

# The dream of Abha

FRANCESCO CELLINI<sup>1</sup>, CRISTINA CASADEI<sup>2</sup>

**Abstract:** In 2014, the Aseer Governorate Municipality in collaboration with the General Authority of Tourism and Antiquities announces a competition for urban and architectural design for a new foundation tourist city in an area just to the north-east of Abha. The one that is going to be described is the winning project, designed by the architects Francesco Cellini (group leader), Luigi Franciosini and Giovanni Longobardi, professors at the Department of Architecture of the Roma Tre University. The “Abha Dream” is the dream of a new city, for leisure, tourism and commerce, functional and with a rich offering of services, water and vegetation. It is a utopia that reflects the current desires of Abha (retracing its perimeter and defining an area of 11 square kilometres); its form embodies a city that develops primarily along a lush *wadi*, resembling and recalling the image of paradise in Islamic culture: a place of rich shadows and fountains of water.

**Keywords:** Abha, urban infrastructure, topography, newly funded city.

FRANCESCO CELLINI

The territory of Southern Arabia, to the West near Abha, is very peculiar: today it is an assemblage convulsively segmented by tall mountains, narrow valleys and dry gullies (*wadis*), eroded and parched following the total abandonment of agricultural activities. Practices that survived only a few decades ago; with great effort it is still possible to read various traces of their existence and, with them, those of human settlement: modest, essential, minimal and poor objects and constructions, suggested by millennia of experience and harsh daily labour.

Objects and constructions that exist (existed) in the deepest and most concealed parts of the territory: in the small valleys of the *wadis*, where the sun rarely arrives, and where the earth, more compact and impermeable, permits (permitted) the construction of irregular sequences of minimal terraces, bordered by earthen walls to create reservoirs, for gardens, plantings and pastures; all that is (was) required to optimise and accumulate what little water was available. This because, in truth, given

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the altitude, climate was not the only temperate element; also the air, laden with the humidity of the Red Sea below, continually deposits a thin veil of water vapour and, in rare cases, light rain. All that was needed to render this land inhabitable and even, in some sections, lush and pleasurable. What was once: *Arabia felix* is no longer: the now sterile earth absorbs each drop, lost in the depths or carried by the winds into the nearby desert. All of this (described so synthetically here) was at the heart of our design: more precisely, it came before all else; it was the primary objective of our efforts to comprehend and understand, and later the foundation atop which we erected our ideas. We worked according to this logic, fully aware of our limited specific understanding of these sites (in truth we knew almost nothing; we are anything but experts in the geology, climate and history of Arab populations). Instead, we dedicated ourselves to a passionate reading and evaluation of anything that could help guide us; texts and literary sources, technical documents, history and iconography, maps, surveys, photographs, etc. Later we were guided, as we defined our solutions, by the conviction that any truly and frankly innovative project (architecture, urbanism, and even the regeneration of the landscape) must in any case be founded on (or confront) a great number of perennial principles that dictate the choice of a site, the cognition of environmental conditions, and a respect for urban proposals or historic constructions. This is also true when, as in our case, economic and technological resources are significant and widely available.

CRISTINA CASADEI

*The edge: the outer boulevard and the monumental city*

Above all else, every idea about the city requires a powerful structure, capable of synthesising and organising the entirety of a settlement. It requires a sign that fixes its form, distinguishing the city from that which, precisely through this sign, is identified as its surroundings. The construction of “walls” is thus the first, inevitable act in the foundation of a city. The *wadi*, which determined the axis of settlement, its basic structure, has no beginning and no end. It assists with the structuring of a backbone, though without the ability to halt expansion. In this contemporary city, without inhibitions and open to change, playing the role of the city wall is a large *boulevard* (in the original sense of the term), a circular path for vehicles, an attractor of flows,

that works to contain and fix the form of Abha Dream, and to establish its limits and points of access. Using streets-diverticulum or important functional platforms, the large arteries crossing the territory of Saudi Arabia to connect large settlements, intercept the boulevard at various points along its length. The large functional centres, event yards, plazas with their relative facilities, or special landscaped areas, like the Natural Science or the Sport and Health Centres, in short the monumental centre, represent the four urban gates. Reflecting universal custom, they indicate the points of access in correspondence with the four cardinal directions.

### *Urban Infrastructures*

The gates and vehicular nodes situated along the boulevard create an articulated network of roads that serve the entire city, linking diverse episodes. Two large arteries, running east to west, bisect the urban area, adapting to the local morphology. In turn, a system of streets crossing the city from north to south connects these arteries with one another and thus to the boulevard, crossing over the *wadi*. They create inhabitable bridges, whose covering is an infrastructure traversed by vehicles, while their interiors become space for a range of services, offices, commercial centres and dining facilities. When it comes into contact with the neighbourhood of terraced patio homes that develops along the edge of the *wadi*, this system of principal arteries grows more minute, with smaller streets and parking areas serving the residential fabric. The edge of the *wadi*, favoured by the coolness rising from reservoirs of water, gardens and oases, becomes the ideal space for pedestrian life, supported and facilitated by people-movers, a shuttle bus running the length of the *wadi*, a shopping centre, sport & health centre and a cultural and entertainment centre facing the lake. Each station of the people-mover features a small plaza with various services. The position of each station is indicated by the presence of a landmark apartment tower.

### *Topography and Urban Development*

The Dream of Abha is thus a new and innovative city which responds to the needs of the contemporary metropolis – functions and services, mobility and sustainability – but which has also been designed in accordance with the rooted and lasting traditions of a strong and direct connection between natural topography and human settlement. The territory of the Asir, of which Abha is the capital, is characterised by the

presence of plateaus with elevated peaks, carved into by watercourses that create the so-called *wadis*. The edges of these valleys, which retrace the local hydrographical system, are generally occupied by terraces used for farming, exploiting the most favourable conditions for this activity. In the project for Abha Dream, these particular characteristics, with an obvious effect on the site selected for the new settlement, are interpreted and reinforced by the types used to define the settlement. Thus castles, hotels, luxury immeuble-villas, services and public plazas emphasise the peaks and offer panoramic overlooks; they stand over and control the valleys from above, condensing the image of the guiding and economic strength of Abha Dream. The plateaus, the valleys framed by peaks, are home to medium to low density quarters, their fabrics comprised of courtyard buildings and the detached villas of the Heritage Village, or the large open spaces, such as the golf course or Sporting Centre. Along the *wadi*, the slopes descending from the plateaus to the level of the water host a fabric of medium density low-rise patio homes and gardens on one side, and the structures of the resort on the other, all of which enjoy vast landscaped spaces running along the valley.

Thus a morphological and environmental richness inherently corresponds with a variety of types of settlement and densities, nurtured by the culture and tradition of a civilisation, which last through time even in a newly founded city (with a new concept) that aspires to be contemporary and to achieve all of the comfort and services available today.

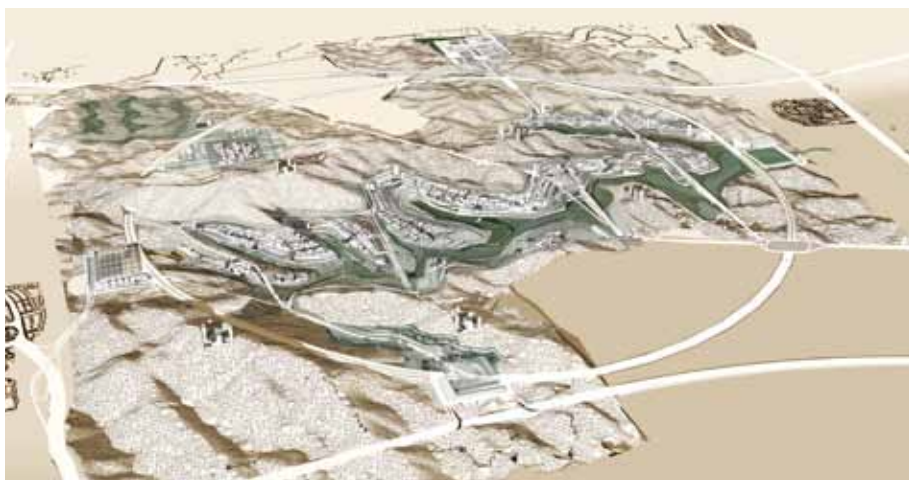


Fig. 1. The Dream of Abha. Department of Architecture. University of Roma 3.

Team: Francesco Cellini, Luigi Franciosini, Giovanni Longobardi.

With Stefano Balzanetti, Cristina Casadei, Luca Catalano, Giulia Cervini, Valerio Socciarelli.



*Fig. 2-3-4. The Asir landscape near Abha.*



*Fig. 5. Aerial photo of the Asir territory, between the Red Sea and the Arabian desert (by Bing Maps).*

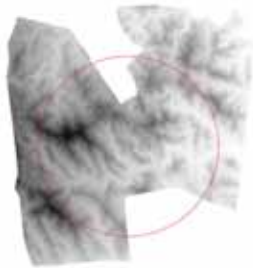


Fig. 6. Site Analysis.

Fig. 7. Morphology



wadi - valleys



contour map

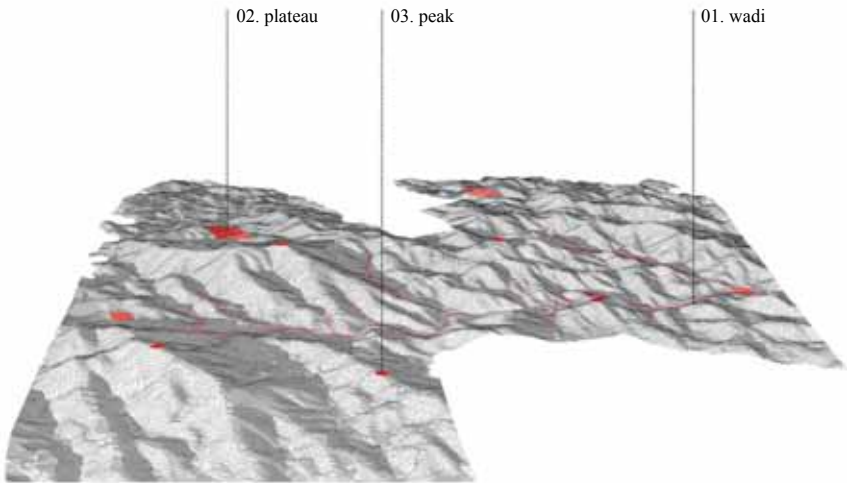
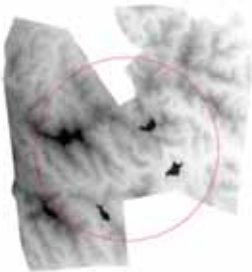


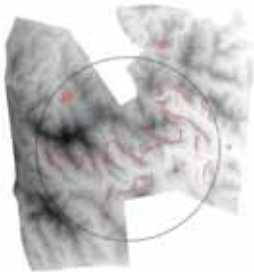
Fig. 8. Relationship between settlement types and topographic features



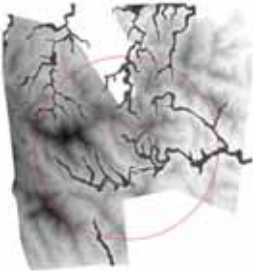
plateaus



peaks



topography and settlement diagram



hydrographic system



shadow map - 01/01 16:00 p.m.



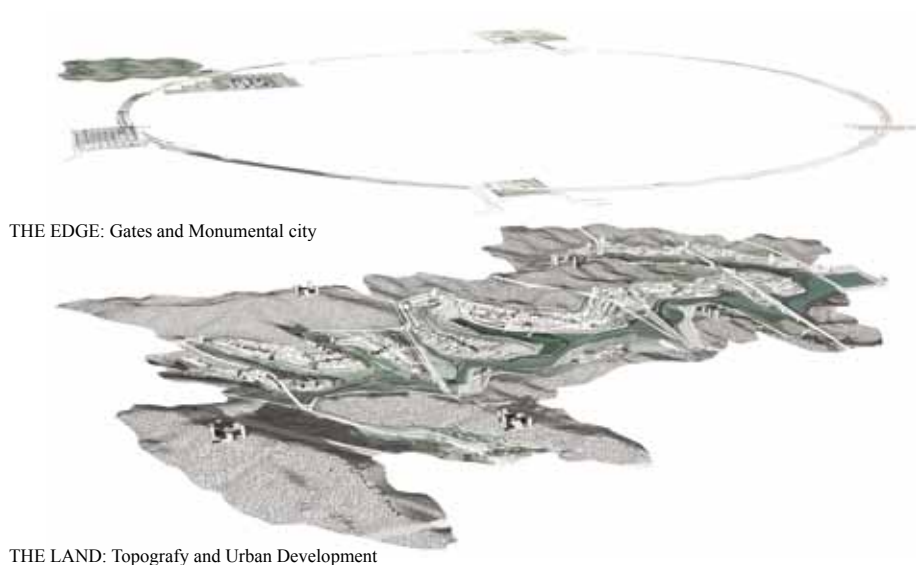
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Fig. 9. Territorial planning and urban development of "Abha Dream".



Fig. 10. Study drawings of the urban development of "Abha Dream": the wadi linear system, the Outer Boulevard and the Gates.



*Fig. 11. Concept and conceptual thinking*



The Outer Boulevard and the Gates.



Main streets and inhabited bridges.



Secondary roads and parkings.



The people-mover and the stations.

*Fig. 12. Urban Infrastructures*

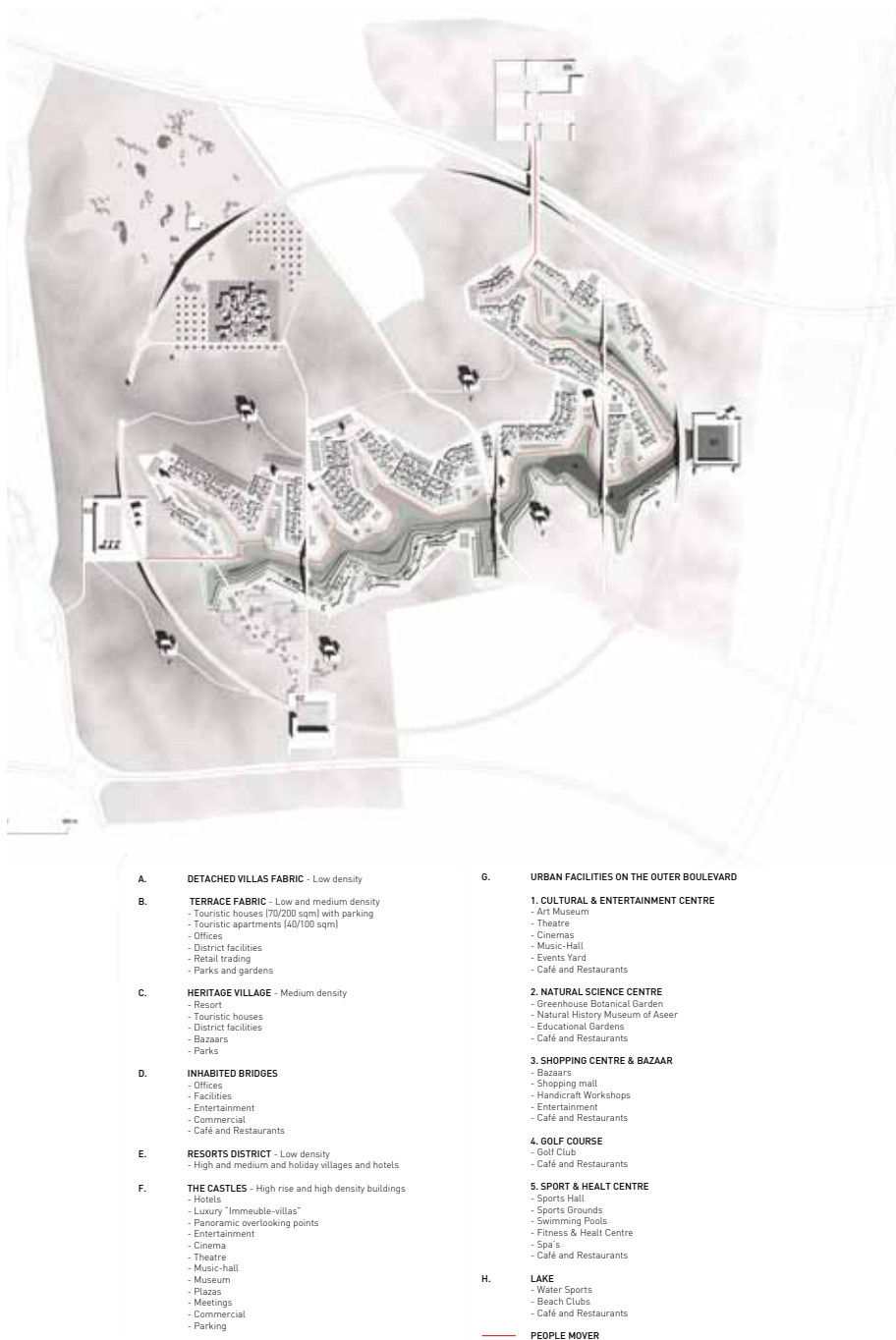
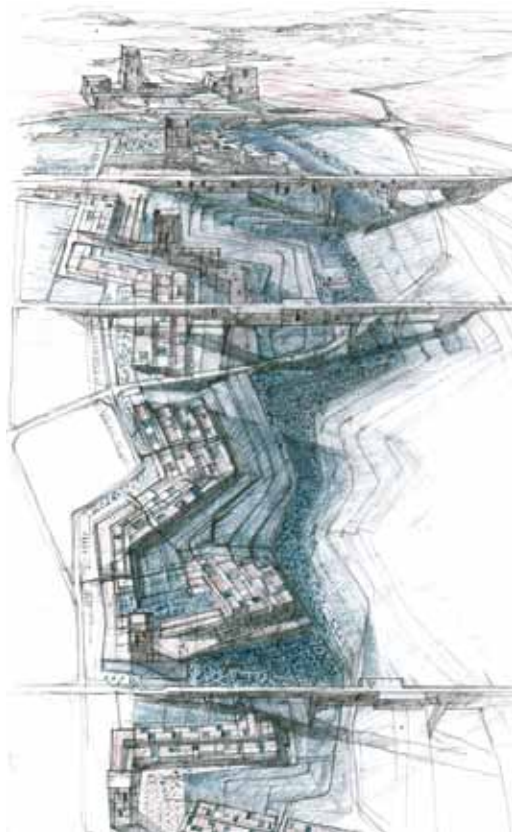


Fig. 13. Urban Plan



*Fig. 14. Study drawings of the fabric of low houses with patios on terraces located along the wadi.*



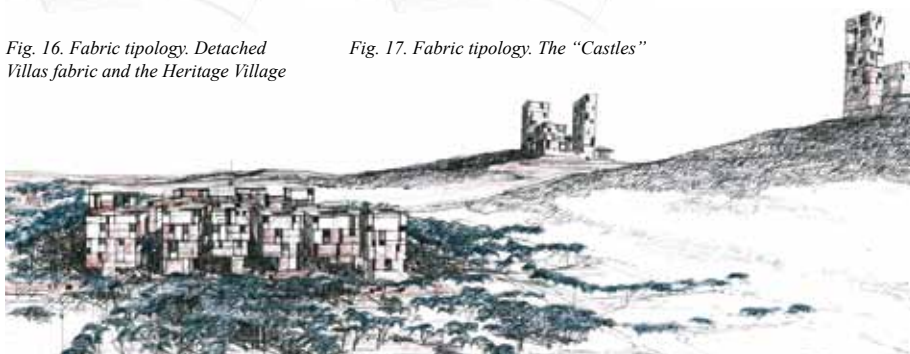
*Fig. 15. Perspective views of the wadi linear system.*



*Fig. 16. Fabric typology: Detached Villas fabric and the Heritage Village*



*Fig. 17. Fabric typology: The "Castles"*



*Fig. 18. Perspective view of the Heritage Village occupying a plateau overlooked by the "Castles".*



*Fig. 19. Fabric typology: Terrace fabric (Patio houses, Tower Apartments, Holiday Village).*



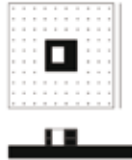
*Fig. 20-21. Perspective views of urban development along the wadi with the castles overlooking the valleys on the background.*



Fig. 22. Fabric typology and their localization.

#### A. DETACHED VILLAS

Plot area: 2500 sqm  
Average floor area: 300 sqm  
FAR: 0,12  
Flats: 1-2



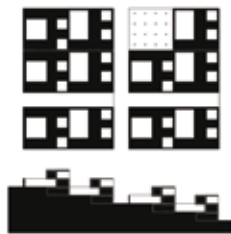
#### D. TOWER APARTMENTS

Plot area: 6000 sqm  
Average floor area: 12000 sqm  
FAR: 2,00  
Flats: 12-15



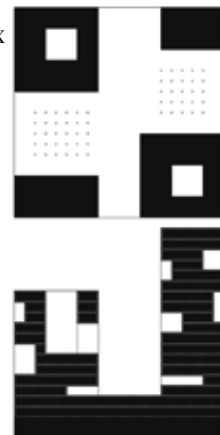
#### B. PATIO-TERRACE HOUSES

Plot area: 400 sqm  
Average floor area: 200 sqm  
FAR: 0,5  
Flats: 1-3



#### E. "THE CASTLE" MIXED USE COMPLEX

Plot area: 22500 sqm  
Average floor area: 50000 sqm  
FAR: 2,20  
Flats: 10-20



#### C. HERITAGE VILLAGE

Typical plot area: 350-600 sqm  
Average floor area: 800-1400 sqm  
FAR: 2,2  
Flats: 3-4

