

Title:	Open Air, Sun and a Glass of Wine - Mediterranean Lifestyle in High-Rise Residential Buildings
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Subjects:	Architectural/Design History, Theory & Criticism
Keywords:	Context Culture Development Façade Interior Design Passive Design Security Sustainability Urban Design
Publication Date:	2016
Original Publication:	Cities to Megacities: Shaping Dense Vertical Urbanism
Paper Type:	1. Book chapter/Part chapter 2. Journal paper 3. Conference proceeding 4. Unpublished conference paper 5. Magazine article 6. Unpublished

Open Air, Sun and a Glass of Wine - Mediterranean Lifestyle in High-Rise Residential Buildings

户外、阳光与红酒——高层住宅中的地中海生活方式



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建筑师Nirit Rosenstein自2014年1月起担任以色列主要的房地产开发公司之一——非洲-以色列住宅开发有限公司的高管。过去15年以来，Nirit 在多种类型的大型项目中担任项目经理，积累了丰富的经验。这些项目包括国际、国内的混合功能综合体、公共设施、购物中心与高层住宅等。Nirit是一名注册建筑师，毕业于以色列理工学院。她的硕士论文运用博弈理论模型，研究了通过清理与重建进行城市更新的论题。

Abstract | 摘要

This paper suggests a look into the local interpretation of dense vertical urbanism in Mediterranean cities through a whirlwind overview of high-rise residential development in the sea-side city Tel Aviv, Israel. Though certain parameters are common to skyscrapers, and specifically residential towers, all over the globe, local climate, culture and even geopolitical situations influence the shape of tall buildings in certain places. Much like other Mediterranean cities, Tel Aviv is dominated by its beaches, all year-round mild climate, and a warm cosmopolitan vibrant nature of its inhabitants. Uniquely, the local attributes have a tremendous influence on the design of residential towers, introducing unique features into typical buildings' structure, envelope, layout and setting. Since dramatic change alters the city's skyline so rapidly, it produces a learning process for all thriving to improve the outcome and its relation to the local context.

Keywords: Culture, Development, Façade, Residential, Urban Design

本文通过对以色列海滨城市特拉维夫高层住宅开发的概述，提议对地中海城市竖向密集城市开发中的当地表达进行研究。尽管摩天大厦具备某些相同的参数特征，尤其是全球范围内的住宅塔楼，但当地的气候、文化甚至是地缘政治现状在特定地域中都影响着建筑的形式。与其它地中海城市高度类似的是，特拉维夫是由海滩、常年温和的气候以及以居民温暖-世界主义-热闹的天性所主导的。与众不同的是，当地特性极大地影响了住宅建筑的设计，在典型建筑的结构、围护结构、平面布局及配置中融入了独特的特点。尽管巨大的变革正快速改变着这座城市的天际线，但这对各方来说仍是一个学习的过程，正方兴未艾地改善结果以及与当地环境的关系。

关键词：文化、开发项目、幕墙、住宅、城市设计

The City of Tel Aviv – Overview

Much like other Mediterranean cities, Tel Aviv is dominated by its beaches, all-year-round mild climate, and warm cosmopolitan nature of its inhabitants.

It is also known as a “Non-Stop City,” “The City that Never sleeps,” and a “Party Capital.” As an international hub of diverse highly active nightlife, bars, dance bars, nightclubs, alternative clubs, underground venues and even restaurants stay open well past midnight (Lonely Planet, 2010). It was named “the best gay city in the world” by numerous travel destination guide books and magazines, being one of the most popular destinations for LGBT community. It offers a wide variety of museums, performing arts centers, world-class cuisine, lively beaches, cultural sites, entertainment and a liberal, dynamic, 24/7 atmosphere. Additionally, the city is a major financial hub, with a booming economy and a vibrant real estate industry.

Its attractiveness to the young single crowd as well as more established families and older

特拉维夫城一概述

和其它地中海城市类似的是，特拉维夫由海滩、全年温和的气候以及居民温暖、四海一家的品性所主导。

特拉维夫也被称作为“永不停歇的城市”、“不夜城”和“派对城”。作为高度活跃的且多样化的夜生活国际中心，特拉维夫的酒吧、舞吧、夜总会、俱乐部、位于地下层的娱乐场所，甚至是餐厅都开放至午夜以后（孤独星球，2010）。作为最受同性恋人群欢迎的目的地之一，它被无数旅游目的地指南和杂志誉为“世界上最佳的同性恋城市”。它还拥有各种类型的博物馆、演艺中心，世界级美食，热闹海滩，文化及娱乐场所，充满自由、动感、活力、全天候的氛围。此外，特拉维夫还是以色列主要的金融中心，经济繁荣，房地产业生机勃勃。

特拉维夫对年轻单身、事业有成的家庭及年长的“空巢”群体的吸引力是毋庸置疑的。每个人都愿意参与城市的氛围，享受这座城市的生活方式。不断增长的需求导致房地产价格的上涨。飞涨的价格也助长了城市密度城市更新与城市绅士化。

“empty-nesters” is no wonder. Everyone wants to take part in the urban vibe and enjoy the city’s lifestyle. This ever growing demand results in increasing real estate prices. Sky rocketing prices promote increasing density, urban renewal and gentrification.

On top of it all, Israel’s population is growing rapidly, revealing one of the highest birth rates in Western countries. Between 1950 and 2010, Israel’s population grew by 800%, from one million to eight million, as concluded by the Israel Center Bureau of Statistics (2014). Current predictions assume an additional shocking 200% growth to 16–18 million residents by 2050 (Passig, 2010) within the narrow borders of Israel – only 20,000sq km (approximately 8,000 sq. miles). High divorce rates contribute to the growing demand of around 100,000 housing units a year.

Since land is scarce and high demand concentrates within Tel Aviv’s 52 sq. km (Approximately 20 sq. miles), a dense vertical urban development pattern has become inevitable. During a short period of time, Tel Aviv’s skyline has altered from low-rise to high-rise, as cranes have taken over the entire city (Figure 1 & 2).

History and Local Architectural Heritage

Tel Aviv was founded in 1909 by Jewish immigrants, on the outskirts of the ancient port city of Jaffa, on the Mediterranean coastline. The first neighborhood constructed outside of Jaffa is characterized by two-story sandstone buildings. By the 1920s an eclectic Neo-Orientalist style came into vogue, combining European architecture with Middle Eastern / Arabic / Oriental features such as arches, domes and ornamental tiles. Bauhaus architecture was introduced in the 1930s by German Jewish architects, trained at the “Bauhaus,” the Modernist school of Architecture, as described by Metzger-Szmuk (1994). Many adapted the Bauhaus outlook to the local conditions, collectively creating what is recognized today as the largest concentration of “International Style” buildings in the world. Tel Aviv’s “White City,” around the city’s center, is comprised of more than 5,000 Modernist-style buildings. In 2003 the “White City” was declared a UNESCO World Heritage site (Figure 3).

Into this low-rise 3–4-story-high urban fabric that dominated the cityscape, skyscrapers were introduced in the mid-1990s. This transformation tries very much to pay

最重要的是，以色列的人口正快速增长，是出生率最高的西方国家之一。根据以色列中央统计局的结论（2014），在1950年至2010年期间，以色列的人口增长了800%，从100万增长到800万。根据目前的预测，至2050年，在狭窄的、只有20000平方公里（约8000平方英里）的国土中，以色列居民人数将再增加令人震惊的200%，达到1600–1800万（Passig, 2010）。高离婚率也导致了每年对于住房的不断上涨的需求，需大约100,000套住房。

在特拉维夫52平方公里的市域范围内，因土地稀少，住房需求高，因此采取竖向的城市密集开发模式成为必然。在较短的时间内，特拉维夫的天际线已经从低层转变高层建筑，起重机已经遍布整座城市（图1、2）。

历史与当地建筑遗产

特拉维夫于1909年由犹太移民在地中海海岸线的港口古城雅法的郊区建立。最先在雅法城外建造的街区以两层的砂岩建筑为特点。到20世纪20年代，一种新式—折中—东方主义风格开始流行。这种风格将欧洲建筑设计与中东/阿拉伯/东方元素，如拱门、穹顶及装饰瓷砖，融合在一起。根据梅茨格—斯穆克（1994），鲍豪斯建筑风格于20世纪30年代由在现代主义建筑学院—鲍豪斯受教育的德籍犹太人建筑师引进以色列。许多建筑师根据当地条件对鲍豪斯风格的外观进行了改变，共同创造如今公认的世界最大的“国际”风格建筑集群。环绕特拉维夫市中心的“白城”由5000余栋现代主义风格的建筑组成。2003年，“白城”被列为联合国教科文组织世界遗产地（图3）。

在主导城市景观的3–4层城市肌理的低层建筑中，摩天大楼于20世纪90年代中期被引进。这一转变过程也竭力的尊重了公共领域、当地环境及居住文化，创造了一种全新的建筑类型（图4）。

高层住宅的特征

本章节概述了特拉维夫高层住宅楼的当地特有的主要特征。这些特征被清晰的界定，进行分别的阐述，并选择最能够展示挑战、机遇、问题及相关设计解决方案的项目案例进行例证。

提供户外空间的独立阳台

特拉维夫是座海滨城市，为地中海气候，夏季炎热潮湿，冬季通常温暖湿润，因此，市民追求全年宜人的户外体验，享受晴天的海滩和新鲜空气。



Figure 1. Historic Center, Tel Aviv (Source: Yashar Architects)
图1：历史中心，特拉维夫（来源：雅莎尔建筑师事务所）



Figure 2. Tel Aviv City Skyline (Source: Ron Shoshani, Photographer)
图2：特拉维夫城市天际线，摄影：罗恩·肖莎尼（来源：罗恩·肖莎尼，摄影师）



Figure 3. Bauhaus International Style architecture in Tel Aviv's "White City" (Source: Yashar Architects)
图3. 鲍豪斯，特拉维夫“白城”国际建筑风格（来源：雅莎尔建筑师事务所）

respect to the public realm, local context and living culture, creating a new building typology (Figure 4).

High-Rise Residential Tower Characteristics

This chapter outlines key local-specific characteristics relating to the tall residential buildings found in Tel Aviv. These characteristics are clearly identified, separately described, and exemplified by select projects that best demonstrate the challenges, opportunities, problems and relevant design solutions.

Individual Balconies for Open Air Space

Tel Aviv, being a coastline city, enjoys a Mediterranean climate, with hot and humid summers and generally mild wet winters. Thus, pursuing a pleasant outdoor experience all year

round while enjoying sunny days at the beach and fresh air is a prerogative.

Enjoying the Mediterranean experience at one's own home played a role in the articulation of the local style 100 years ago, and manages to find its way up even as density increases. Traditionally, living rooms open up onto balconies, allowing fresh air to flow inside and facilitating a light sea breeze while dining and hosting in the apartment's own "outdoor space."

The cantilevering balconies challenge the building's envelope system, posing horizontal interruptions to the vertical continuity of façade structure. This feature is so engrained in the local market that selling apartments in Israel without a balcony is practically impossible.



Figure 4. Tzameret Park, MYS Architects, 2006 (Source: MYS Architects)
图4. 扎美雷特公园，MYS建筑事务所，2006年（来源：MYS建筑事务所）

在家中享受地中海风情在100年前的当地建筑风格中就得到过表达，并当建筑密度上升时成功地在高层建筑中得到实现。传统上，客厅阳台打开，迎进新鲜空气，从而享受轻柔的海风，同时也能在公寓自带的“户外空间”中用餐及招待宾朋。

悬臂露台的设计给建筑的围护结构带来挑战，从水平的角度打断了建筑外立面竖向的连续性。这一特点在当地市场如此的根深蒂固，以至于在以色列销售不带阳台的公寓几乎成为不可能。

基于客户的喜好，营销团队经常要求更大的阳台，甚至不惜牺牲宝贵的室内面积。一个较为极端的案例是由“雅莎尔建筑师事务所（Yashar Architects）”设计的“W”型大厦。这栋建筑巧妙地利用了分区规划的规定，使每套公寓都能配置30-40平米（约350-400平方英尺）的大阳台（图5）。

自然通风

从20世界50年代起，以色列最为常见的住宅建筑类型为典型的“H”型街区。这种布局的街区能够提供自然采光及自然通风，甚至能够提供可以安置私人、独立的空调的服务区域，免去了安装昂贵且复杂的中央暖通空调系统，如冷却塔。此外，晾晒衣服成为可能，也成为住户的首选，而这比生态环境友好型设计准则流行前早了好多年。

第一批高层建筑似乎是“H”型平面布局的压缩版，试图将低层住宅的布局调整进高层住宅楼宇，而最近刚刚演化的建筑形式采取了一种铰链式格局，满足了每层布置更多单元的需求。但尽管是更稠密的建筑布局也会通过最大化的利用可开启的窗户及自然通风应对住户对于新鲜空气及自然通风的喜好。这也给建筑表皮系统带来挑战，从而促生了建筑与窗户结合的具体细节，即突出或隐藏双层窗框。

气候意识设计

地中海气候有其自身缺点：夏日炎热，阳光炽热，令人不舒适的高温和炫目的光亮。很多年来建筑师试图解决当地条件的挑战。“国际风格”的建筑以百叶窗、双层外立面、悬挑屋脊及露台，棚架与“遮阳帘”为特点。

目前高层建筑通常都使用了科技元素：百叶设置在玻璃之间，根据太阳位置自动调节，以及对传统的元素进行现代的诠释。

由“雅莎尔建筑师事务所（Yashar Architects）”设计的特拉维夫最为奢华的建筑之一——“罗斯柴尔德1号”中，设计通过露台之间相互连接的梁柱对建筑外立面形成遮阳效果，这种设计也与“白城”的建筑风格联系在一起（图6）。

Based on client preferences, marketing teams often request bigger balconies, even at the expense of precious interior GFA. An extreme example is “W” tower, designed by Yashar Architects, in which a clever utilization of zoning plan regulations allowed each apartment to enjoy a vast 30–40 sqm (approximately 350–400 square feet) balcony (Figure 5).

Natural Ventilation

The typical “H” block that has developed as the most common residential typology in Israel since the 1950s accommodates natural lighting and ventilation and even a service area for private, separate A/C units, exempting the need for expensive central HVAC systems such as cooling towers. In additions, air-drying one’s laundry – preferred by tenants – was made possible years before eco-friendly design guidelines became trendy.

While the first high-rises seem to be an extrusion of the “H” shape floor plan, trying to adapt the low-rise layout into a high-rise structure, more recently evolved forms of buildings, adopted an articulated layout, accommodate the need for an increased number of units on each floor. Nevertheless, even denser layouts still address the preference for fresh air and natural ventilation by maximizing operable windows and natural ventilation. This challenge to the building skin systems yield specific details for incorporating windows, either accentuating or concealing the double frame.

Climate Conscious Design – Shading

The Mediterranean climate has its downsides: boiling hot days, blazing sun, unpleasant heat and glare. Architects’ attempt to cope with the challenge of local conditions has

evolved through the years. International Style buildings feature louvers, double skin façades, over-hanging roof ledges and balconies, trellises or brise-soleil.

Current accommodation in high-rise buildings often utilizes technology as well as modern articulation of traditional features; integral blinds inserted in between the glazing surfaces are automatically operated according to sun position.

In “Rothschild no. 1,” designed by Yashar Architects and one of the most luxurious buildings in Tel Aviv, interconnecting beams between balconies shade the building façade and relate to the “white city” (Figure 6).

Sustainable building codes (IS 5281, LEED) are compelled by Tel Aviv Municipality, forcing the implementation of measures to ensure more efficient energy saving structures, considering local conditions beginning at the initial program.

Family-Centric Apartment Layouts

The Israeli home differs in its high birth rate and thus can be characterized by its family oriented, hospitable culture. The center of family life is a large open kitchen, part of the living room area through an open flow layout, addressing the values of this particular society. Even with an over-flow of dining and take-out options at hand, the residence culture maintains meaningful home-cooking, home-dining and hosting experiences. Although rising prices result in smaller units, the apartment layouts still meet hospitable standards, with large span open spaces living areas, usually at the expense of smaller bedrooms.

特拉维夫市政府强力推行的《可持续建筑规范 (IS 5281, LEED) 》，强制采取措施，在项目实施之始即考虑当地条件，确保实现效率更高、更节能的建筑体。

以家庭为中心的公寓布局

以色列的家庭因其较高的人口出生率而与众不同，以家庭为中心、热情好客的文化为特征。家庭生活的中心区域是由一个宽敞、开放的厨房，客厅部分区域以及一个具有开放流线的布局组成的，遵循了这个特殊社会的价值观。尽管外出就餐或外卖的流行，这里的居住文化还保留了颇有意义的家庭烹饪、家庭就餐和主办家宴的传统。尽管房价的上涨导致住房变小，但是公寓的布局仍然能达到招待宾朋的标准，室内通常在牺牲卧室面积的代价下配有宽大开敞的客厅空间。

注重安全性的设计——防空洞

2012年，特拉维夫地区受到火箭袭击，空袭警报自1991年海湾战争受导弹袭击以来第一次响彻这座城市。2014年，特拉维夫再次受到导弹袭击，而这些导弹都被部署在城市周围的“铁穹”火箭防空系统击落。

针对这一实质的地缘政治安全威胁，当地法规严格规定每套住房都应配置加筋混凝土结构的安全室/避难所，从而使每套住房总楼面面积增加了额外的12平米（约130平方英尺）。在高层住宅楼中，这些避难室从底层一直擦到顶层，在建筑顶部到最深的基础之间形成了一个连续的加固结构。

这一硬性的元素对常规的高楼结构方案、布局流线的灵活性、建筑围护结构设计及地下停车构成了挑战。

在大多数建筑师选择隐藏这些“避难室”时，有些建筑师则将这一特点作为醒目



Figure 5. W Tower's vast balconies, Yashar Architects (Source: Yashar Architects)
图5. W型塔楼宽敞的露台，雅莎尔建筑师事务所（来源：雅莎尔建筑师事务所）



Figure 6. 1 Rothschild Boulevard overhanging beams, Yashar Architects (Source: Yashar Architects)
图6. 罗斯柴尔德1号悬挑梁，雅莎尔建筑师事务所（来源：雅莎尔建筑师事务所）

Design with Security in Mind – Individual Bomb Shelters

In 2012, the Tel Aviv area was targeted by rockets, and air-raid sirens were sound in the city for the first time since the missile attacks during the 1991 Gulf War. In 2014 Tel Aviv was once again attacked by missiles, all shot down by Iron Dome rocket defense batteries around the city.

This very substantial geopolitical security threat is addressed by local regulations, strictly requiring a concrete reinforced safe room / shelter for each unit, adding an additional 12 sqm (approximately 130 sqf) to the unit's gross floor area. In high-rise residential towers the shelters are stacked from top to bottom, in a continuous reinforced structure all the way down from the roof top to the building's deepest foundation.

This rigid element challenges the conventional structural schemes of tower construction, as well as the flexible layout flow, the building envelope design, and the underground parking plan.

While most architects choose to conceal the “shelter tower,” some utilize this feature as a visible design element enriching the composition. In “Gindi Heights,” designed by Architect Kika Braz, the reinforced shelter towers form a vertical element with significant presence, defining the building and complementing the high-rise's slender proportions.

Diversity and Customizable Units

The mix of Tel Aviv's crowd – young singles, established families, DINKs, same-sex couples, empty-nesters, foreign-residents and so forth – yields a variety of dwelling unit types and a mix of changing typical floors through the high-rise building sections to meet the diverse tenant needs. In that spirit, each tenant is allowed to hire his/her own interior designer and provide a personal layout. All features in the apartments, shelter excluded, are flexible, including sanitary fixtures. This freedom of expression in shaping one's living experience weighs heavily on tall buildings infrastructure, challenging the vertical continuity of MEP shafts and pipes, compelling substantial sand fill under flooring to accommodate pipe streams while maintaining acoustics standards, and not to mention the complex construction logistics.

Yet, several trials to limit flexibility have failed miserably and eventually caved to the democracy of personal choice and expression in private living space design.

A perhaps extreme evolution of self-expression can be found in a unique local

form of development, which has evolved in Tel Aviv as an alternative to rising real estate prices: acquisition groups. Groups of individuals gather together to purchase a plot of land and develop a high-rise residential tower, setting their own design and technical specifications, while splitting the apartments between group members (Figure 7 & 8).

The Importance and Value of Western Orientation

Tel Aviv's most prized possession is its beach front. The Municipality protects it, prevents private initiatives from blocking the view, and preserves it as a public domain for everyone to enjoy.

As high-rise buildings conquer the skyline, rising above the low-rise cityscape, the desire to enjoy the view of the sun setting over the Mediterranean Sea is only natural. The outcome of this pursuit is positioning

的设计元素丰富建筑的组成。在由建筑师吉卡·布拉斯设计的“金迪山庄（Gindi Heights）”项目中，加固的避难室部分形成了一项显著的竖向元素，成为定义整栋建筑的亮点，弥补了高层建筑瘦高的比例。

多样化及定制化住宅单元

特拉维夫的人群构成：年轻单身，事业有成的家庭，丁克一族，同性伴侣，空巢老人，外国居民等，催生了各种各样的户型以及在高层住宅楼各部分不同布局形式的标准层，以满足租户的多样化需求。本着这种精神，每位住户都能够自己聘请室内设计师打造属于自己的私属格局。公寓中除避难室以外所有的部分都可灵活变通，包括洁具设备。这种塑造个性居住体验的自由表达对高层建筑的基础设施具有很大影响，对建筑管网、机电管井的连续性构成挑战，这就导致需要在地板下填充大量沙子埋管，同时还要保证达到隔音标准，更不用提复杂的施工流程。



Figure 7. 1 Rothschild Boulevard overhanging beams, Yashar Architects (Source: Yashar Architects)
图7. 罗斯柴尔德1号—悬挑梁，雅莎尔建筑师事务所（来源：雅莎尔建筑师事务所）



Figure 8. A reinforced shelter under construction (Source: Palraz Industries)
图8. 在建的加固避难所（来源：帕拉兹实业集团）

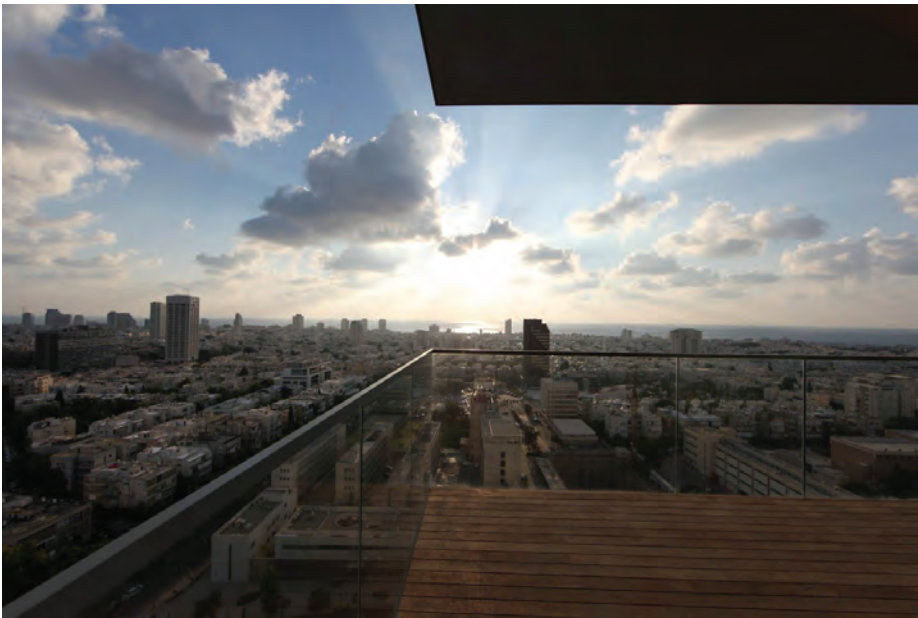


Figure 9. Pursuing the view towards west, 6 Remez Tower, Moshe Zur Architects and Town Planners (Source: Moshe Zur Architects and Town Planners)

图9. 西景憧憬，雷米兹6号楼，摩西·祖尔建筑师与城镇规划师事务所（来源：帕拉兹实业集团）



Figure 10. 17 Arlozorov outdoor swimming pool, Moshe Zur Architects and Town Planners (Source: Moshe Zur Architects and Town Planners)

图10. 阿尔罗佐夫17号—室外游泳池，摩西·祖尔建筑师与城镇规划师事务所（来源：摩西·祖尔建筑师与城镇规划师事务所）

buildings facing west, maximizing the number of dwelling units able to enjoy a sea view. The sea-view effect on the real estate value provides a major incentive for tremendous design efforts to obtain this goal, as seen in many examples throughout the city (Figure 9).

Locating Shared Amenities Outdoors

The mild climate and the proximity to the sea provide perfect conditions for enjoying buildings' recreational areas outdoors. Unlike in regions suffering rough climate, where the gym, pool and so forth are hidden and protected from the elements, in most Tel Aviv luxury residential complexes, there's an exceptional effort to produce a place celebrating the location, it's view, the sea-breeze and the city vibe (Figure 10).

Urban Context

Building within the sensitive historical fabric of the UNESCO designated "White City" of Tel Aviv encourages embracing its characteristics and suggesting a modern interpretation in the high-rise form. Since the proportions of high-rise buildings rise high above the low-rise Bauhaus urban fabric, the result is landmark iconic buildings, whose presence and volume are immense in their surroundings.

The inherent tension between the old and the new, human street scale and slender bigger-than-life forms, is resolved differently by different architects, paying respect to the legacy of International Style architecture and the urban fabric.

然而，许多限制灵活性的尝试均以惨败告终，最终屈服于注重民主、个性选择和表达的私密居住空间设计。

当地有一种独特的开发模式，其也许是自由表达较为极端的演化，同时也成为应对特拉维夫房地产价格上升的一种手段：众筹并购。一群人集资购买一处地块并开发成一栋住宅楼，设置自己的设计及技术标准，最后由成员分享楼中的公寓单元（图7、8）。

西朝向的重要性及价值

特拉维夫最有价值的资产为海滩。市政府对海进行了保护，防止任何阻挡海景的企图，将海滩作为每个人都可以享受的公共空间予以保护。

当高层建筑正在占领这座城市天际线时，超越低层城市景观，享受地中海日落胜景的愿望也就变得自然而然。这样所导致的结果是追求将建筑向西朝向，使更多的居住单元享受到海景。海景效应对房地产价值的影响极大地激励着大量的设计工作朝着实现这一目标而努力，这从这座城市中的很多案例中得以看出（图9）。

公共户外设施的定位

温和的气候和近海的特点为人们提供了享用建筑室外休闲区域的绝佳条件。气候恶劣地区的健身房、泳池等设施都针对气候做了隐藏或保护，不同的是，特拉维夫最为豪华的居住社区着力打造能够利用场地、景色、海风和城市氛围的空间（图10）。

城市文脉

在由联合国教科文组织指定的特拉维夫“白城”敏感的历史肌理中建造建筑，鼓励结合城市的特征，在高层建筑形式中进行现代的诠释。当高层建筑的比例远高于低层包豪斯风格建筑肌理时，其结果是地标式建筑的产生，其存在及建筑体块对周围环境的影响是巨大的。

新旧之间、街道尺度与大于生命体的瘦高的尺度之间固有的冲突被建筑师以不同形式进行了化解，也致敬了“国际建筑风格”与城市肌理的遗产。

在“白城宅邸（White City Residence）”项目中，雅莎尔建筑师事务所在建筑长形的裙楼中结合具有历史意义的小尺度手法，保留了街道及街道尺度的体验。此外，建筑的白色外墙与当地材料形成呼应，从而使建筑融入周围环境（图11）。

不忽视公共开放空间的规划

稳定可靠的城市治理有利于明晰的政策和计划的制定，平衡竖向密度以及住宅供给的需求，并在街道尺度开发以行人为导向的宜人的公共空间。特拉维夫中心区适于步行，城市的大部分由自行车道连接，街

In “White City Residence,”Yashar Architects embrace the historic smaller scale in the building’s long podium, preserving the street section and the street level experience. In addition, the building’s white cladding corresponds with local materials, relating the building to its surroundings (Figure 11).

Planning without Neglecting the Public Open Space

Continuity of a solid, stable municipal regime promotes clear policy and agenda, balancing the need for vertical density and the ongoing supply of residences, with the development of a pleasant pedestrian-oriented public domain at street level. Tel Aviv’s center is walkable, most of the city is connected by cycling paths, the streets are crowded, the atmosphere is outgoing, and the mild climate allows it all to happen.

Residential mixed-use complexes are often combined with heritage buildings and outdoor public open spaces, mostly as a result of municipal policy favoring public realm.

A remarkable example is the development of Sarona Park, jeweled by historic 19th century “Templers” (one story structures hosting leisure business establishments) and framed by three reserved and elegant residential high-rises, which preform as a background to the vibrant happening at ground level (Figure 12).

Future Prospects

The high-rise living culture is a new notion to Israelis with no previous experience at the skyscraper scale. The dramatic change swept Tel Aviv rapidly, forcing adjustments in all aspects. The tremendous socio-economic forces lead the way, while urban design and architecture adapt, in search of the proper means to “get it right.”

There is still a learning process for all: architects, engineers, consultants, developers and city government, all thriving to improve the outcome and its relation to the local context, hoping for tall buildings that are relevant to the specifics of the place – reflecting the essence of Tel Aviv, the vibrant “Non-stop party capital that never sleeps.”

Summary and Conclusion

Tel Aviv is a major Mediterranean city and the financial and cultural hub of Israel. Over the course of the past two decades, significant high-rise development has been carried out



Figure 11. White City Residence street view, Yashar Architects (Source: Y.A. Yashar Architects)
图11: “白城宅邸”街视图, 雅莎尔建筑师事务所 (来源: 雅莎尔建筑师事务所)



Figure 12. Sarona Park, Kika Braz Architects (Source: Kika Braz Architects)
图12: 萨罗纳公园, 吉卡·布拉斯建筑师事务所 (来源: 吉卡·布拉斯建筑师事务所)

in the city, blending with the existing low rise city fabric and with buildings of historic value.

The residential high-rise buildings of Tel Aviv demonstrate certain unique features which can be explained by Tel Aviv's climate, by Israeli culture and demographics, and by the region's geopolitical reality and security concerns. These features include large open-air balconies, an abundance of operable windows on the façade, clever shading solutions, flexible layouts for individual units, and mandatory shelters incorporated into each and every apartment.

This set of features contributes to the creation of a local style of residential high-rise buildings and the resulting lifestyle, one which is still in the making, and is constantly being explored and improved.

道充满人气，氛围活泼，而温和的气候促进了这一切的发生。

住宅多功能综合体建筑通常与文物建筑及公共开放空间组合存在，其中很大的原因在于市政政策提倡公共空间的打造。

其中一个显著的案例是萨罗纳公园（Sarona Park）的开发。该公园最耀眼的“明珠”是建于19世纪的一层建筑“Templers”，作为休闲与商务场所。外围由3栋含蓄优雅的高层住宅楼环绕，作为地面热闹景象的背景（图12）。

未来展望

高层居住文化对以色列人来说是个新概念，在摩天大楼的尺度并无过往经验可循。剧烈的变化快速地席卷了这个城市，强迫城市在每个层面做出调整。巨大的社会经济驱动力引领着方向，城市设计和建筑设计随之做出改变，以寻找合适的方式。

对所有各方来说，目前还是一个学习的过程：建筑师、工程师、咨询师、开发商以及市政府。所有人都在努力提升结果，以

及结果与当地环境的关联性，希望与场所特性具有关联的高层建筑能够反映特拉维夫—“永不停歇的派对不夜之都”的精髓。

综述与结论

特拉维夫是地中海主要的城市之一，也是以色列金融文化中心。在过去20年的历程中，令人瞩目的高层建筑开发项目在特拉维夫城市中得以开展，将现有的低层建筑城市肌理与具有历史价值的建筑进行了融合。

特拉维夫的高层住宅建筑显示出某些特有的特征，而这些特征可以由特拉维夫的气候，以色列文化和人口结构，以及该地区的地缘政治实际和安全性问题来解释。这些特征包括宽敞的露台，建筑立面大量可开启的窗户，巧妙的遮阳设计，每个单元灵活的平面布局以及每套公寓强行配置的避难所。

这些特征促进了高层住宅建筑及生活方式形成当地的风格特点，而这些风格特点仍方兴未艾，正被不断探索和改善。

References:

Braz, K. (2016). **Braz, Kika, Kika Braz Architects, Personal Interview.** Tel-Aviv.

David, I. (2016). **David, Israel, David Engineers, Personal Interview.** Givat Shmuel.

Geve, G. (2016). **Geva, Guy, Waxman-Govrin-Geva Construction Management, Personal Interview.** Givat Shmuel.

Israel. **Center Bureau of Statistics (2014) Annual Publication,** 2014. Jerusalem.

Lonely Planet (2010). **Lonely Planet's Top 10 Cities for 2011.** Available from: <http://www.lonelyplanet.com/travel-tips-and-articles/76165>. (Accessed: October 31st 2010)

Margolin, S. (2016). **Margolin, Shai, MEC Margolin Engineering Consultants, Personal Interview.** Givat Shmuel.

Metzger-Szmuk, N. (1994). **Dwelling on the Dunes: International Style Architecture in Tel-Aviv: 1931-1948,** Ministry of Defence Press, Israel (Hebrew), L'Eclat, Paris, 2004 (English, French)

Moore, A. (2016) **Moore, Ami, MYS Architects, Personal Interview.** Bney-Brak.

Passig, D., PROF. (2010). **2048 - Global and Regional Geopolitics.** Yedirot Aharonot Press.

Shenhav, G. (2016). **Shenhav, Gil, Canaan-Shenhav Architects, Personal Interview.** Tel-Aviv.

Tel-Aviv Museum of Art (2004). **The White City- Tel-Aviv's Modern Movement.** Tel-Aviv Museum of Art, exhibition publication

Wood, A., Dr. (2015). **Rethinking the Skyscraper in the Ecological Age: Design Principles for a New High Rise Vernacular.** CTBUH Annual Conference Publication, New-York.

Yashar, A. (2016). **Yashar Avner, Y.A. Architects, Tel-Aviv, Personal Interview.** Tel-Aviv.

Zur, M. (2016). **Zur, Moshe and Mendi Rotbard, Moshe Zur Architects, Personal Interview.** Tel-Aviv.