Visualizing Urban Form as Mass Ornament in Muscat Capital Area

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Introduction

This chapter examines the recent urban development of Muscat Capital Area as a continuous urban form. This urban form is at the same time the “result” of demographic and economic constraints and the cultural “product” of careful negotiation and aesthetic politics. The urban form, manifested in an expansive urban sprawl, radically and irreversibly changes the environment in which the majority of the Omanis live. These circumstances condition the production of visual culture. The emergence of visual culture through the deployment of urbanism is far from coincidental, and yet distinctively Omani, as the process sets itself apart from the flashy development in other GCC countries. Less exhibitionist in nature than in the neighboring Emirates, Oman’s urban form is nonetheless developing at an alarming rate. At a population of merely two million inhabitants, more than 130,000 new applications have been filed for plots in Oman in 2009 alone. Most applications aspire to the principle of the free-standing villa, a building type that stands diametrically opposed to social habits, environmental and climatic responsibility and, ultimately traditional Omani culture. This new (sub-) urban form represents a continuous urban landscape, turning the individual houses into exchangeable pieces of a nation-wide ornament.
The paper traces the concepts of physiognomy and Gestalt-theory from their Romantic German origins towards Siegfried Kracauer’s thesis of “the mass ornament” developed in Weimar Germany. The “reading” of urban fabric necessitates a short record of the concept of physiognomy developed by Lavater and the seminal work on the relation between monuments, open spaces, and the urban fabric as a play of figure-ground by Camilo Sitte and later generations of physiognomist architects. Based on the theoretical work of physiognomists, we can propose a framework to support research in urbanism that contributes to visual culture in Oman. The concept is transposed from a general cultural critique of literature, theater and movies to urbanism and applied to contemporary Muscat Capital Area. The concept of the mass ornament postulates that “surface-level expressions” are the product of mass culture. Its constituting parts interact dynamically, their relationship form specific geometries. The relationship of individual contributions (the performance of the actor for Kracauer, the house in Muscat Capital Area) to a larger whole (the development of culture for Kracauer, the urban expansion in Muscat Capital Area) no longer have any impact on the direction of the development itself if the constraining mechanisms of this development can no longer be addressed critically.

In the case of Muscat Capital Area, political, social, and aesthetic processes coincide. Understood as reciprocal layers of urban morphology, these processes describe the visual repercussions of a society driven by the regulating geometries of urban planning, the predominant expanded infrastructure, conformist and self-censored, modern Omani citizens, an invisible “infrastructure” of myriads of expat workers and, finally, the reemergence of tribal structures in the guise of urbanism. Ultimately, a layered model of urban morphology leads to a different approach of defining aesthetic politics in urban form and visual culture.

The Origin of Physiognomy and Gestalt-theory in Romantic German Thought


1. Blüthenstaub Novalis, in  

In his poem, “Blüthenstaub” the German Romantic poet Novalis (1772-1801) located the “soul” at the intersection of the Inner and the Outer world. He emphasized that the soul (of people and things) is revealed through the observation of their surface. Novalis implied the existence of a dialectic relationship of inner (constituting) constraints and outer appearances. (Adolf Loos later made a moral claim on the truth of things stripped from their ornamental appearance based on this thought). While Novalis’ intent was to reveal the hidden inner structure of the object of contemplation, inner parts and outer appearance gained similar importance. Swiss philosopher Johann Caspar Lavater (1741-1801) – a contemporary of Novalis – reversed the historic predominance of the inner value of things over the outer apparition in his concept of “physiognomy.” His methodology was based on critical observation and perception: “To observe or to perceive and distinguish is the soul of physiognomy.” In the scientific recast of Dibutades’ (600 BC) ancient explanation of the origin of drawing as the “tracing of shadows,” Lavater studied the silhouette of people to derive the “contour” of their personality. To Lavater, the reduced paper cut silhouette portraits represented an abstraction – the “spirit” – of things. While he still clung to the dialectic of inner and outer aspects of the material world, to him, physiognomy represented a significant shift towards the examination of the surface, the outline, and the appearance as the relevant categories of investigation. Furthermore, the surface of things was seen as an individual category – as “a medium” – worth interpretation. “The discourse on physiognomy constructs new topoi at the borderline of inside/outside, surface/depth, core/hull, etc. as transitional stations of physiognomy.” As such it is a dynamic process under constant change, a further parallel to urban phenomena.

Lavater’s concept of physiognomy entered the intellectual German discourse through Goethe, Brentano, and Ehrenfels and laid the conceptual ground for later psychoanalytic Gestalt theory. In a similar fashion, Gestalt theory is based on the

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principle of psychophysical isomorphism, postulating the correlation between conscious experience and cerebral activity (inner and outer realms). The concepts of physiognomy and Gestalt found various entries into the architectural discourse at regular intervals as urban phenomenologies of the late nineteenth century to cybernetic theories of the mid twentieth century.

**Physiognomic Debates in Architecture since the 1890s**

Roughly a hundred years later, the discourse on physiognomy entered the field of architecture and urban planning. Austrian architect Camillo Sitte invented a graphic method to analyze urban spaces and published it in his book *City Planning According to Artistic Principles*.\(^6\) Studying “organically grown” Italian cities and contrasting them with symmetrically planned imperial Austrian cities, he claimed that morphological analysis of urban space could provide insights on the degree of cultural sophistication. Sitte drew maps of emblematic squares in each city, by contrasting private buildings as black solids to open public spaces as white. The resulting double reading of solid/void, figure/ground became a topic of the American architectural discourse from the 1970s onwards. Anticipating Gestalt theory, the city, according to Sitte, was more than just the sum of its parts (the buildings). The Gestalt was a greater pattern legible from the disposition of the parts. While the architecture and the buildings (the inner) were a known quantity for Sitte, the urban shape (the outer) was a result of accumulated processes that surfaced on the scale of the city.

Austrian architect Adolf Loos used the dichotomy of inner values and surface representation in his polemical treatise on architecture, *Ornament and Crime*, in 1908, not to make a moral judgment on the actual surface treatment (ornament), but to defame the reactionary state of architecture at the time.\(^7\) In his eyes, architecture had to represent on the outside its inherent governing structures, even at the expense of decoration which most of his contemporaries failed to address. His designs were shockingly “naked” in the sense that they exposed previously covered (functional) elements of the building. Architecture, for Loos, had a revelatory even missionary

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goal of educating and correcting social mores, yet the insistence on the congruence of content/shape persisted. The later Modernist movement reduced his thesis to a rejection of ornament all together.

Kevin Lynch can be seen as the next physiognomist. In his 1960s’ seminal book, *The Image of the City*, Lynch approaches the city from the perspective of the inhabitant. Hence, perception of space from the point of view of the user and not the planner is the main tool of investigation. The modus operandi – deduction of inner values from external observation – remains the same. The “image” of the city is nothing but the physiognomic silhouette portrait of Lavater applied to the larger scale of urbanism.

Colin Rowe and Fred Koetter took the idea of physiognomic analysis to an extreme by turning it into a design strategy in their book *Collage City* in 1978. Rowe and Koetter utilized fragments of various cities rendered in contrasting black and white drawings à la Sitte. As if these reductive fragments were not abstract enough, Rowe and Koetter extracted them from their original context, re-shuffled them, and juxtaposed elements of various times and scales to re-compose a city. The multiple acts of physiognomic separation and re-combination subverted the initial idea to read the city, yet accounted for the depth of the creative urban design process. As Victor Burgin put it: “It is not that one spatial formation was replaced by another. It is rather as if a superior “layer” of spatial representations itself became permeable, “porous” and allowed an inferior layer to show through.”

These examples – that still form the canon of the discourse on urban planning – ultimately account for the impossibility to reduce urban phenomena to a singular image. As critical instruments they reveal a layered model of urban morphology. Applied to the case of Muscat Capital Area, this concept reveals structures and modes of production of visual culture hidden beneath the facade of rapid urban development.

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The Local Context: Research on Urban Morphology in Oman

Due to the remote location of the Sultanate, and the voluntary isolation imposed by the Bu Said rule till the ascension to the throne by Sultan Qaboos in 1970, Muscat remained an uncharted territory in terms of urban geography. At the beginning of the twentieth century, J.G. Lorimer published the *Gazetteer of the Persian Gulf: Oman and Central Arabia*. As a by-product of his mandate for the British Protectorate, Lorimer delivered detailed descriptions of location, population, and history of the various quarters of Muscat. His work published in 1915 represents the first modern attempt to describe Muscat and its hinterland.11 J.E. Peterson also visited the Sultanate in the 1960s and collected important material. He took the first color photographs of the city and surveyed the old town producing an important figure-ground plan of Muscat.12 Shortly after Peterson, Ian Skeet depicted the late sixties with vivid descriptions of the lives of the inhabitants in contrast to the transitional moment of the ascension to the throne by Sultan Qaboos.13 These accounts are very useful to contrast the rapid development of the events after 1970, but remain historical due to their focus on the end of a specific era.

The first modern study was conducted by the German urban geographer Fred Scholz from 1980 to 1990.14 Scholz was fortunate to witness the country’s remarkable transition from a middle age Arab town to a modern city. By applying geographical tools of mapping and surveying, Scholz drew a comprehensive snapshot in time of a dynamic city with his two volumes on Muscat.15 His merit was to record both the traces of a fading traditional lifestyle as well as to anticipate the developments laid in various regional and urban plans at this pivotal time in the development of the Omani capital. The seaming objectivity of his socio-geographic approach was highlighted by meticulous use of maps and charts. All records on these remarkable maps were done based on comparative historical studies and reconnaissance on site. His efforts as geographer were mostly focused on meticulously documenting the various social and cultural changes and to synthesize a first urban morphology. His

15. Ibid., 25.
works on Muscat, including large scale maps of future transformation of the city, form the point of departure for this paper.

**Geometries of Urbanisation in Muscat Capital Area**

The majority of the present urban expanse is located on previously uninhabited land along the Batinah coast towards the East as we can see in Figure 6.1. While this land was used for agriculture with tiny semi-nomadic settlements, the urbanization-wave progressed along former caravan paths. As the settlements grew, the pathways gradually turned into paved roads and later highways. A particularity of the urbanization process is the restriction in favor of low-rise houses. No dwelling residential or commercial can exceed nine stories, inevitably leading to an urban sprawl. Unlike other processes of urbanization shaped by constant dialogue and negotiation, the single-handed planning tools of Royal Decrees lead to a top-down deployment of urban regulations and subsequent formal expressions: scale, monotony, and repetition.

![Figure 6.1: Map illustrating the growth of Muscat Capital Area from 1970 to 2010](image)

Photo credit: © 2012 Aurel von Richthofen

*Scale:* The scalar process of urbanization can be read in a twofold way: Geographically, as horizontal expansion in the northeastern direction toward the Batinah coast and sociologically as the stratification of social status into sizes of residence along privileged infrastructure nodes. Since 2005, so-called Integrated Tourism Projects have created new forms of occupation of strategic spaces within the urban compound. Demographic pressure played an important role in the process of urbanization,
acting as a main driving force for urban expansion. Half of the Omani population is under 25 years of age and eager to build a home. Oman’s urbanization is growing at an alarming rate with more than 130,000 new applications for construction plots filed in 2009 alone. Compared to a total population of two million Omanis, the relative size of the annual development reflects the potential of large numbers inherent to the mass ornament.

**Monotony:** In contrast to traditional courtyard houses, the predominant type of residential dwelling is the freestanding villa. This building type repeats monotonously across Muscat Capital Area. The single villa is the most wasteful building in terms of land-use and the most demanding in terms of supporting infrastructure. It stands diametrically opposed to social habits, environmental and climatic responsibility, and traditional Omani culture. The propagation of the single villa on the plot is driven by Royal Decree No. 81 / 84. Accordingly every Omani citizen of age 23 or above has the right to a plot of land.\(^{16}\) In a 2008 amendment, the Decree was extended to male and female applicants alike, if he or she is the sole breadwinner of the family.\(^{17}\) The land is surveyed and prepared by governmental agencies, subdivided into equal plot sizes, serviced by roads and infrastructure, and generally speaking is ready for construction. The plots are then put in a lottery. Applicants register for the draw and finally pick their plot from the lucky pot. In the logic of homogeneity, these given plots are all equal in size and shape. Through the years the size of the plots increased dramatically, leading to alarming development: from 150 m\(^2\) in 1970 to 600 m\(^2\) in 1990 per plot. This legal framework is still in place today.

**Repetition:** The urban expanse is made up of a multitude of constituting parts, namely architecture, infrastructure, and open spaces. The interest is not so much in enumerating these parts but to study their interaction – “their geometry.” The geometry of Muscat Capital Area is, first of all, determined by a master plan originating in the 1980s following a nation-wide Five Year Plan from 1976.\(^{18}\) The term “Muscat Capital Area” was coined in 1977 by the consultancy of Llewelyn-Davies Weeks Forestier-Walker and Bor in their “Coastal Policy Study” and the

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17. Amendment to the Royal decree 81/84, Oman, of 1984 in 2008.
18. Oman adopted its first “Five-Year Development Plan” in 1976 after the ascension to the throne of Sultan Qaboos in 1970. Key to this plan was the implementation of measures to secure economic welfare in all regions of Oman, with a strong emphasis on investments in infrastructure.
“Capital Area — Seeb Local Plan.” They estimate population growth to 226,000 by 1980, 443,000 by 1990, and 686,000 by the year 2000 to have proven accurate. This master plan shows the typical separation of functions and divides the greater Muscat area into “zones.” These zones are designed for single uses (residential, commercial, industrial, and recreational); massive roads serve the different parts with new highways, fly-overs, and roundabouts, built to escape the inevitable traffic collapse. This “modernist separation of functions” marginalized the traditional mix of uses that characterizes the traditional Omani city. The instrument for realization of the Capital Area Plan of 1977 was Royal Decree No. 26 /1975 describing the functions of the Ministry of Land Affairs. This Royal Decree determined residential, commercial, and industrial uses as well as the subdivision, preparation, development, coordination, and allocation of land. The zoning plan and the legal framework of the institutions governed the development of the urban landscape that is characteristic of the Muscat Capital Area.

Al Khoudh Neighborhood: A Study Case

The neighborhood of Al Khoudh showcases the underlying processes within Muscat Capital Area; Al Khoudh has been developed recently (2007–present) and stands for areas set for development or in areas of rural-urban transition (refer to Figure 6.2). All these areas are covered by satellite imagery tracing the development over the last few years. The satellite snapshots allow the reconstructing of an image of the city from the outside. The resolution of the imagery allows the determination of the time of construction and the classification of the different typologies of buildings. The predominant building type evolves from single story villas to double story villas, towards twin villas and ultimately super-sized villas (the latter consisting of a large villa to the front side with two apartments attached to the back). These types represent new strategies to maximize the land-use under the prevailing rules and stand in direct connection to the economic base of the constructor. These plots belong to Omani homeowners and are developed by the families directly. Translated with geo-information systems (GIS) into maps, these images become a key indicator of visual culture in the city.


Figure 6.2: GIS mapping of the development of Al Khoudh

Photo credit: © 2012 Aurel von Richthofen.
The mapping done with GIS of the development in Al Khoudh can be contrasted to the proposed regional plan issued by the Ministry of Housing in Muscat. The proposed regional plan resembles a static image of the projected city—rendered in equal blocks of 600 m² arranged in clusters of 12 to 18 plots, serviced by dead-end roads, feeder roads, and highways. The plan is available as an AutoCAD drawing file. The screenshots that we see in Figure 6.3 reveal the underlying logic of the urban plan. Literally flat, this document fails to represent topographic and natural features of the city. The logic of the AutoCAD program prescribes the waste of space with rigid setback-rules and arbitrary allocation of land. The proposed plan restricts the development of dynamic urban space. By contrasting the proposed plan and the actual development, mapped in GIS on site, a multitude of exceptions and changes become evident. In the case of Al Khoudh, the development slowed down when approximately 35 percent of the plots were built. Most of the recent plots had been over-built with massive houses while the development of the road network was still incomplete. The discrepancy between the proposed plan and built reality is prototypical of the urban morphology of Muscat Capital Area.

**Figure 6.3: Screenshot of the AutoCAD plan of Muscat Capital Area in May 2011**

![Screenshot of the AutoCAD plan of Muscat Capital Area in May 2011](image)

Courtesy the Ministry of Housing in Oman.

A mechanical documentation of this transformation process with the classic tools of an architect and planner such as drawings, maps, and charts would fail to address the underlying cultural processes at stake. Based on the theoretical work
of physiognomists, we can propose a framework to support research in urbanism as visual culture in Oman. Sitte, Loos, Rowe, and Lynch delineate an architectural strategy to read and interpret ordinary urban phenomena to decipher rules, patterns, and strategies for urban design. These strategies enable a new mode of reading urban form, involving the abstraction of immediate, ordinary, and gratuitous phenomena into applicable theories and approaches to visual culture and urbanism. In the case of Oman, the cultural changes have been dramatic since 1970. Due to the gradual opening of the country to the world, the Omani society is transforming towards a modern capitalist society. The pace of development defeats standard modes of documentation. The study of urban form in the Muscat Capital Area as an expression of a cultural shift requires new analytic tools.

The complexity of urban phenomena poses a challenge to a visual-cultural reception. Urban phenomena happen continuously at various scales and speeds. Developed cities carry the legacy of their architectures within the cyclical processes of building, renovation, demolition, rebuilding. The imprints of various phases of expansion and shrinkage become legible as visual culture. In analogy to living organisms (plants, mushrooms, corals), the structure of cities has often been described as rhizomorphic. Recently, architects and urbanists have used the metaphor of genetics to decipher the “code” of a city. While some cities carry a clear blueprint – Ildefons Cerda’s Nineteenth Century plan with octagonal plots across Barcelona is one example – the analogy of genotype and phenotype is deceiving considering the complexity and multiplicity of the processes at stake. Neither the rhizome metaphor nor the genetic analogy serves to describe the production of an aesthetic regime within an urban phenomenon in the Muscat Capital Area. Instead, the top-down process inherent to Muscat Capital Area creates a stratified urban “geology” in which the inhabitants have less and less options to participate in the creation of visual culture: Muscat Capital Area as the Golden Cage of Suburbia.

Form, Ornament, and the Visual in Omani Urban Culture

While theory (and practice) of urbanism turned out to be slow in response to the physiognomic revolution of the turn of the twentieth century, shaping all aspects of visual culture, cultural critics shifted their attention to newer media like photography and cinema. In Weimar Germany, intellectuals Siegfried Kracauer and Walter Benjamin, among others, commented on contemporary visual culture by scrutinizing ordinary urban phenomena for insights, trends, and clues on prevailing cultural directions. “Instead of just writing texts, [Walter Benjamin] practices
‘Seeing as Reading of Things’.”21 The surface was at the same time a projection foil for cultural desires as well as the product of the fast paced cultural developments in the metropolitan culture. Walter Benjamin surveyed the cosmos of new mediatized surfaces to conclude: “to reach, suddenly, into those secret, generally untapped surface-worlds [Oberflächenwelt] represented by the ornament.”22

The ornament, in contrast to Loos’s polemical use of the term, allowed for the penetration into the surface world opening multiple interpretations of the primordial condition of the ornament, constituting just one aspect of its inherent ideation. The reciprocity of the expression in surface levels of unmediated nature to the fundamental substance of things is reminiscent of earlier physiognomic thought, yet the Kracauer assigns to the surface-level expressions a dynamic and animated character. The animation arises from the mathematical repetition of parts. The superficiality of the ensemble marks the advent of a new established form.

The constituting elements are interchangeable, the individual reduced to a building block. The ornament does not need to reaffirm itself through the dialectic of inside/outside: “The patterns […] are composed of elements that are mere building blocks and nothing more. […] The ornament is an end in itself.”23 “Clusters,” “mathematics,” “spectacles,” and “form”: these categories are transposed to describe urbanism. The observation on mass culture, that the repetitive elements emerge from mechanical production and are both a product of and the condition for further production of culture, can be applied to all “artefacts,” including architecture and urbanism, as an animated system. Relating the constituting parts, their aggregation and shape into a mathematical (geometrical) relationship, the ornament becomes a process in constant dialogue emerging out of the principles of production. In their totality, these dynamic processes can be read as visual culture. Kracauer takes the analogy further by equating his concept of ornament to surveying photographs of geography and urbanism:

“The ornament resembles aerial photographs of landscapes and cities in that it does not emerge out of the interior of the given conditions, but rather appears above them. Actors likewise never grasp the stage setting in its totality, yet they consciously take part in its construction. […] The more the coherence

22. Ibid., 57.
23. Ibid., 76.
of the figure is relinquished in favour of mere linearity, the more distant it becomes from the immanent consciousness of those constituting it.”

Kracauer identified aerial photography as an effective tool to analyze and qualify visual culture in the 1920s. Contemporary technology, including satellite imagery, digital projection and GIS mapping, expanded the possibilities of surveying complex urban phenomena in space and time. While they produce vast amounts of data that can be observed on a single surface, the tools serve to identify mass ornaments. At the same time, Kracauer’s mass ornament is devoid of utilitarian connotations; the aesthetic dimension resists a reduction to the function and opens up the examination of larger social and economic aspects of life.

Kracauer depicts the creation of a new aesthetic emerging out of the subject/object relationship. He describes a scalar relationship between constituting parts and the larger ensemble, the latter revealed only through the lens of the detached observation. This new aesthetic regime is inherent to the new cultural conditions, which produce it, yet does not manifest itself immediately. The transformations have a fundamental paradigmatic character; they “must remain in disguise because they are at odds with out-dated but still reigning notions.” These “out-dated notions” collapse once the emerging ornament is widely accepted as the new modality of culture, which Kracauer identifies as new aesthetic. Kracauer identifies the social consequences of the mass ornament in the detachment of the bearer and being that ultimately transforms the human figure: “Precisely because the bearer of the ornament does not appear as a total personality [. . .] he becomes transparent to the man determined by reason.” Kracauer recognizes the inevitability of the mass ornament as an automatic, telekinetic system arising from the prevailing conditions. He describes the mass ornament as: “The aesthetic reflex of the rationality to which the prevailing economic system aspires.” The muteness of the ornament and its immunity against ratio make attempts to diminish or ignore it futile: “But reason has not penetrated the mass ornament; its patterns are mute. The ratio that gives rise to the ornament is strong enough to invoke the mass and to expunge all life from the figures constituting it.” Conversely, this system entails its alternative

25. Ibid., 93.
26. Ibid., 83.
27. Ibid., 79.
28. Ibid., 84.
mode of production: Deducting a positivist attitude towards the mass ornament opens the possibility to transgress it. Understanding and utilizing the mechanisms that give rise to the mass ornament allow tuning its productive modes and offering an alternative aesthetic form – a new layered model of urban morphology.

**Muscat Capital Area as a Layered Model of Urban Morphology**

The introductory discourse on physiognomy describes the impossibility of reducing urban phenomena to a singular image in general and the phenomena at stake in Muscat Capital Area. Instead of a singular image, this work proposes a “Layered Model of Urban Morphology” anchored around a key thesis of the mass ornament:

“The position an epoch occupies in the historical process can be determined more strikingly from an analysis of its inconspicuous surface-level expressions [Oberflächenausdrücke] than from that epoch’s judgment about itself. Since these judgments are expressions of the tendencies of a particular era, they do not offer conclusive testimony about its overall constitution. The surface-level expressions, however, by virtue of their unconscious nature, provide unmediated access to the fundamental substance of the state of things. Conversely, knowledge of this state of things depends on the interpretation of these surface-level expressions. The fundamental substance of an epoch and its unheeded impulses illuminate each other reciprocally.”

Kracauer’s concept of mass ornament originates in the observation of mass culture. While he developed the concept in Weimar Berlin, it offers a range of tools applicable today, withstandng the transfer from Europe to the Omani context. Kracauer’s first observation lay in the recognition of surface-level expressions as products of contemporary culture. His next observation identifies the constituting parts of surface-level expressions as aggregation, clusters, and forms and establishes a geometric relationship between them. Kracauer’s third observation lies in the description of a dynamic system legible from a remote vantage point: the mass ornament.

**Surface-level expressions:** While approaching the Muscat Capital Area from Al Amarat Road crossing the Hajar Mountains, one sees a carpet of villas stretching toward the Indian Ocean. The carpet analogy stands for the endless proliferation of the urbanization process. The strict building regulations governing heights and setbacks on regular shaped plots lead to a general morphology of predominantly

29. Ibid., 75.
low-rise and low-density urbanism. The uniform plot sizes and equal regulations lead to a uniform architectural typology: The endless palace on the plot that maximize allowed floor area ratio, differing only externally by means of variation of the style-guide imposed by the loan-giving Oman Housing Bank (see Figure 6.4).

**Figure 6.4: A panoramic view of Muscat Capital Area 2012, taken from Al Amarat Road on November 2012**

![Panoramic view of Muscat Capital Area](image)

Photo credit: © 2012 Aurel von Richthofen.

Geometric relationships: As we can see in Figure 6.5 from the screenshot of an AutoCAD file for the planning of the future expanses of Muscat, the geometric relationship guides the planning process regardless of topographic features (Wadis – Arabic term literally meaning “valleys” or “riverbeds”), climatic aspects (sun and wind orientation), or social aspects (uniformity of residences in contrast to the diversity of the Omani population). The geometry of the urban expanse is literally inscribed into the patterns of blocks and neighborhoods, repeated using the ubiquitous AutoCAD transformation commands “copy,” “mirror,” “rotate” and “scale.” The uniformity of the layout in conjunction with a scalar difference in block sizes and street width reflects the hierarchical discrimination against social status of the future residents. Neighborhoods are reduced to exchangeable tiles within a larger urban mosaic. Within the repetitive logic of the tile-pattern, the geometry of the Muscat Capital Area proliferates endlessly in the infinite space of the software program. Scale and repetition play an important role in the concept of the mass ornament. The mode of observation needs to shift in scales – zooming out from a single housing block towards the larger neighborhood and finally to the new suburbs and the entire city. The mass ornament requires repetition in large numbers: Each sample area resembles the next one. The neighborhoods in Muscat Capital Area display similarity and reflexivity, since they are over-constrained by the regulating mechanisms. Kracauer’s geometric relationships find their contemporary equivalents in the endless proliferation of similar houses, streets, and neighborhoods.
Visualizing Urban Form as Mass Ornament in Muscat Capital Area

Figure 6.5: Screenshot of the AutoCAD plan of Al Khoudh in May 2011

Through the lenses of the mass ornament one can criticize the rise of Muscat Capital Area as an aesthetic form driven by a powerful economic machine. This process is engendered by the state, exploited by the financial frameworks, broadcast by the media, and imposed without alternative on a generation of Omani citizens. It can be understood as a passive act of violence. Starting from the built environment, the sublimated subject is permanently conditioned to the role of consumers. On the other hand, the aesthetic regime of geometry and repetition aims to create a modern Omani citizen. The specificities of the mechanisms at stake in Oman literally redistribute a previously tribal population across the Sultanate. The processes point at the inevitability of the mass ornament and, at the same time, at the muteness of the ornament and its immunity against ratio. Yet, exposing and understanding its modality offers a way to tune the mechanisms of the mass ornament. The shapeless urban expanse becomes legible as urban mass ornament.

Surface-level expressions, geometric relationships, and mass ornament form a paradigmatic shift in the creation of aesthetic politics in urban form and visual culture. Applied to Muscat Capital Area, we can discern the following inherited layers of development:

First Layer: Because of the hierarchical principles of the Royal Decrees, the resulting urban morphology rests on a base of regulating geometries originating in urban planning. This “first layer” is rigid in the sense that it expands regardless of natural or cultural conditions. As we can see in Figure 6.6, this “first layer” is
planned in the Ministry of Housing and based on a master plan developed by the German consultancy firm Weidleplan in 1990. CAD programs offer the perfect tools to implement this grid of identical plots and self-similar houses. While the grid implies absolute control over the development of the city and the control of visual culture, it does, in fact, only offer faint means to develop a sustainable city due to its inability to cope with dynamic systems in general.

**Figure 6.6: Muscat Capital Area Structure Plan, drawn after Weidleplan scheme of 1990**

Photo credit: © 2012 Aurel von Richthofen.

*Second Layer:* In order to regain control, the authorities of Muscat Capital Area have introduced a “second layer” of expanded infrastructure: The network of highways and service roads criss-cross the urban area at huge expense on initial investments, land use, and maintenance. This layer of infrastructure illustrated in Figure 6.7 dictates the modes of transit, exchange, and communication within Muscat Capital Area and between the neighborhoods. It comes at the cost of social isolation. At the same time, isolated urban pockets emerge with a distinct local identity. The neighborhoods of Wadi Kabeer, Al Kuwair and Al Ghubra within Muscat Capital Area have managed to create a distinct modern identity around a former functional determination embedded in the zoning plan and with it an independent visual culture. These pockets form insular moments and decentralize the urban fabric. Nonetheless, the distribution of privileged facilities such as recreational spaces, large commercial complexes, administrative buildings, and access to the road network remains uneven.
Third Layer: This emancipatory tendency is again undermined by the compliance of the inhabitants to their presumable roles, at least on the surface. Instead of embracing the freedom within the confines of their modern neighborhoods, these citizens re-create a pastiche of rural and traditional Omani villages while enjoying the comfort of modern technologies and car-based mobility. We witness a cultural conflict typical of societies in transition. The process of modernization happened in less than 40 years. The necessary cultural dialogue has just recently started in the wake of the Arab Spring. The citizens of Muscat Capital Area voluntarily drop out of the productive cycle of visual culture. As we can see in Figure 6.8, the deterioration of architecture is symptomatic of the crisis of content. Urban planning is reduced to aspects of decoration. The representation of values is pushed to the exterior patterns of the buildings. This “third layer” is the “conformist and self-censored, modern citizen.”

Fourth Layer: The next layer is formed by the myriads of expat workers who build and maintain the city. This invisible “infrastructure” gets mobilized when it does not disturb the other residents of Muscat Capital Area. It forms the glue that holds otherwise loose parts together. A social contract is imposed onto this cast of workers binding them to restrictive working conditions and revoking their right to express their needs. Still, their growing number is a time-bomb and a chance at the same time. Once the expat workers claim their rights, an inter-cultural dialogue will take place and change the face of the city once again. As a sea-faring nation, Oman has proven to be able to integrate various cultures from Persia, the Indian West coast, and the shores of Eastern Africa.
Fifth Layer: The “fifth layer” of this proposed model is the topography of Muscat Capital Area. The Hajar mountain range runs parallel to the coastline and finally meets the Indian Ocean at Old Muscat. Running off the mountains, a series of wadis drain the coastal plain at regular distances perpendicular to the coastline. These dry riverbeds form natural sections in the city. The sand dunes of Bowsher rise more than a 100 meters above the city. These topographic landmarks challenge and disrupt the grid-like expansion of the city, where plot lines meet natural features and new edge conditions appear. The unfinished edges of residential developments offer views over wadis and mountain ridges into the hinterland of Muscat Capital Area. Highways contour larger dunes and fly over mountain ridges and valleys. At times, these highways cut into the soft limestone. New geometric figures appear. The works of Chinese construction companies resemble large scale land-art. The residual space between highway and plot lines become a landscaped feature of the city. The interstitial spaces of cloverleaf highway exchanges are re-appropriated as soccer grounds and impromptu market places. While these spaces are not planned, and have in some cases very limited access, they complement the otherwise uniform development of Muscat Capital Area with unique urban features.
Sixth Layer: The “sixth layer” is the distinct Omani culture rooted in a tribal society. Tribes are very influential in the Muscat Capital Area. Their esteem is based on historical achievements, financial power, and social networks. Some tribes have more than 10,000 members. *Wasta* – Arabic term literally meaning “nepotism” and referring to a measure for the degree of power and influence of an individual or clan – is the social currency in Oman. Adherence to the tribe is more important than national pride, a source of constant threat to the authority of the state.

While the land allocation by lottery can be seen as an active way to re-distribute the Omani population across the region, thereby disrupting traditional tribal structures, the strains of tribal adherence can be traced in every neighborhood, every company, and every form of social representation. Therefore, tribal structures reflect in the urban morphology of Muscat Capital Area through clusters of re-organized spaces, independent commercial activities, and privately founded institutions such as mosques and school. The tribal structures are very effective actors on the low and mid-level development of the city and fill a gap that was left in the threshold of governmental planning. At times improvised, and at other times carefully planned, the tribal construction activities account for the majority of the residential and commercial developments. Their creative momentum is a source of ingenuity constantly re-interpreting the city.
These layers do not need to be read in this particular order; rather they should be seen as parts of a stratified model with various folds and overlaps. The first two described here are driven by the state and can be seen as a response to, but also as the trigger of, the later economic and social layers. In return, the social components can account for a historical explanation of the development towards the present condition, as the topographic features condition the development of the urban morphology in general. But this model wants to be more than an accumulation of acute Omani conditions. Each layer interacts in specific ways with the others. This interaction could be called “the geometry of urbanization.” The reciprocal interdependencies create a dynamic system, whose ever-changing surface-level expressions create a distinct urban morphology.

Finally, no other development in Oman consumes more space, resources, and attention than the ongoing urbanization process of the Muscat Capital Area. The urbanization process in most radical and fundamental shift imposed onto the Omani society that cannot go by without the emergence of a new visual culture. Indeed, the new mass culture described in this model finds its visual-cultural representation in Muscat Capital Area as mass ornament.