

Dubai [Metro]polis: Infrastructural Landscapes and Urban Utopia

When Dubai Metro was launched in 2009, it became a new catalyst for urban change but also a modern tool to interact with the city - providing a visual experience and an unprecedented perception of moving in space and time, almost at the edge between the imaginary and the real. By drawing on the traditional association between train, perception and the city we argue that the design and planning of Dubai Metro is intended as a signifier of modernity for the Gulf region, with its futuristic designs and in the context of the local socio-cultural associations.

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INTRODUCTION

For the last four decades, Dubai epitomized a model for post-oil Gulf cities and positioned itself as a subject for visionary thinking and urban experimentation. During the years preceding 2008, Dubai became almost a site of utopia - evoking a long tradition of prolific visionary thinking about the city – particularly 1970s utopian projects. Today skyscrapers, gated communities, man-made islands, iconic buildings and long extended waterfronts, dominate the cityscape. Until now, most of the projects are built organically within a fragmented urban order, often coexisting in isolation within a surrounding incoherence. When inaugurated in 2009, Dubai Metro marked the beginning of a new association between urbanity, mobility and modernity. It marked the start of a new era for urban mass transit in the Arabian Peninsula and is now perceived as an icon of the emirate's modern urbanity (Ramos, 2010, Decker, 2009, Billing, n. d).

Dubai is the only city in the Gulf to have a metro system; this will soon be followed by Abu Dhabi and Doha. This new infrastructural layer presented a different spatial modality to the Gulf. The system is mostly elevated and detached from the urban fabric, providing an unprecedented perception of moving in space and time. Lying “at the edge between the imaginary and the real” (Decker, 2009), the scheme weaves through the urban realm from Rashidiya to Jebel Ali and produces a multiplicity of spaces along its path. As a network it mediates, links and connects.

This paper explores the impact of the metro on the city of Dubai. Grounded in urban research and historical narratives, the study seeks to analyze the role of the system as a network for connectivity and mobility. Using cultural theory, mapping and photography, we analyze Dubai's cityscapes along the metro-line and the extent to which the change in the last four years has impacted on users' perception of the city. Our premise is that the metro provided a modern tool to explore the built environment; it presented the city to the metro riders in the form of ‘a cinematic journey’.

The notion of the ‘cinematic journey’ within the city is driven by a historic analogy between film and architecture. For a long time, architecture and urban space formed key components of cinematic experimentation. Since its inception cinema provided a “laboratory for the exploration of the built world” while film has been seen “to anticipate the built forms of architecture and the city” (Vidler 1993) The fascination of many architects with cinema also lies in “the imaginary space of film” and the continuous search for ways to represent movement and temporality in architecture - to produce images marked by filmic techniques (Neumann 1997, Vidler, 1993). This link between cinema and architecture became more peculiar when the complexity of the city itself needed to be depicted. Where an isolated object could be represented by a fixed image, like a photograph or a painting, the frenetic dynamicity of the modern city needs to be represented by a dynamic representational technique as well. Therefore, the cinema, since its very beginning, became the expressive tool to depict the modern city and its tensions, and the railroads, with their imagery of steel veins driving steamy trains into the pulsating body of the city, assume the role of herald of the chaotic, but in the meantime rigidly organized, modern life.

Noticeably, a train is the protagonist of one of the first movies in the cinema’s history (*L’Arrivée d’un train en gare de La Ciotat*, by Auguste and Louis Lumière, 1896); yet in an experimental documentary, almost a ‘filmic poem’ of the city in the 20’s (*Berlin - Die Sinfonie der Großstadt*, by Walter Ruttmann, 1927), the entire first part is filmed on board of a steam train entering the city in the early morning, with the corollary of sleepy suburbs, steam engines depots, and smoked peripheries; and yet until the adventures of a little girl and her struggling in Paris to have a ride at any cost in the metro closed for strike (*Zazie dans le métro*, by Louis Malle, 1960). Then the marriage between cinema, architecture, and for extension the city as a whole, has distant precedents almost coinciding with the dawn of the filmic art itself, and the train, with its imaginary quintessence of mechanical complexity and fascination, as its own epiphany.

DUBAI’S INFRASTRUCTURAL LANDSCAPES

Dubai has an irregular urban plan, which follows the city’s informal historic development. Originally, a port settlement (or a coastal town) along the Gulf, the city had modest beginnings, up until the 1960s. But for the last 40 years, major urban transitions invited much attention for the analysis of its societal and spatial change. Questions of urbanization became more evident in Dubai’s rapid series of large scale infrastructural projects acting as a set of objects, networks, and services that can be borrowed, replicated, and amplified (Ramos, 2010). The highway system has been the most instrumental object in structuring network and settlement patterns and economic developments in the UAE where most of the investments have been concentrated on the highways, flyovers, and road networks (Keilo & Montagne, 2012). Today, Dubai’s visual landscapes are a source of debate and inspiration. David Kendall’s photography illustrates these landscapes by focusing on snapshots along the often-inaccessible highways.

Sheikh Zayed Road is perhaps an evident example. The highway cuts through the city and links the Southwest region (Abu Dhabi) with the Northeast (Sharjah) further reinforcing urban sprawl in both directions. Like a crossing line, a vital datum or a sort of *Cardo Maximus*, it organizes space and propagates new urban expansion along its path. Now, the modern version of the city is formed in a linear manner, designed as continuous clusters of towers, mega structures, and complexes lined

along the highway In this regard, Yasser Elsheshtawy (2004) individuates a group of projects “along a stretch of highway linking Dubai to Abu Dhabi known as Sheikh Zayed Road, a spine which will form the centre of the ‘New Dubai.’” This group is led by the retail sector; in fact the most popular shopping malls are located along this Sheikh Zayed Road stretch, and connected directly by the Red Line Metro.

One of the most densely traveled highways in the Emirates, Sheikh Zayed Road is a key channel for the majority of UAE population. Despite new alternative solutions to divert from this highly intensive and single linear system (namely by adding secondary routes: E66 Al Khail Road, and E311 Emirates Road), still the recent introduction of parallel modes of mobility including a light rail and a tram along the vehicle lanes re-affirm the urban connotation of the line. Today, Sheikh Zayed Road is flanked by tracks including the metro elevated structures and the tram path. The integration of those cooperative systems could become instrumental in conceiving more efficiently connected regional urbanities and infrastructures. However, the potential of this design is still to be tested and assessed with time. Questions about whether this line may be configured as “a “thick” system where transport types are stacked and separated to maximize temporary efficiency, safety and accessibility - effectively increasing the bandwidth of the “line”. Can the line become as Ripely, Thun and Velikov propose (2009) an example of a “robust infrastructural backbone to foster the development of a proximate urbanism”; a model of mobility in post-carbon world?



Figure 1: Aerial view of Sheikh Zayed Road and Burj Khalifa in 2011. Photo credit to authors.

A LIGHT RAIL SYSTEM

Except for the traditional Abras (or water taxis), the introduction of public transit system started quite recently. In 2000, a new bus system was launched. Five years later, the Government of Dubai Road and Transport Authority (RTA) embarked on the ambitious project to design and build the Metro. The first of its kind in

the region, Dubai Metro is a driverless metro network and intended to become the longest fully automated rail system in the world. Dubai metro light-rail draws on a long tradition of elevated railway and overhead systems in American and European cities. It adds to a number of similar modern systems such as Bangkok BTS Skytrain, Vancouver Skytrain and London's Docklands Light Railway, symbolizing a point of convergence between Dubai as utopia and the Dubai of everyday life; the scheme combines the real and the imagined in one project.

The train is perceived beyond its function as mode of transport; it is an urban artifact, a sort of cultural object d'art in the city. Its mega structures prefigure the imagined future city with their curvilinear surfaces and aerodynamic shapes. The metro ratifies the idea of linear continuity of space and evokes through its form movement, speed and dynamism - inviting people to experience a new collective form of circulating within the city.



Today, the system consists of two lines: the Red line (completed in 2010) and the Green Line (completed in 2011). The 52 km long Red line connects Rashidiya to the new Al Maktoum Airport. It comprises 42 km of elevated viaduct with 22 above ground stations, 5.5 km of tunnels with 4 underground stations and 2 depots. The 24 km long Green Line runs around the city center connecting Festival City to the Airport Free Zone and comprises 16 km of elevated viaduct with 12 over-ground stations and 7 km of tunnels with 8 underground stations (of which two are shared with the Red Line). Three more lines are planned for future including a Yellow Line, a Blue Line (along Emirates Road) and a Purple Line (an airport express route) are planned for subsequent years.

Initially intended to alleviate traffic congestion and to highlight Dubai's role as a Global City, Dubai Metro serves, as Keilo & Montagne (2012) argue: "a resilient factor to the crisis in diversifying mobility choices and stepping towards a car-free society. Opened right amidst the global financial crisis, the project plays a major role in the drive of a "revived" city image [...] today [it] is a world-class infrastructure that connects "major commercial and touristic attractions."

Figure 2: View onto Dubai metro station and Sheikh Zayed Road, 2014. Photo credit to authors.

With its launching, the Dubai Metro has probably marked the re-launch of plans for an extensive railway network in the Gulf area, linking together the six GCC states (Decker, 2009). Bringing back memories of the Hejaz Railway, Dubai Metro revived a sporadic and lost historical connection between railways and cities in the region. It seems a very distant time when, for a patient railroad traveler, it was possible to cross Europe and reach parts of the Middle East from London to Baghdad on board of a train. The Ottoman Empire had placed huge expectations in the opportunities of development given by an efficient railway system, partially continued after the First World War and permanently canceled after the Second. Today's Saudi Arabia's Riyadh-Dammam Railway is thought to be the Arabian Gulf's only functioning Railway.

Despite billions of dollars that are being invested in this new rail system and the marketing campaign to encourage the use of public transport, Dubai public transit systems is still struggling to compete with the private automobile. The car continues to gain preference over other means of public transportation, mainly due a lack of mobility interchange options at some metro stations (remarkably Al Quoz industrial area), the peculiarity of urban arrangement (lack of pedestrian walkways) and climatic conditions, extremely harsh during summer season. The demand of environmental comfort and necessity to overstep the artificial barrier represented by the 16-lanes span of Sheikh Zayed Road, has extended as much as possible the aerial connections between the elevated stations and the ground surface. Air-conditioned pedestrian bridges finally cross the otherwise insurmountable Sheikh Zayed Road, linking one bank to the other like a river. Long umbilical cords connect relatively distant metro stations to the main points of interest, remarkably the Mall of the Emirates and Dubai Mall, driving the shopping-goers to destination and keeping them in a bubble of artificial microclimate, away from the chaotic roads, the dust, and heat.

THE STATIONS

"The station, a vast organism which houses the big trains, the urban trains, the subway, a department store, and a whole underground commerce - the station gives the district this landmark which [...] permits the city to signify, to be read". For Roland Barthes (1983), the station is a collection of signs, a world on its own, its "underground floors, extensive as a city, lined with food stalls ... with travelers sleeping, talking, eating on the very floor of these sordid corridors, fulfilling the novelistic essence of the lower depths" (Barthes, 1983). This notion of the station as a "landscape" where the lightness of being is felt scarcely exists in Dubai - mainly due to the design of the stations.

In Dubai, most stations are built above ground; they have an emblematic design inspired by the uniquely shaped shell roofs. According to the architect, the scheme is intended to be modern and iconic but also evoking the heritage of pearl diving which is an integral part of Dubai's history. Resting lightly on elegant supports, the shell provides a smooth covering to the public areas of the station (Summers, 2012).

The stations appear at regular intervals along Sheikh Zayed Road. Distributed as identical repetitive curvilinear blobs within the space of the city. Their design and organization resonating with Stephen Ramos explanation of *Amplified Dubai* where a cycle of typological borrowing, prototypical replication, and scalar amplification characterizes Dubai's infrastructure projects (Ramos 2010). Their oversized structure present a new scale corresponding to the future metropolis



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that will host Expo 2020. Whilst the city is presented as an open network which is capable of accommodating future changes.

At this key moment in its urban evolution, Dubai (after the metro) brings back utopian visions of functionalist, modernist city where architecture can be adaptable to eventual growth and change. These stations are like functional units, they fit within a larger framework and remind of the 1960s proposals for a mass human-scale city, combining infrastructure with a set of load bearing structures at regular intervals. Here the station is reduced to a stop, a node in a network, and point of departure dedicated to transition: “a non-place, in which individuals are connected in a uniform manner and where no organic social experience is possible” (Augé, 1995).

CINEMATIC CITYSCAPES?

To travel in Dubai metro is to cross a city of extremes from the top to the bottom; the journey takes the passengers from the edges of the humble (“the India of commerce” according to Barthes (1983)) to the luxurious indulgence of Burj Khalifa and Dubai Mall. Each line, and each set of stations, produces different ethnic groups, distinct bodies, and a new understanding of the social and economic realities that make up this metropolis. While the Green Line is located mainly in the old town and partially consists of underground stations used by workers, the Red Line provides a particular urban phenomenon, new perspectives and a specific spatial condition - a ‘cinematic encounter with the city’. It crosses and overlooks new Dubai with its linear path and aerial point of view. It articulates through its stations the major economic/trade centers and leisure attractions of Dubai.

According to Paul Virilio (2005), the meanings of journey have lost significance to be replaced with the expectancy of destination. Instant journey should be the dream for the rider of the third millennium, making a parallel with the instant communication suggested by electronic and new media devices. Differently by a car driver focused on the road in front of the windshield and to the traffic around, the metro rider can enjoy train’s windows as virtual screens showing a new panorama, perfect background for imagination. Dubai’s imagery is connected to a place of sun, skyscrapers, beaches, supercars, palms and shopping malls,



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Figure 3: JLT Metro station under construction in 2009. Photo credit to authors.

Figure 4: JLT Metro station after completion in 2011. Photo credit to authors.

therefore metro riders are like spectators in a carousel running through the seventh wonder, touching one by one all of these marvels, the city that shows itself as the best of entertainments. Virilio describes the rider of the third millennium as *voyageur/voyeur*. The Red Line presents Dubai mostly in this way; for the tourist, the train acts as a tool to visually consume the best parts of the city. As we approach Expo 2020 with a growing population and a substantial flow of visitors, it is no surprise that mobility becomes synonymous to entertainment. Where like a *voyeur*, the riders contemplate what the city has to offer.

Finally, Dubai Metro's journey in the city is still new and open for interpretations. After its deployment, now Dubai Metro seems to want to offer itself as a support for different initiatives, the latest one is to be transformed in a museum-themed stations. Waiting is an activity that has to be filled up with amusement or entertainment, it is a suspended time where the journey continues to unfold. Any transport company in the world seems to be seriously worried about passenger's time, then they feel in the right to occupy it as much as possible with any sort of distractions: advertisements, music, performances, cultural initiatives and displays (Almasar, 2014). The project to transform four metro stations into museums, dedicated respectively to Islamic Art, Arabic Calligraphy, Contemporary Art, and Visual Art, has been launched this year to be completed before the inauguration of Art Dubai 2015. However, the risk to trivialize art's content is high and can easily create a confusing parallel between "museum", intended as a permanent place for collection and preservation of original artifacts, with the most commercial "exhibition" of reproductions from originals.

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