The White City of Tel Aviv

Tel Aviv

In the wish of founding an entirely Jewish city, 60 families -mainly established in Jaffa- were led by the Zionist pioneer Meir Dizengoff to start the city of Tel Aviv in 1909. This new settlement, established on twelve acres of sand dunes north of Jaffa, experimented an extraordinarily rapid growth of population. From its very foundation, it received an outrageous number of Jewish immigrants coming from various places of Europe. Among these, a handful of architects trained by some of the most important masters of the XX century.
Due to the enormous demand for housing and the qualified architects, Tel Aviv became an experimental land, in which the modern theories could be tested and adapted to the very characteristic conditions of the territory.
Tel aviv has been historically considered as a land bridge between Europe, Asia, and Africa, and it is nowadays the major centre of culture and entertainment of Israel. The city receives about 2.5 million of international visitors per year, being positioned as the fifth most visited city in the Middle East and Africa, and known as "the city that never sleeps".

The Bauhaus

he Bauhaus School, dedicated to art, architecture and design was founded by Walter Gropius in Weimar in 1919. The philosophy of the school was a response to the social adversities caused by the First World War. Since its foundation, the Bauhaus was determined to take part in the creation of a better future.
Gropius created a "classless" academy. As a pedagogical innovation, the school introduced the "preliminary course", in which the students would become familiar with a wide variety of materials and learn how to use them in a practical and informal way.
The Bauhaus School was open for 14 years, and had three directors, Walter Gropius, Hannes Meyer and Ludwing Mies van der Rohe, and its history can be divided in three main periods:
1) From 1919 to 1925 in Weimar, focusing mainly on arts and crafts
2) From 1925 to 1930 in Dessau, with an emphasis on industrial creation of objects
3) From 1930 to1933 in Berlin, with the training of architects as the central task of the school

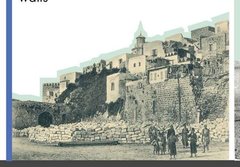
Due to political and economic reasons, the school was closed in 1933 under the direction of Mies van der Rohe. This closing, and the Second World War, caused the massive migration of architects trained under the Bauhaus ideals all around the world. During the 1930's, Palestine -still under the British mandate- received a large number of these architects as a result of the escape and expulsion of Jews from Europe.
This massive migration, and the contrasting physical and social conditions of Tel Aviv, gave origin to the Israeli Bauhaus or International Style *(Bauhaus Center)*.

UNESCO

The White City of Tel Aviv – the Modern Movement of Israel, was included on the UNESCO World Heritage List on 2003.
The property consists of three separated zones: the central White City (97.50 ha), Lev Hair and Rothschild Avenue (36.40 ha), and the Bialik Area (6.47 ha), surrounded by a common buffer zone. In total, the protected area sums 140.37 hectares, while the buffer zone has a total of 197 hectares (UNESCO).
The relevance of the White City protected area can be summarized as follows:
1. The White City contains the largest concentration in the world of Early International Style buildings
2. The preservation zone is noted for the size, coherence, and homogeneous nature of its urban pattern
3. The preservation zone is located in the core of the Tel Aviv Metropolitan Area, a centre of urban activity, and is exposed to the eyes of thousands of residents and daily visitors, in contrast to International Style areas in other countries, which are usually situated in the city's periphery
4. The White City is a showcase of many stylistic variations reflecting all the trends in Early European Modernism in the beginning of the 20th century
5. The area uniquely demonstrates a synergetic confluence of a high-quality urban plan designed by Sir Patrick Geddes and good Modern architecture, both still preserving many of their authentic features *(Y. Rofé 2009)*.

1880's

The Jewish community lives on the old city of **Jaffa**, starting the serch for their own settlement outside the walls



1896

Aharon Chelouche bought a large piece of land in the vicinity of Jaffa, on the north side. The first jewish district was founded by himself in that plot, with the name of **Neve Tzedek**

1900

1909

66 Jewish families decided to separate from Jaffa, forming the **Ahuzat-Bait** association (lead by Akiva Aryeh Weiss). These families started the construction of the first Jewish city, in the sand dunes. Through a lottery of seashells, they randomly matched each family with a plot of land

1910

1910

Establishment of **Ahuzat-Bait** ("homestead" in hebrew). Built as a suburb of Jaffa, each house was surrounded by a garden. This new neighbourhood was visualized as a clean and modern settlement

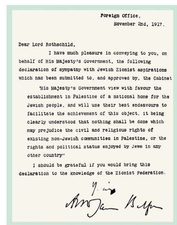
1911

-First master plan: an orthogonal grid with large roads designed by Stiansi, Traidel, Brasky e Goldman.
-Ahuzat-Bait adopted the name of **Tel Aviv**, after the biblical name *Tel Abib* adopted by Nahum Sokolow as the title for his Hebrew translation of Theodor Herzl's 1902 novel *Altneuland* ("Old New Land") which describes how an utopian Jewish country would look like.
לת (Tel), in Hebrew means mound or hill
ביבא (Aviv) in Hebrew means spring. (as in springtime)

TEL תל
AVIV אביב

1917

With the Declaration of **Balfour**, the English Minister of Foreign Affairs officialised the Jewish settlement in Palestine



Foreign Office,
November 2nd, 1917.

Dear Lord Rothschild,

I have much pleasure in conveying to you, on behalf of His Majesty's Government, the following declaration of sympathy with Jewish Zionist aspirations which has been submitted to, and approved by, the Cabinet:

"His Majesty's Government view with favour the establishment in Palestine of a national home for the Jewish people, and will use their best endeavours to facilitate the achievement of this object, it being clearly understood that nothing shall be done which may prejudice the civil and religious rights of existing non-Jewish communities in Palestine, or the rights and political status enjoyed by Jews in any other country"

I should be grateful if you would bring this declaration to the knowledge of the Zionist Federation.

1920's

The **exodus** of the Jewish community from Jaffa intensifies, giving place to provisional immigration camps outside Jaffa, and the accelerated growth of the Jewish settlement. The former Ahuzat-Bait absorbed Neve Tzedek

1920

The League of Nations adopts the Mandate for Palestine, granting Britain temporary authority over the territory.
The **British mandate** would consider Jaffa and Tel Aviv as a single territory for administrative and planning reasons

1921

Mier **Dizengoff**, the first mayor of Tel Aviv, commissioned Richard Kauffmann the urban planning of the city. The Kauffmann plan was not completed

1925

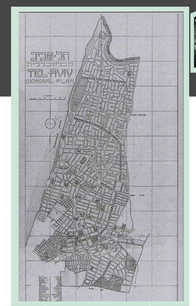
The urban planning of Tel Aviv was comissioned to **Sir Patrick Geddes**. His proposal was a sort of mesh of the Garden City Movement and the Zionist Movement

1927

Geddes' urban plan is locally **approved** by the Planing Board of the British Mandate

1930

1931



Due to the growing population, the Geddes plan was **adapted**. This second plan proposed to provide housing for 100.000 people, by reducing the green areas and distance among the buildings and increasing the height of the buildings from 3 to 4 levels

1932

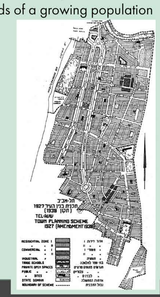
Higher concentration of **arrival of architects** running away from Europe. From the Bauhaus: Arieh Sharon, Hannes Meyer, Shlomo Bernstein, Shmuel Miestechkin. From Le Corbusier's studio: Sam Barkai and Ze'ev Rechter. Erich Mendelssohn with his collaborators Yosef Neufeld, Carl Rubin and Richard Kauffmann. Among many others

1934

Genia Averbuch win the contest for the Dizengoff Square, the heart of the White City. The square was inaugurated on 1938, showing some differences from the original design

1938

Significant **amendments** were made to the Geddes plan, in order to fulfill the needs of a growing population



1940

1947

The United Nations votes to **partition Palestine into two states**, one Jewish and one Arab. Zionist leaders agree to the plan, but the leaders of several Arab countries and of the Palestinian Arab community reject it, leading to intercommunal clashes that ultimately develop into a full-blown civil war

1948

David Ben-Gurion proclaims the **establishment of Israel** in a ceremony in Tel Aviv on the day the British officially end their rule in Palestine.

2000 ...

UNESCO decided to add the White City of Tel Aviv to the list of World Heritage Sites for being an outstanding architectural ensemble of the Modern Movement in a very specific cultural context

2003

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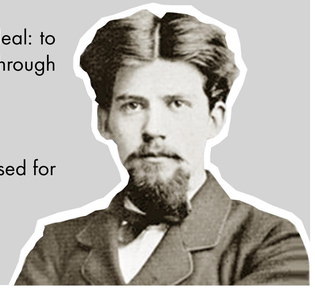
The Geddes Plan

The plan

The preparation of the outline plan for the new city of Tel Aviv was started by architect Richard Kauffmann. During a visit to Palestine in 1925, Sir Patrick Geddes, the Scottish biologist, sociologist, geographer, philanthropist, and town planner, was approached by the local authorities with the request to continue the plan.
Geddes' rich educational background allowed him to propose an interdisciplinary approach to the urban planning of Tel Aviv. Sir Geddes submitted his Town-Planning Report to the Tel Aviv municipality that same year, and his principles and recommendations were approved in 1927. The plan was intended for a population of 100,000, but already by the end of the British Mandatory rule the city comprised 8,000 buildings and a population of 150,000.

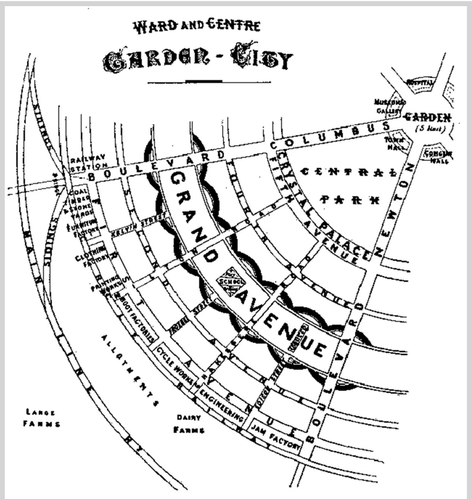
Geddes believed that Jewish culture would flourish by combining the pursuit of economic viability with the Zionist ideal: to reabsorb the Jewish people in their ancient homeland through forms of settlement that would root them in the soil through agricultural work and direct contact with nature *(Metzger-Szmuk 2004)*.

These thoughts originated a sort of mesh of the Garden City Movement and the Zionist Movement that Geddes proposed for Tel Aviv. It represents well the contrasting values of Tel Aviv, the duality of the old and the new, tradition and modernity.



The garden city

Geddes defended the importance of greenery. This is why he took inspiration in the German and English "Garden cities", and the "Garden city movement" by Ebenezer Howard. Nonetheless, for Geddes, this model should not be used for suburban areas only, instead, the design of the city itself should valorise the green areas as a fundamental element for town planning.
As he wrote in his Town-Planning Report, "The model and ideal before us is that of the Garden Village. But this as no longer merely suburban; but as coming into town; and even into the very heart of the city block". Unlike the European idea of separating the city life and the residential life, Geddes aimed to create a liveable city, giving a key role both to environment and nature to achieve communal interaction and an active social life among its inhabitants. Geddes wanted a city capable of evolve together with the people's ideas and ideals, a city that would keep up to the society's needs. Geddes related to Tel Aviv as a living organism rather than a static agglomeration with a preordained future.



The Garden City (Ebenezer Howard, 1903)

The hexagon place

Referring to the Dizengoff circle as the central avenue of Tel Aviv, Geddes would describe it as "its most important point of access from all sides" as a "widening out into a Hexagon Place...guarded form congestions and collisions by its central space, with ring of trees or shrubbery within its surrounding pavement. With this space it is suggested a Bandstand, with surrounding seats than which there can be no better open-air attraction for Sabbath evenings...This hexagon place is also the point where I recommend giving the permission to erect four storey buildings. These, and for the whole six sides, should be designed, with due measure of architectural unity, by a single well-chosen architect."
The hexagon was an important element for Geddes' design language. Proposed also for the Hebrew University of Jerusalem, for him it represented the six-pointed Star of David, probably the most important symbol of Zionism. Besides this evident connotation, for Geddes, it also represented unity and collective activity.

Dizengoff circle (1940's)

The hall of vision (Patrick Geddes, 1924)

Architectural guidelines

Geddes considered unsuitable to imitate North European architecture, since the climatic conditions of Tel Aviv are completely different, the features of architecture should adapt to provide comfort to their inhabitants. Therefore, he recommended:
-Small openings to control the solar exposure
-Flat rooftops adapt better to the climate of Tel Aviv and provide the opportunity to create an enjoyable space on top of the buildings, on Geddes' words, "The flat roof offers what is by far the best room in the house".
-Free-standing structures were the rule since the founding of Ahuzat Bayit in 1909, Geddes advocated for buildings raised in pilotis to increase the space available for the surrounding garden. The majority of buildings were constructed in this way. Each room in a flat should grant its residents an unobstructed view of greenery.
-Building height was restricted to three storeys in residential streets and four storeys in main streets.

Engel House (Ze'ev Rechter, 1933)

The urban fabric

Geddes proposed a functional hierarchy of street types to compose the urban fabric of Tel Aviv. "A grid of Main-Ways made up of Main Roads, i.e., traffic and commercial arteries running in a northward direction, parallel to the Mediterranean, and Minor Roads, i.e., wide residential streets and secondary traffic arteries running in an eastward direction" *(Matzger-Szmuk 2004)*.
In this way, the grid composed by Main Roads and Minor Roads, give shape to the city blocks, denominated by Geddes as Home-Blocks. Connected, at the same time, by inner and minor streets, for dwelling purposes only, the Home-Ways. Geddes specified that these roads should be "as few, as short and as narrow as possible". In their majority, they have a width of 15 to 16 meters between the house facades. The Home-Ways provide for the needs of housing and commerce, while assuring a peaceful environment with limited traffic.
This grid remains intact to this day, and it constitutes a fuller application of the "Zoning" principle. A commonly used strategy of urban planning, in which the territory is divided into areas called zones. Each one of these zones has a set of regulations for new development that differs from the others.
The last category of streets is the "Rose and Vine Lanes", consisting of narrow pedestrian paths (1.5 meters width), connecting the main arteries surrounding the Home-Blocks with their common garden at the centre. Not a great number of these paths were built, and nowadays only three remain in use.

The Home-blocks

The Home-block is the basic urban unit of Geddesian planning, inserted into the grid with numerous variations. The Home-Blocks could be defined as a small-scale garden city, since they are composed by quiet residential streets that share a public garden, or a green area that accommodates also communal services (religious, recreational, or educational). Therefore, this greenery serves the residents of the Home-Block as a social venue.
Each one of the Home-Blocks were surrounded by Main-Ways, to connect them with the rest of the urban fabric and provide for the necessities of the bigger scale commerce. As Geddes would note on his report: "In this form of layout of large Home-Blocks with Main-Ways, practically no two interior aspects are exactly the same. Each has its own more or less different character, often indeed distinctive. So, the monotony of city block interiors hitherto is substantially abated".
Perks of different design for each block: better orientation, create individual identity that translates into sense of belonging of the citizens. Each Home-Block developed its own social pattern of life.
Each Home-Block had its autonomy, but at the same time, it was connected with precision with the rest of the urban fabric. The configuration of the residences within blocks, provide them with protection from the dust and privacy from the street.
Geddes gave a special value to the life quality that the city would offer, not only the practical and functional aspects, but the social response and the link between the inhabitants and the nature. He aimed to bond the people with their new land.

Private Gardens and Sidewalk Plantings

Patrick Geddes privileged the city's vegetation during his planning process. Considering important to stimulate the residents to tend their land and make a profit of gardening. He suggested the implementation of municipal incentives for citizens tending the private plots. In his vision, families could exploit their gardens, for example, by planting fruit trees. Geddes' was convinced that providing houses with a large private garden would ensure the use and enjoyment of this open space by the house inhabitants. His expectation was not really fulfilled, probably due to the difficult climate.
However, Geddes re-imagined the Green City, contrasting it with that of Ebenezer Howard. Decades later, this aim for strengthen the link between the citizens and nature is still visible. A large number of trees remain along the main streets, many of them have been there from the 1930's.

Public gardens

In his original plan, Geddes proposed a total of sixty public gardens located in the centre of the Home-Blocks. In practice, due to the difficulty to purchase the prospective land, half of those gardens were never realized.
However, when implementing greenery in the city of Tel Aviv, the hard climate was to take in consideration. The variety of species had to be limited to endemic ones, that would be capable to adapt to the extreme heat and sun exposure, and the lack of water.
A great number of trees that were planted during the late 1930's still survives until this day, nonetheless, most of the public gardens have suffered modifications on their original designs.

Boulevards

The Geddes report includes the northern part of Rothschild boulevard from Sheinkin Street to the Mann Auditorium, as well as the Chen and Ben Gurion boulevards planned as a direct continuation of the first sections of Rothschild Boulevard, forming a ring around the core of the historic city. In addition, it shows the Ben-Zion boulevard to the south and Nordau Boulevard to the north.

"But a city is more than a place in space. It is a drama in time."

Sir Patrick Geddes, 1925

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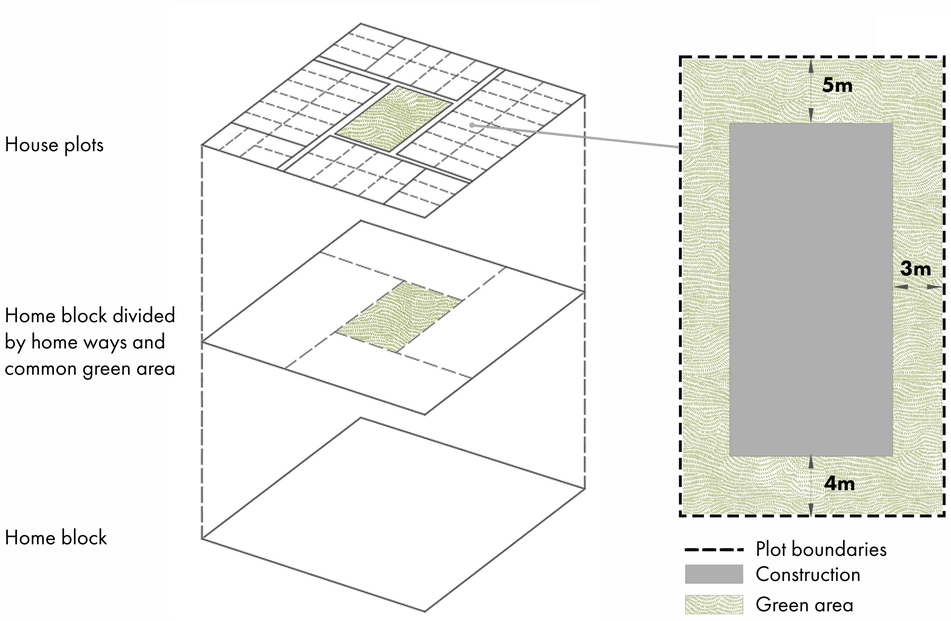


Home-block plot requirements

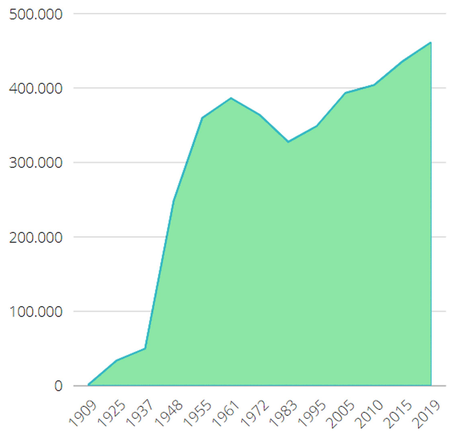
The building footprint (plot-coverage ratio) recommended by Geddes is one third, the same as Ahuzat Bayit. He warned that a higher ratio would result in low sanitary standards and thus, in an increased rate of mortality. In practice, it was raised to 40% for the residential streets and 50% for the busiest arteries.
Geddes recommended a minimum plot size of 560 square meters. In effect, the average plot size in the area covered by the report is 450 square meters.
According to Geddes, the deeper set back of the façade from the street the better, since this admits the planting of one good fruit tree before the house. Throughout the area covered by the Geddes Plan the regulated frontage setback was 4 meters, and the width of the Home-ways 15-16 meters, in line with Geddes' recommendation. The buildings were set 2-3 meters from the lateral boundaries and 5 meters from the rear one.

Territorial analysis

Tel Aviv-Yafo, located on the Israeli Mediterranean coastline, with a population of 460,613, is the economic and technological centre of Israel, being the second most populous city of the country, only after Jerusalem.

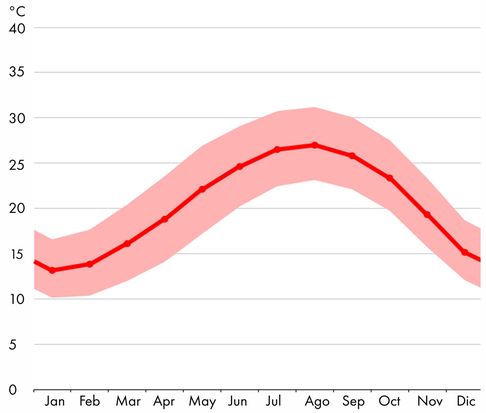
Tel Aviv population

Tel Aviv's population reached a peak in the early 1960s at around 390,000, falling to 317,000 in the late 1980s as high property prices forced families out and deterred young couples from moving in. Since the 1990s, population has steadily grown. Today, the city's population is young and growing. In 2006, 22,000 people moved to the city, while only 18,500 left, and many of the new families had young children. The population is expected to reach 450,000 by 2025; meanwhile, the average age of residents fell from 35.8 in 1983 to 34 in 2008.



Climate

Tel Aviv has a Mediterranean climate (according to the Köppen climate classification), with plenty of sunshine throughout the year and a high relative humidity due to the vicinity to the Mediterranean Sea. Summers are hot and humid (temperatures up to 35.5°C), while winters are mild and wet (the minimum temperature averages 10.2°C). Freezing temperatures and snowfall are extremely rare. Autumns and springs are characterized by sharp temperature changes, with heat peaks that can reach temperatures up to 40°C.



Natural context

-Human settlements in the area dates back to 7500 BCE
-Tel Aviv is consolidated as a modern city in 1934 and merged with the old port of Jaffa in 1950
-Even if Tel Aviv was settled on the sand dunes, the land has been flattened and has no important gradients

Society & Economics

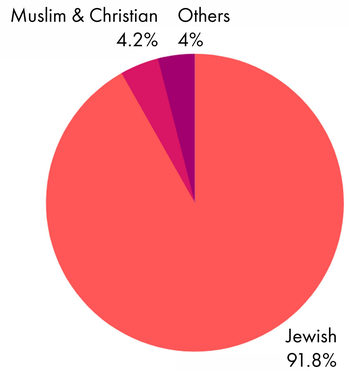
-Tel Aviv is governed by a 31-member city council elected for a five-year term in direct proportional elections. Politically, Tel Aviv is known to be a stronghold for the left, in both local and national issues.

-The city of Tel Aviv is one of the largest economies of the Middle East.

-Tel Aviv and Jaffa merged as a single municipality in 1950. Currently, Tel Aviv-Yaffo counts with an area of 52 square kilometres, or 52,000 dunams and it is located 60 kilometres northwest of Jerusalem and 90 kilometres south of the city of Haifa.

Religion demographic

The predominant religion of Tel Aviv is the Jewish, nonetheless, the city is ethnically diverse due to the massive migration of the early twentieth century. Some of the religious minorities of the territory are the Muslims, Arab Christians, Armenian Christians, and a small group of Christians coming from the former Soviet Union.

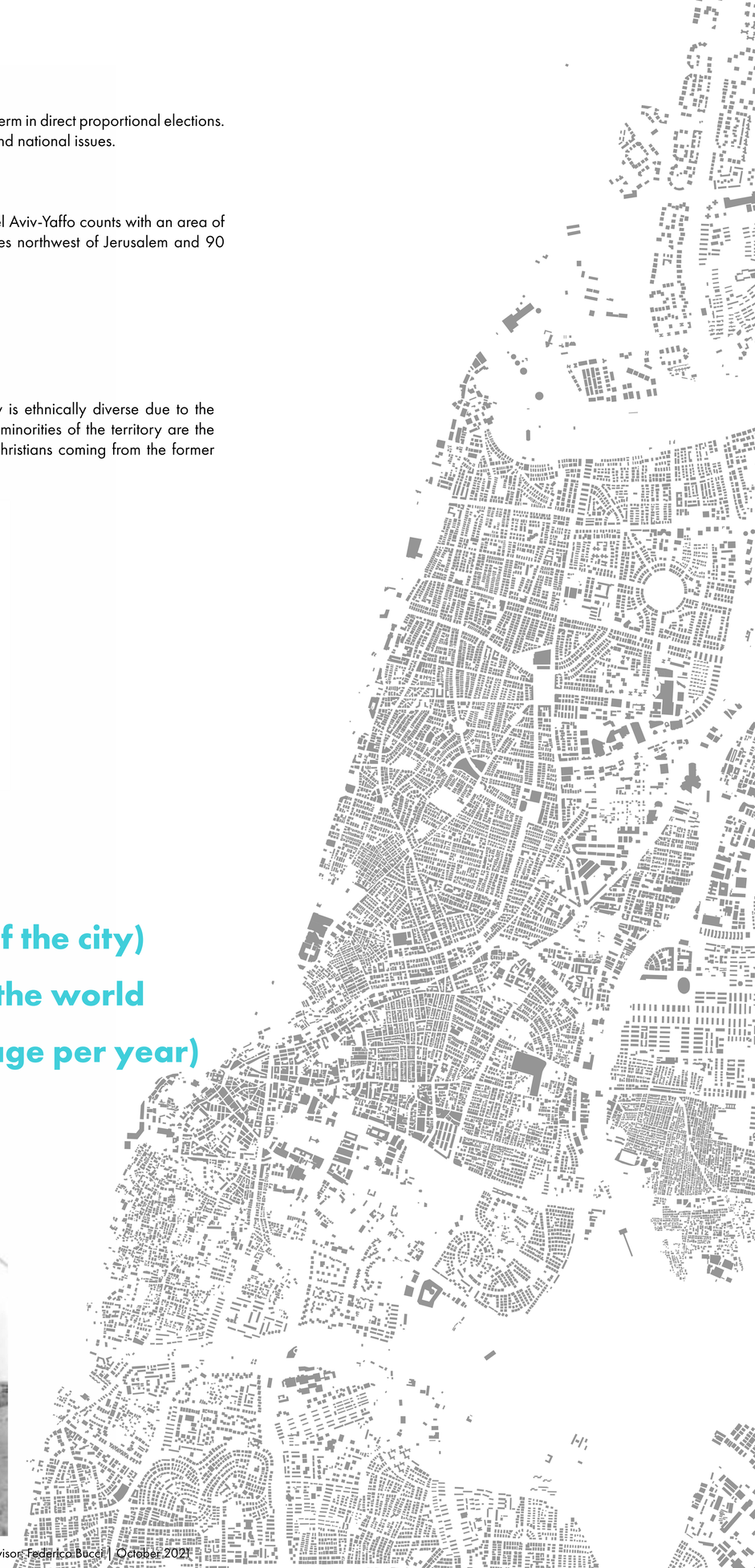


840 / km2 urban density

52 km2 of urban area

11 km2 of gren space (22% of the city)

31st highest cost of living in the world

320 clear sunny days (average per year)

13 touristic beaches