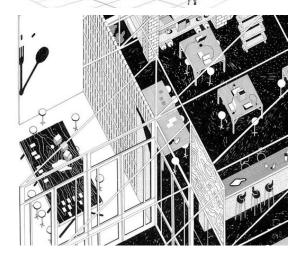












### **FIGURES**

- Johnson, Philip. "Deconstructivist Architecture." The Museum of Modern Art (1988).
- 2. https://i.pinimg.com/originals/a7/d4/c8/a7d4c84ca3479e388d26382f7a3c9919.jpg
- Varnelis, Kazys. "Programming After Program: Archizoom's No-Stop City." Praxis (2006).
- Varnelis, Kazys.
- 5. Varnelis, Kazys.
- 6. http://www.eisenmanarchitects.com/wexner.html
- 7. http://www.eisenmanarchitects.com/wexner.html
- 8. http://www.iaacblog.com/projects bio%E2%80%A2connectivity-urban-scenario-2050
- 9. http://www.iaacblog.com/projects bio%E2%80%A2connectivity-urban-scenario-2050
- 10. http://www.iaacblog.com/projects bio%E2%80%A2connectivity-urban-scenario-2050
- 11. Image by author
- 12. Image by author
- 13. http://www.iaacblog.com/projects bio%E2%80%A2connectivity-urban-scenario-2050
- 14. https://www.seattletimes.com/seattle-news/special-reports/architectural-review-from-sculpture-to-structure/
- 15. https://www.seattletimes.com/seattle-news/special-reports/architectural-review-from-sculpture-to-structure/
- https://www.seattletimes.com/seattle-news/special-reports/architectural-review-from-sculpture-to-structure/
- 17. Image by author
- 18. Image by author
- 19. https://www.seattletimes.com/seattle-news/special-reports/architectural-review-from-sculpture-to-structure/
- 20. http://www.archdaily.com/874034/willem-ii-passage-civic-architects
- 21. http://www.archdaily.com/874034/willem-ii-passage-civic-architects
- https://www.designboom.com/architecture/civicarchitects-bright-augmented-brickwork-willem-iipassage-tilburg-04-09-2017/
- 23. Image by author
- 24. Image by author
- 25. http://www.archdaily.com/874034/willem-ii-passage-civic-architects

# SITE

RECONNECTING THE GRID

EXISTING CONDITIONS

NEIGHBORHOOD ZONING

# RECONNECTING THE GRID

The proposed site of the thesis is within the Tel Aviv New Central Bus Station. To reconnect the original street grid of the Neve Sha'anan neighborhood designed in the figure of a menorah, the structure is spliced through three axis. Although the shape is not perceived by pedestrians, the street layout provided connectivity within the southern neighborhood, with the major artery Lenvinsky Street serving as the central candle, known as the 'shamash'.

The 230,000 m<sup>2</sup> central bus station, constructed on Levsinky Street, disrupts the original urban fabric, not only dismantling the efficiency of the urban design, but also severing the community as well.

In the 2025 master plan for the city of Tel Aviv, all buses will be rerouted from the Tel Aviv New Central Bus Station to two existing bus stations, in the north and south of the city. As the megastructure loses its role as the main hub for the city's bus system, the station becomes further obsolete and adaptable to modification for the surrounding community.

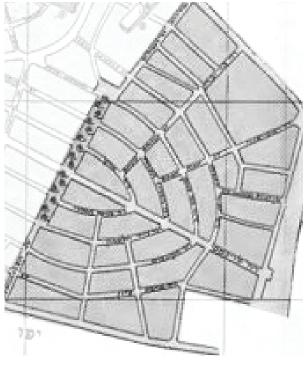


FIG. 1 FIGURE GROUND OF NEVE SHA'ANAN 1931, BEFORE THE CONSTRUCTION OF THE TEL AVIV NEW CENTRAL BUS STATION

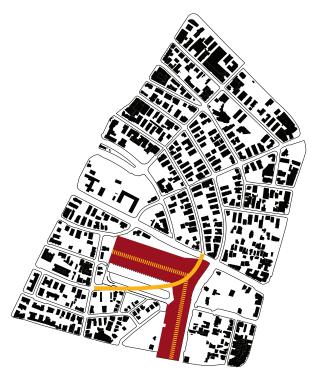


FIG. 2 FIGURE GROUND OF NEVE SHA'ANAN SHOWING PROPOSED INTERVENTION FOR URBAN CONNECTION

# EXISTING CONDITIONS

The Tel Aviv New Central Bus Station is seven stories tall, encompassing a total interior area of 44,000 m<sup>2</sup>. Three stories are underground, and four above, with two main pedestrian entrances on the fourth floor. The bus terminals occupy the top three floors. The circulation of the station is maze-like, with 29 escalators throughout the central atrium space. The commercial space is the heart of the station, the truest expression of the original design for the station, as a bus station inside of a mall. The commercial bus station was envisioned to have high-end stores and fashion shows, but today the market sells mass produced trinkets, inexpensive clothing and kitchenware, as well as fast food.

Twenty-five artists rent out studio space on the fifth floor, although they come and go as the vibrations from the bus terminal above become a nuisance. These artists as well as others in the community add to the wall-to-wall art installations and graffiti on the seventh floor. Several theater and dance companies make use of the overwhelming vacant space in the megastructure.



FIG. 3 4TH FLOOR COMMERCIAL AREA, ESCALATORS WEAVING THROUGH THE ATRIUM



FIG. 4 7TH FLOOR TERMINAL GRAFFITI



FIG. 5 VACANT BASEMENT FLOOR



FIG. 6 5TH FLOOR LOOKING DOWN TO 4TH

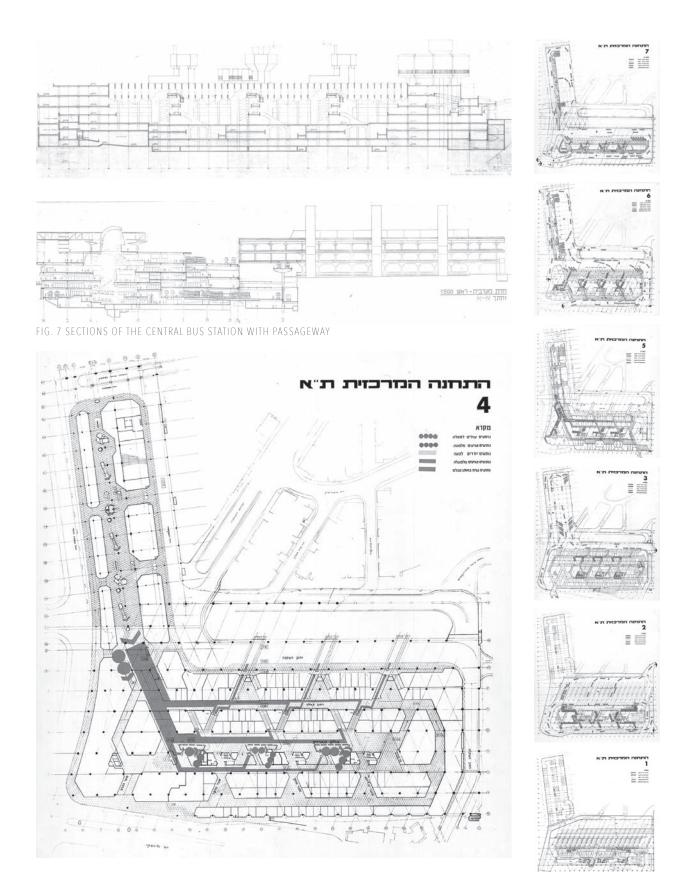


FIG. 8 PLANS OF THE CENTRAL BUS STATION

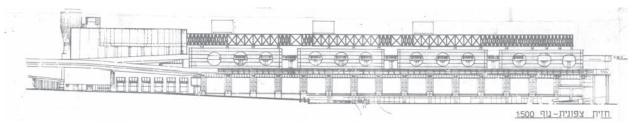


FIG. 9 NORTH NEVE SHA'ANAN ST ELEVATION

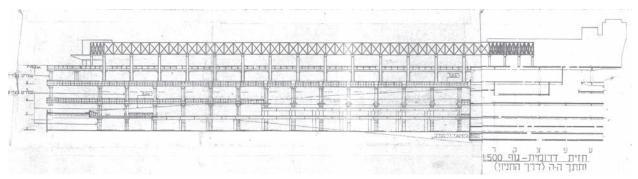


FIG. 10 SOUTH HAKONGRES ST ELEVATION



FIG. 11 AERIAL PHOTOGRAPH OF THE TEL AVIV NEW CENTRAL BUS STATION



# NEIGHBORHOOD ZONING

The surrounding neighborhood of the Tel Aviv New Central Bus Station has a variety of zoning. There is a large park just north of the station, call Levinsky Park, but known to many of the homeless African refugees as 'State of Levinsky', a place where they congregate and find refuge. A market runs along Levinsky Street, with branches that extend to numerous of the side streets. The majority of the residential zones are tenement housing that are occupied by the labor migrants and asylum seekers. The area on the opposite side of the bus station from Levinsky Street is currently a blighted grouping of blocks, but is marked for future development.

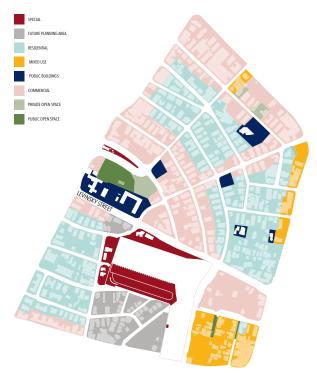


FIG. 13 ZONING OF NEVE SHA'ANAN



FIG. 14 URBAN LIFE IN NEVE SHA'ANAN, WITH THE TEL AVIV NEW CENTRAL BUS STATION LOOMING IN THE BACKGROUND

# **FIGURES**

- http://forward.com/news/israel/357204/in-tel-aviv-a-neighborhood-shaped-like-a-menorah/
- 2. Image by author
- Image by author, original image https://www.ctlv. org.il/new-central-bus-station-tel-aviv/
- 4. Image by author
- 5. Image by author
- 6. Image by author
- 7. Image by author
- 8. Azrieli Architectural Archive, Ram Karmi Collection
- 9. Image by author, original image Azrieli Architectural Archive, Ram Karmi Collection
- 10. Image by author, original image Azrieli Architectural Archive, Ram Karmi Collection
- 11. Image by author, original image Azrieli Architectural Archive, Ram Karmi Collection
- 12. Image by author
- 13. Image by author
- 14. https://www.google.com/url?sa=i&rct=j&q=&esr c=s&source=images&cd=&ved=0ahUKEwiZgIO u0LrXAhUX-GMKHWcOC1gQjhwIBQ&url=htt ps%3A%2F%2Fwww.timesofisrael.com%2Fmanstabs-eritrean-toddler-in-south-tel-aviv%2F& psig=AOvVaw25PoLqtF06scy3bvUBhKmf&u st=1510630787464976

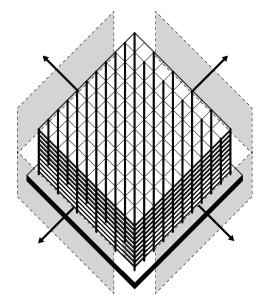
# PROGRAM

THE STRATEGY + PROGRAM CRITERIA

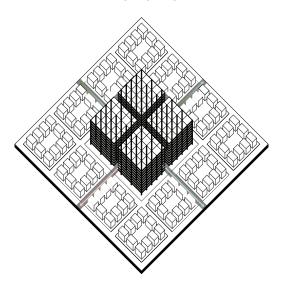
11<sup>™</sup> STREET BRIDGE PARK

GREEN SQUARE LIBRARY + PLAZA

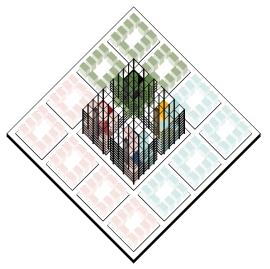
READING ROOMS



PERMANENT STRUCTURE + DEMATERIALIZATION OF FORM



URBAN CONNECTIVITY THROUGH MANIPULATION OF FORM



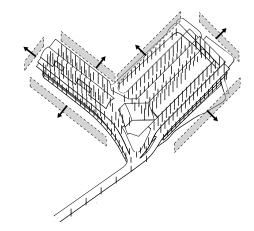
ANCHOR PROGRAM AND CIRCULATION PLUG IN MODULAR UNITS ACCORDING TO CONTEXT

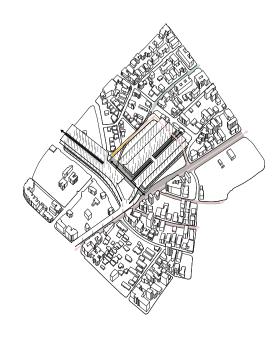
# THE STRATEGY

The architectural intervention is an aggregation of public and community driven programming which intersects the New Central Bus Station.

The design intent is to promote transparency, connectivity and efficiency through a series of actions to reconfigure the existing megastructure. By stripping the structure to the floor slabs and columns, the dematerialization of the form serves as a social condenser. The megastructure is spliced to reestablish the urban connectivity of the original menorah urban fabric. Three main programmatic elements, for performance, education and recreation are placed on the main nodes with vertical circulation towers. Smaller modules of commerce, agriculture and shelter plugged in adjacent to the anchors.

The programmed spaces create a destination for the neighborhood. Many of the defined elements of program exist informally in the bus station and neighborhood. The proposal seeks to design a tactical fusion of formal spaces.





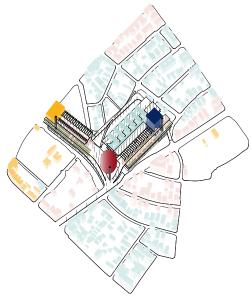
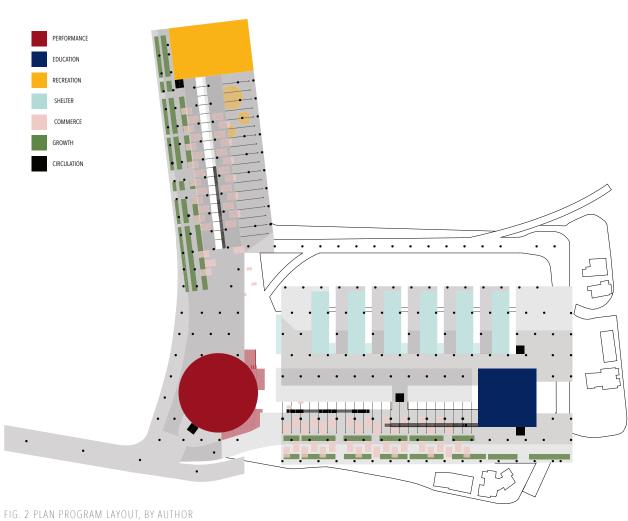


FIG. 1 STRATEGY SEQUENCE, BY AUTHOR



# PROGRAM CRITERIA

#### EDUCATION

The library and resource center is an amenity for the refugees and asylum seekers in the community to gain knowledge, information, and help to navigate as outsiders, and create a more stable lifestyle.

### PERFORMANCE

The theater creates a formal space for community performances, an arena to share art. Currently there are dance groups who utilize the vast vacant space within the bus station to rehearse.

#### RECREATION

The recreation center offers a safe play zone for the children in the community, as well as a fitness center, pools and playing fields.

### COMMERCE

The commerce component maintains the existing quantity of commercial program in the bus station, and adds surplus vendor space for continued commercial growth.

### SHELTER

The shelter provides for those unable to find permanent and suitable homes in the current housing crisis in Neve Sha'anan.

### GROWTH

The growth program references the large agricultural economy in Israel, creating a more sustainable bus station and urban environment.

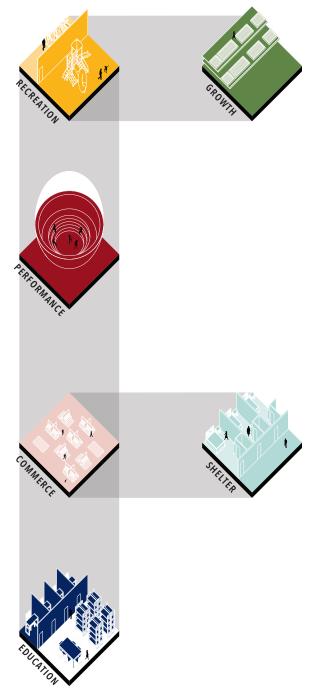


FIG. 3 PROGRAM MATRIX, BY AUTHOR

### 11<sup>™</sup> STREET BRIDGE PARK



FIG. 4 ACTIVATED BRIDGE

# OMA - Washington, D.C. - 2014

The 11th Street Bridge Park, in Washington, D.C. connects two disparate neighborhoods on opposite sides of the Anacostia River. The project has four goals: to create economic development, improve public health, connect communities on either side of the river, and reengage residents with the river itself. The bridge holds a series of outdoor-programmed spaces and actives zones for play, relaxation, learning, and gathering. The intervention offers layered program for a variety of users, creating a neighborhood park, an after-hours destination for the surrounding work force, a retreat for residents, as well as an area for tourists to explore. The main design element is two sloped ramps, elevating visitors to maximized views of the surrounding context. An X forms at the intersection of the two ramps, generating a central public plaza, flexible for various community programming.



FIG. 5 PROGRAM DIAGRAM, BY ARCHITECT



FIG. 6 SECTIONAL MOMENT REVEALING AMPITHEATER BELOW

### PROGRAM

Landscape 14,572 m<sup>2</sup> Restaurant/Bar 1,315 m<sup>2</sup> Education 1,296 m<sup>2</sup> Museum/Gallery 1,032 m<sup>2</sup> Amphitheater 303 m<sup>2</sup>

Total 18,518 m<sup>2</sup>

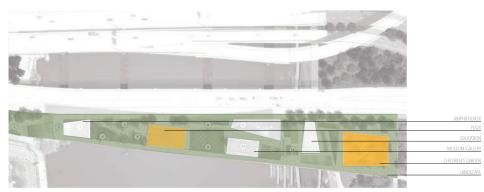


FIG. 7 PROGRAM PLAN DIAGRAM



FIG. 8 PROGRAM SECTION DIAGRAM



FIG. 9 PERSPECTIVE OF PROGRAMMED SPACES

#### GREEN SQUARE LIBRARY + PLAZA



FIG. 10 ACTIVATED BRIDGE

### Stewart and Hollenstein Architects - Sydney, Australia - 2018

The Green Square Library and Plaza is a proposal for an urban living room in Sydney, Australia. Exterior and interior program is distributed along the linear plaza, playfully arranged in plan and section. The plaza scheme is scaled for future developments around the site, forming a central green community centric heart for the city. The proposal includes a triangulated entry pavilion, a sunken community room, a garden, an open-air amphitheater, and a multi-use library tower. The tower, emerging from the plaza, features community rooms, reading rooms, and a technology suite. The amphitheater descends down to the main community space, adjacent to the sunken garden for children's play. The surrounding plaza is programmed with a ring of trees, a reading lawn, both fixed and movable furniture, and community pop up events.

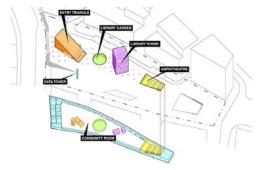


FIG. 11 PROGRAM DIAGRAM, BY ARCHITECT



FIG. 12 SUNKEN GARDEN AND CHILDREN'S PLAY SPACE

## ${\tt PROGRAM}$

Library 3,000 m<sup>2</sup> Plaza 4,200 m<sup>2</sup> Amphitheater Community room Children's garden Cafe

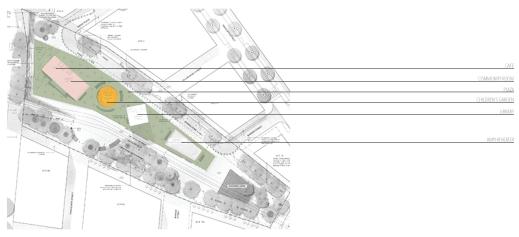


FIG. 13 PROGRAM PLAN DIAGRAM



FIG. 14 PROGRAM SECTION DIAGRAM



FIG. 15 INTERIOR FLEX SPACE WITH VIEW TO EXTERIOR AMPHITHEATER

#### READING ROOMS



FIG. 16 1 STORY LIBRARY MODULE OPENED

#### Fernanda Canales - Mexico - 2017

The Reading Rooms, placed throughout Mexico, are concrete cubes 2 ½ meters by 5 meters, roughly the size of a parking space. They serve as "cultural sanctuaries" for communities in need, providing local gathering spaces for meetings, events, and cultural activities. Each structure is open to the environment, formed by latticed concrete walls. The cubes serve as modules, with two basic orientations: the vertical 2-story module and the horizontal 1 story module. The spaces serve as free libraries, but can be transformed to serve many community programs such as an informal dance group, or a forum for neighborhood assemblies. The modules have the ability to be aggregated and adapted to contain bathrooms, computer facilities, and exterior furnishings, as well as exterior programmed space.



FIG. 17 2 STORY MODULE

## ${\tt PROGRAM}$

Library unit 12.5 m<sup>2</sup>
Computers
Book storage
Reading room/
Assembly space

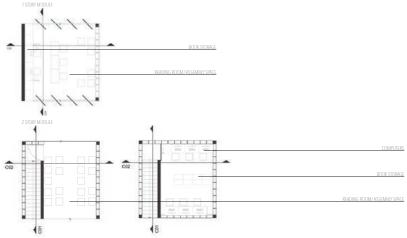


FIG. 18 PROGRAM PLAN DIAGRAM

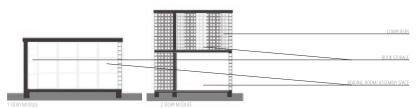


FIG. 19 PROGRAM SECTION DIAGRAM



FIG. 20 INTERIOR LIBRARY SPACE

#### **FIGURES**

- Image by author
- Image by author
- 2. 3.
- Image by author
  http://oma.eu/projects/11th-street-bridge-park
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- Image by author Image by author
- http://oma.eu/projects/11th-street-bridge-park
- 10. http://www.stewarthollenstein.com/#/green-
- square-library-and-plaza/
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- square-library-and-plaza/
- 13. Image by author
- 14. Image by autho15. http://www.stewarthollenstein.com/#/greensquare-library-and-plaza/
- 16. https://www.archdaily.com/801917/salas-de-lecturafernanda-canales
- 17. https://www.archdaily.com/801917/salas-de-lectura-fernanda-canales
- 18. Image by author
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social exchange / narrow

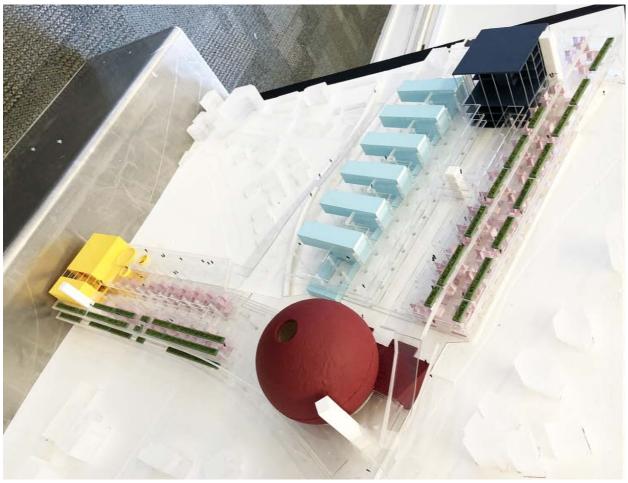
## DESIGN PROPOSAL

FINAL DRAWINGS + MODELS

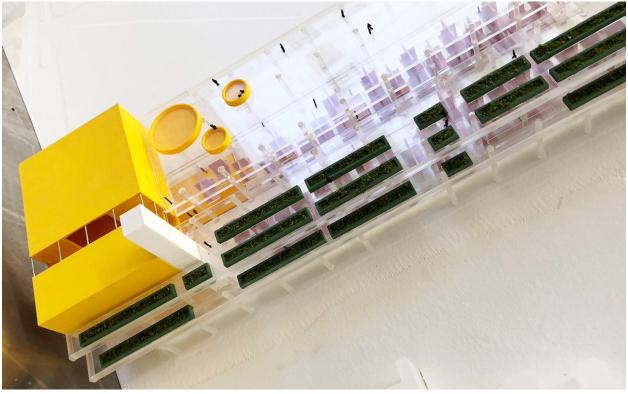


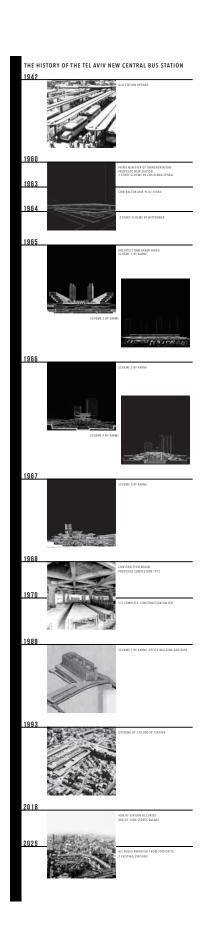






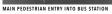














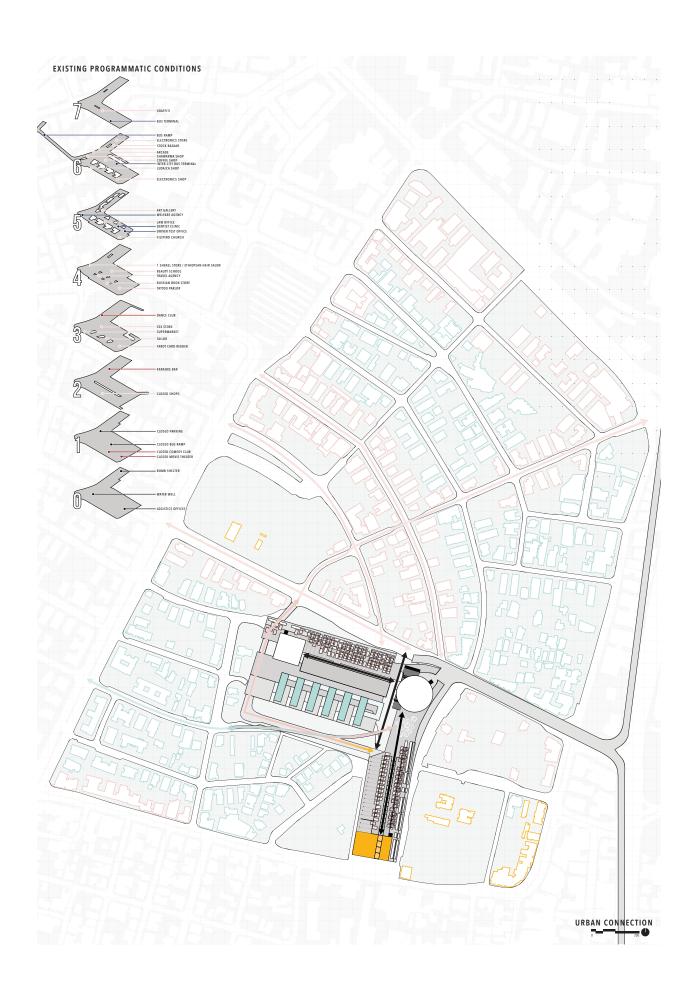










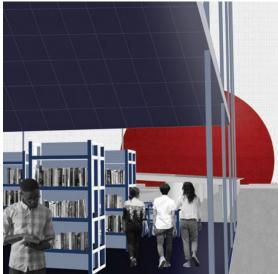




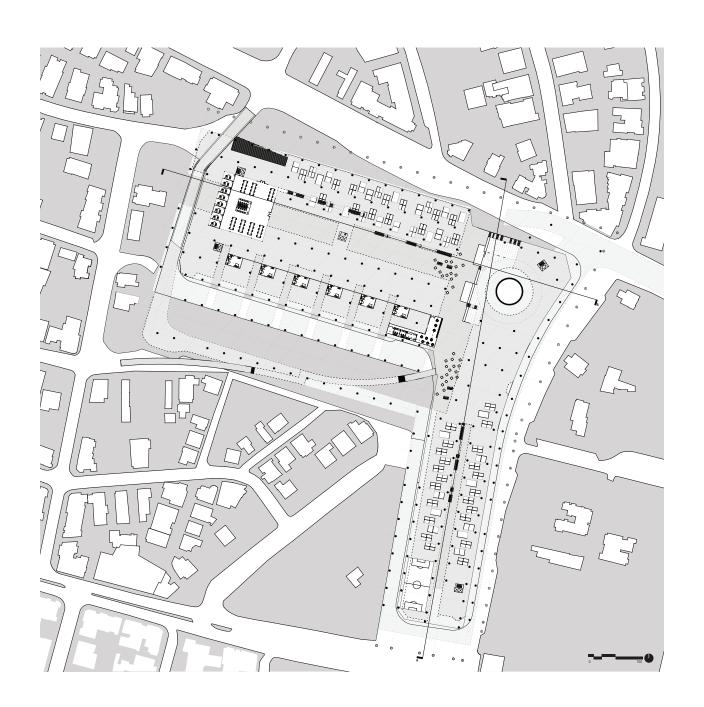


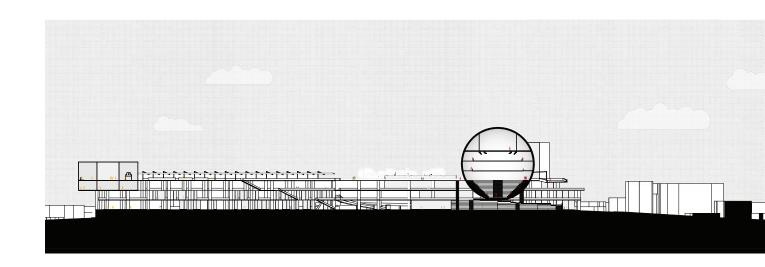


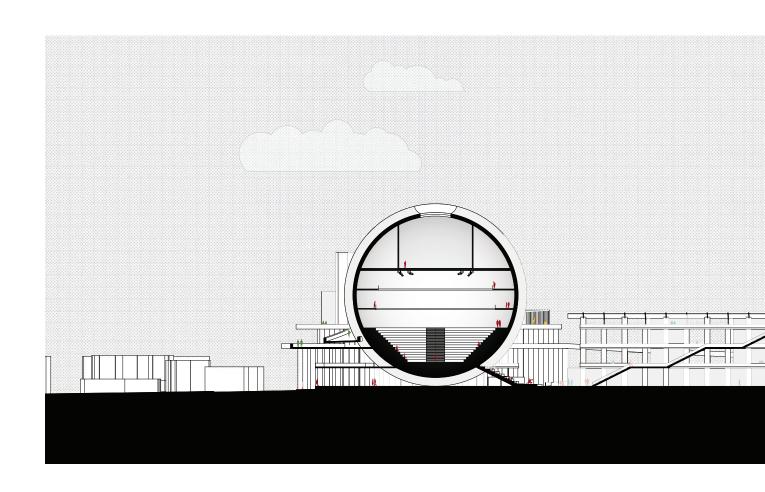


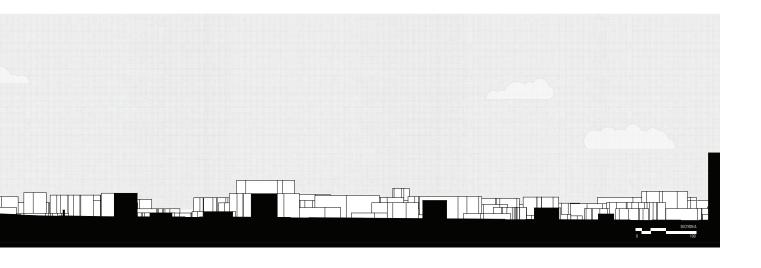


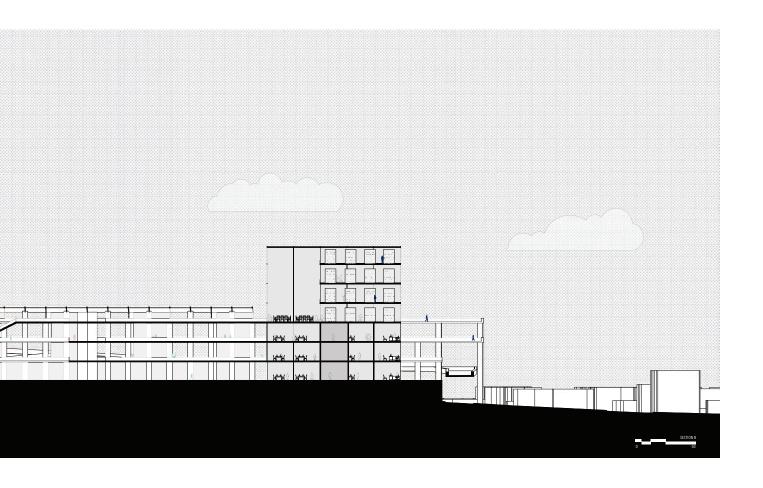












social exchange / narrow

#### ANNOTATED BIBLIOGRAPHY

# Architects' Places, Users' Places: Place Meanings at the New Central Bus Station, Tel Aviv

Admur, Liron, and Marina Epstein-Pliochtch.

This article directly coincides with the concepts I am challenging in my research. The authors examine the construction of place meanings by architects and users of places through interviews with architects and occupants of the bus station, to analyze their relationship through perception of the space. The qualitative data collected and stated in this article provides a foundation for my own analysis of place making within the New Central Bus Station.

# Place, narrative, and relationship: a new approach to place attachment

Childress, Herb.

Childress examines the concept of "place attachment" by reviewing literature of both environment-behavior studies and human geography. The author identifies four aspects to place, using narrative to examine them contextually. He is able to create a working definition of place: "A place is an environment made whole in the imagination, and used to define and orient the self." Childress' analysis of place attachment and subsequent delineation of a framework to apply it can guide my analysis of place making.

# The Death and Life of Great American Cities Jacobs, Jane.

Jane Jacobs created a new way to understand, design and program public spaces by creating a people first way of thought. She is widely known for her sociological concept of "eyes on the street," which is introduced in her book The Death and Life of Great American Cities. She argues that urban renewal did not respect the needs of those living in the cities. Although written almost half a century ago, Jacobs' analysis and critique on city planning and rebuilding is relevant to most urban environments today. Focusing on the introduction as well as the chapter on the need for primary mixed uses, Jacobs' seminal work can be applied to the context of Neve Sha'anan.

## Ram Karmi and the New Central Bus Station in Tel Aviv

Neuman, Eran.

Neuman presents the convoluted history of the New Central Bus Station, outlining the evolution of the architect's designs for the station, in conjunction with the economic, social and political forces involved in the development of the project. The article acknowledges the faults of the design, backing them with accounts from the architect Ram Karmi and the developer Arie Piltz. The article is helpful to my research because it presents an extremely detailed timeline of the creation of the New Central Bus Station from the perspective of both the designer and developer.

# Places in the Making: How placemaking builds places and communities

Silberberg, Susan, Katie Lorah, Rebecca Disbrow, Anna Muessig.

This article identifies that our recent intense focus on place has resulted in the designer to overlook the community process and the act of making to create place. It highlights ten cases of successful placemaking plans, which put place behind the concept of make, prioritizing the process rather than the end result. The article coins the term "the virtuous cycle of placemaking," implying a mutual relationship, as community transforms place, place transforms community. The case studies can provide me with concrete evidence and methodology of successful placemaking for communities in need of revitalization, to reference in my investigation.

#### White City Black City: Architecture and War in Tel Aviv and Jaffa

Rotbard, Sharon.

In this book, Rotbard tells the narrative of two cities, Tel Aviv and Jaffa, which he labels the white city and the black. At the end of part two of the book, Rotbard investigates "The Menorah," a termed used to describe the neighborhood of Neve Sha'anan. Rotbard provides details, images, and accounts of Neve Sha'anan and the New Central Bus Station in the larger context of the development of Tel Aviv, which will benefit my overall understanding of the site, which I am researching. In the afterward, Rotbard mentions the black city literally becoming blacker, addressing the African refugee situation in Tel Aviv's southern region. He gives an anecdote of a xenophobic campaign in 2010 against African refugees in Israel, as well as the radical left activists and NGO's supporting refugee rights. Rotbard's writing aids my research on the community's cultural marginalization.

#### **WORKS CITED**

"11th Street Bridge Park." OMA, oma.eu/projects/11th-street-bridge-park.

"1960s Utopian Groups." Spatial Agency, www. spatialagency.net/database/1960s.utopian.groups.

African Refugee Development Center, Israel, www.ardc-israel. org/refugees-in-israel.

Amdur, Liron, and Marina Epstein-Pliouchtch. "Architects' Places, Users' Places: Place Meanings at the New Central Bus Station, Tel Aviv." *Journal of Urban Design*, vol. 14, no. 2, 2009, pp. 147–161.

Banham, Reynar. "A Clip-On Architecture." Design Quarterly, no. 63, 1965.

Banham, Reyner, and John Partridge. "May 1977: Pompidou Cannot Be Perceived as Anything but a Monument"." *Architectural Review*, www.architectural-review.com/buildings/may-1977-pompidou-cannot-be-perceived-as-anything-but-a-monument/8627187.article.

Banham, Reyner. Theory and Design in the First Machine Age. Praeger Publishers, 1960.

"Bio-Connectivity - An Urban Scenario [2050] – *LAAC Blog.*" IAAC Blog, www.iaacblog.com/projects/bio%E2%80%A2connectivity-urban-scenario-2050.

Boddy, Trevor. "Architectural Review | From Sculpture to Structure." The Seattle Times, *The Seattle Times Company*, 17 May 2010, www.seattletimes.com/seattlenews/special-reports/architectural-review-from-sculpture-to-structure/.

Centre Pompidou. Rizzoli International Publications, 1977.

"Civic Architects + BRIGHT Revive Will-II Railway Underpass in Tilburg." *Designboom* | *Architecture & Design Magazine*, 11 Apr. 2017, www.designboom. com/architecture/civic-architects-bright-augmented-brickwork-willem-ii-passage-tilburg-04-09-2017/.

Denti, Giovanni. R. Piano, R. Rogers, O. Arup: Il Centre Georges Pompidou. Alinea, 1998.

Devine-Wright, Patrick. "Planning and Place in the City: Mapping Place Identity, Marichela Sepe." *International Development Planning Revien*, vol. 36, no. 4, 2014, pp. 509–511.

Duin, Lee van. The Urban Project: Architectural Intervention in Urban Areas. IOS Press, 2009.

"Eisenman Architects." Wexner, www.eisenmanarchitects. com/wexner.html.

Fenster, Tovi, and Haim Yacobi. "Whose City Is It? On Urban Planning and Local Knowledge in Globalizing Tel Aviv-Jaffa." *Planning Theory & Practice*, vol. 6, no. 2, 2005, pp. 191–211.

Frampton, Kenneth. Megaform as Urban Landscape: 1999 Raoul Wallenberg Lecture. 1999.

Goldstein, Evan. "Does Israel Have an Immigrant Problem?" *Foreign Policy*, 22 Jan. 2010, foreignpolicy.com/2010/01/22/does-israel-have-an-immigrant-problem/.

Green, Andrew. "Inside Israel's Secret Program to Get Rid of African Refugees." *Foreign Policy*, 12 Oct. 2017, foreignpolicy.com/2017/06/27/inside-israels-secret-program-to-get-rid-of-african\_refugees\_uganda\_rwanda/.

"Green Square Library and Plaza." Stewart Hollenstein, www.stewarthollenstein.com/#/green-square-library-and-plaza/.

Jacobs, Jane. The Death and Life of Great American Cities. Modern Library, 2011.

Janson, Alban, et al. Le Corbusier: Unite D'habitation, Marseille. Edition Axel Menges, 2007.

Johnson, Phillip. "Deconstructivist Architecture." *The Museum of Modern Art*, 1988.

Kamisher, Eliyahu. "Bats in the Bus Station: Tel Aviv Hub Houses Makeshift Cave." *The Jerusalem Post*, 27 July 2016, www.jpost.com/Israel-News/Bats-in-the-bus-station-Tel-Aviv-hub-houses-makeshift-cave-462522.

Koolhaas, Rem. Content. Taschen, 2004.

Koolhaas, Rem, and Bruce Mau. S, M, L, XL. Monacelli Press, 1998.

Kopp, Anatole. *Constructivist Architecture in the USSR*. Academy Editions, 1985.

Langevin, Jared. "Reyner Banham: In Search of an Imageable, Invisible Architecture." *Architectural Theory Review*, vol. 16, no. 1, 2011, pp. 2–21.

Ley, Sabrina van der. Megastructure Reloaded: Visionary Architecture and Urban Planning of the 1960s Reflected by Contemporary Artists. Hatje Cantz, 2008.

Lidman, Melanie. "In Tel Aviv, a Concrete Elephant Goes from Blight to Bloom." *The Times of Israel*, www.timesofisrael.com/in-tel-aviv-a-concrete-elephant-goes-from-blight-to-bloom-2/.

Madanipour, Ali. "Viewpoint: Why Urban Design?" *The Town Planning Review*, vol. 75, no. 2, 2004.

Maki, Fumihiko. *Investigations in Collective Form.* School of Architecture, Washington University, 1964.

Mann. "Tel Aviv after 100: Notes toward a New Cultural History." Jewish Social Studies, vol. 16, no. 2, 2010, p. 93.

"McCormick-Tribune Campus Center." Architizer, architizer.com/projects/mccormick-tribune-campus-center/.

Murawski, Michal, and Jane Rendell. "The Social Condenser: a Century of Revolution through Architecture, 1917-2017." *The Journal of Architecture*, vol. 22, no. 3, Mar. 2017, pp. 369–371.

Neuman, Eran. "Ram Karmi and the New Central Bus Station in Tel Aviv." Architectural Theory Review, vol. 20, no. 2, Apr. 2015, pp. 202–227., doi:10.1080/13264826.2016. 1146317.

Ozkan, Ozay. "Strategic Way of Design in Rem Koolhaas' Parc De La Villette Project." 2008.

The Population and Migration Authority. *Policy Planning Division* Edition no. 2016/2.

"Reading Rooms / Fernanda Canales." *ArchDaily*, 20 Dec. 2016, www.archdaily.com/801917/salas-de-lectura-fernanda-canales.

Rotbard, Sharon. White City, Black City Architecture and War in Tel Aviv and Jaffa. Pluto Press, 2015.

Schnell, Izhak, and Moshe Harpaz. "A Model of a Heterogeneous Neighborhood." *GeoJournal*, vol. 64, no. 2, 2005, pp. 105–115.

Seidel, Andrew D., and Herb Childress. "Place, Narrative, and Relationship: a New Approach to Place Attachment." Banking on Design?: Proceedings of the Twenty-Fifth Annual Conference of the Environmental Design Research Association, St Anthony Hotel, San Antonio, Texas, March 16-20, 1994, Environmental Design Research Association, 1995.

Shannon, Kelly, and Marcel Smets. The Landscape of Contemporary Infrastructure. 2016.

Silberberg, Susan, et al. "Places in the Making: How Placemaking Builds Places and Communities." *MIT Department of Urban Studies and Planning*, 2013.

Silberberg, Susan. What's Your Place in the World? Building Community in the Heart of Every City. Mashable Social Good Summit, 2013, livestream.com/Mashable/sgs2013/videos/30705080.

Tel Aviv Municipality GIS. gisn.tel-aviv.gov.il/.

Vernelis, Kazys. "Programming After Program: Archizoom's No-Stop City." *Praxis*, 2006.

Welter, Volker M. "The 1925 Master Plan for Tel-Aviv by Patrick Geddes." *Israel Studies*, vol. 14, no. 3, 2009, pp. 94–119.

"Willem II Passage / Civic Architects." *ArchDaily*, 21 June 2017, www.archdaily.com/874034/willem-ii-passage-civic-architects.

Whiteley, Nigel. Reyner Banham: Historian of the Immediate Future. MIT Press, 2002.

Zeveloff, Naomi. "I Spent 18 Hours In Tel Aviv's Bus Station." *Forward*, 13 Dec. 2014, forward.com/culture/210717/i-spent-18-hours-in-tel-avivs-bus station/?attribution=articles-article-related-1-headline

Zeveloff, Naomi. "In Tel Aviv, a Neighborhood Shaped Like a Menorah." *Forward*, 15 Dec. 2016, forward.com/news/israel/357204/in-tel-aviv-a-neighborhood-shaped-like-a-menorah/.