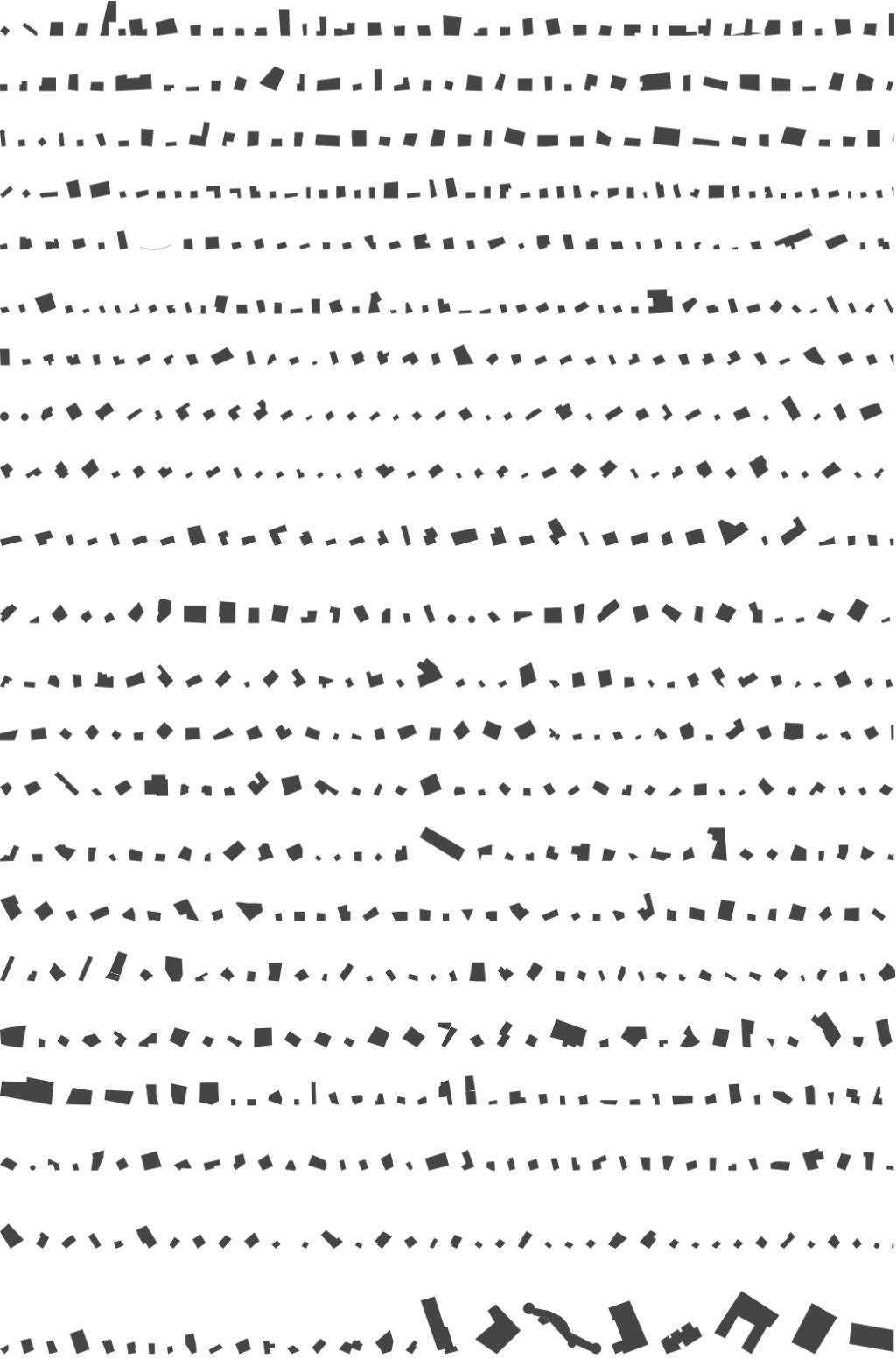




re I think
Mutrah



re I think Mutrah

diploma thesis on Mutrah, Muscat, Oman
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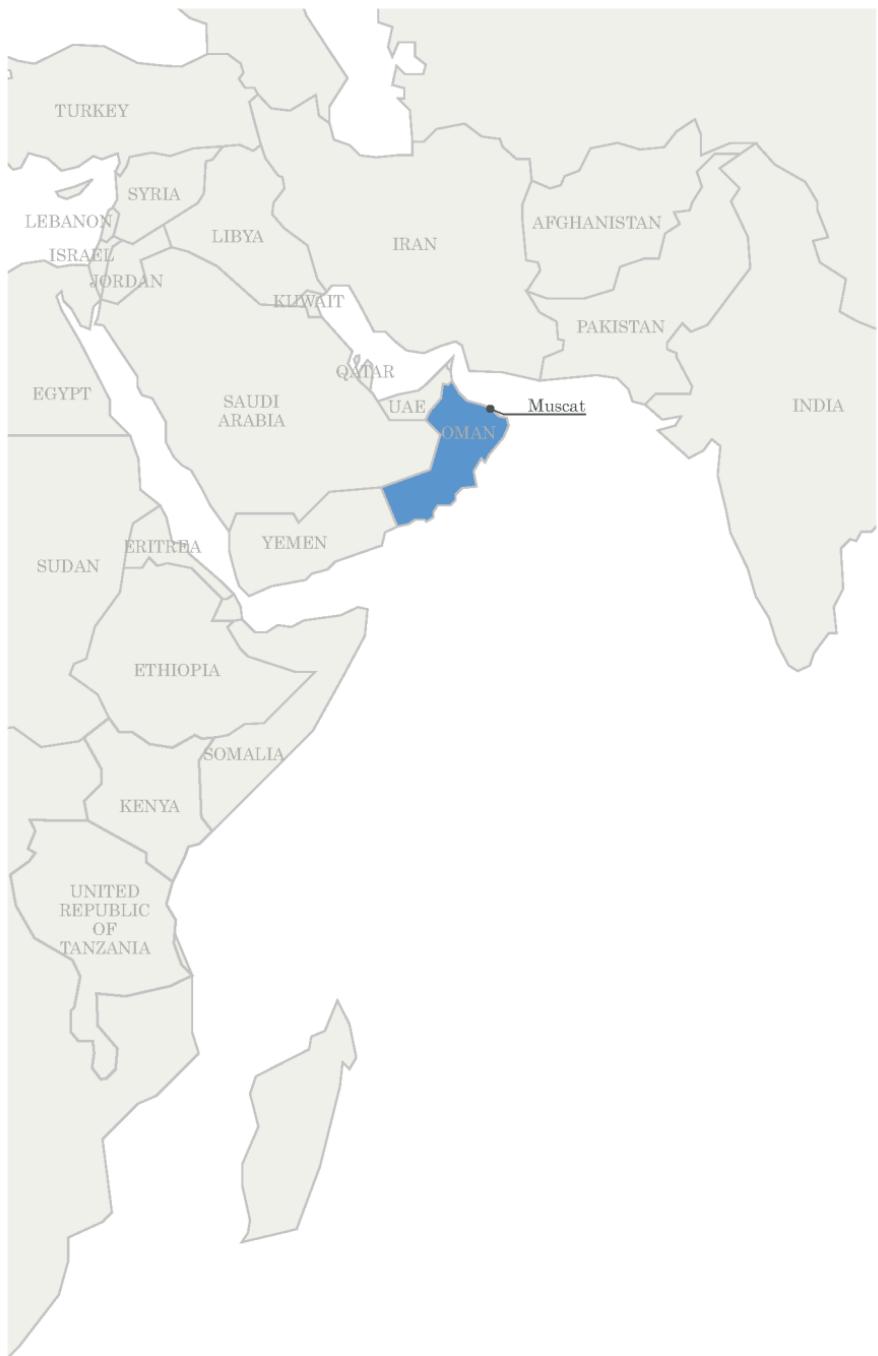
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re | think Mutrah

diploma thesis 2011
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I Oman, a basic introduction

I.1 Oman's rapid development

In any description of a country the author will sooner or later guide his readers to the past in order to get an idea of the country's political, economical and social development. In the case of Oman such an approach is an absolute necessity, as the country's development has been eventful to say the least. Speaking about Oman in general, it is important to understand the enormous transformation this country has experienced, since His Majesty Qaboos bin Said al Said came to power.

Sultan Qaboos had spent his childhood in Salalah. At the age of 17 he was sent to England. There he attended a private school for two years, to later on join the Royal Military Academy of Sandhurst. After completing his education in Great Britain he was sent on a three-month journey around the world. Sultan Qaboos returned to Oman in 1964 to stay in Salalah once again and widen his knowledge in the field of Islamic studies and his country's culture and history.

During the reign of his father, Sultan Said bin Taimur, there was no true conception of the country's size or its' population. The Sultanate lacked a state-covering and functioning administration, as the Sultan practiced a rather withdrawn rule from Salalah. Oman had no internationally acknowledged air- or seaport and the transportation of goods was mainly carried out with the use of camels, since cars were owned only by the government, the military or the police. The country had a total of 3 schools and hospitals were only found in the bigger cities such as Muscat, Mutrah and Salalah. These bigger cities (all with a population under 20.000) mainly consisted of barasti type houses or adobe brick buildings.

Oman's main export products were dried lemons, dried fish, dates and oil with the latter's profits never reaching the population in any way. Many of the Omani people had moved away from their country while those who had returned (e.g. from eastern Africa) didn't have many possibilities to build up a life. In addition the rebellion in Dhofar and frequent turmoil in Muscat kept the people agitated.

Oman had a stable income from the oil industry since 1967. The population did await a change and the west, as well as the other gulf countries, was interested in a stable Oman, due to the countries geostrategic position and the region's ever increasing economic importance.

It was the 23rd of July 1970 when His Majesty Sultan Qaboos began his rule over the Sultanate. His plans of modernization had to wait though as the country was still separated among different tribes, and his power was threatened by the rebellion in Dhofar. Some of the first changes were the abolishment of slavery, opening the borders for travel, and the allowance to use the oil-income for infrastructural changes.

Nowadays the comparison of numbers between 1970 and today has almost become a national habit accompanied by a big amount of pride. And the figures are striking indeed, as Oman is seen as a prime example of rapid development. In fact, "the United Nations Development Programme listed Oman as the most improved nation over the last 40 years from among 135 countries worldwide."¹

The number of schools has risen drastically from 3 to 1283 while nowadays an Omani citizen can receive free medical treatment in any one of 58 hospitals. The life expectancy

has risen to 75.9 years (in contrast to 49.4 in 1970) and the literacy rate has ascended from 4.5% to 87% within the last years. In universities the number of female students rises consistently, which slowly begins to transmit to the business market as well.

And while the population has grown to 2 694 000 today, the cities have expanded accordingly. Muscat, which became the Sultanates capital has grown along the coastline into a 735 000 -people, multicultural business, tourism and transportation hub.

“What we have done over the past 40 years is amazing. It has been a tremendous achievement. In the past, Omanis used to work abroad. After 1970, they came back and started working in Oman. If you compare what Oman has done over 40 years versus other countries that were much more advanced, we went up and developed faster and we are now ahead of some of them.” (Kalat al Bulooshi, chief executive officer of the Oman Investment Corporation) ²

“There is no question that Omanis are better off now than they were in 1970 and the standard of living is immeasurably higher,” says J.E. Peterson, a political analyst affiliated with the Center for Middle Eastern Studies at the US’ University of Arizona, and former official historian of Oman’s armed forces. “[Sultan] Qaboos deserves much of the credit for this, but it should also be remembered that oil income only began in 1968 and his father had little time to start developing the country before he was overthrown.” ²

But despite all positive figures and statistics there is a dark cloud in the horizon: the oil resources. The economy of Oman is mainly based on the profits from the black gold. The oil production had reached its peak in 2001 with 961 000 barrels a day (b/d). In 2009 the amount dropped to 810 000 b/d. Now the country is forced to rethink its strategies and diversify

its economy. In 1995 a conference called 'Vision Conference' was held in Muscat. The resulting 'Oman 2020' plan aims to strengthen the private sector beyond the oil and gas industries and to enhance the tourism branch.

Oman's tourism is different to the rather pompous offers of its richer neighbours. The country has a lot to offer and it doesn't even need as much effort. The Hajar Mountains separate the low coastal plain of Oman from the high desert plateau of the UAE and provide a complete change in landscape. Oman does not need to take the economically stressful path of its neighbours by investing in high profile architectural modern-day wonders. It is a country blessed with a diverse countryside that has lots to offer to any visitor. Wadi crossings, desert experiences of any kind and many trekking possibilities are just a few of the options one has, besides just relaxing by the ocean. And while nature is one thing inviting exploration, culture and history is another. In Oman one will find many highly interesting villages, forts, and museums all revealing parts of the country's past.

The fast development of Oman has left many older areas within cities and villages completely untouched. Birkat al Mawz or Izki are just examples where the old town has been deserted partially or entirely, making it possible for visitors to wander through old adobe structures and experience an old Arab town from proximity. A more conventional option would be a visit to Nizwa or even old Muscat, where the old structures have been renovated and represent a bond to the past, modern Omanis aspire to maintain.

I.2 the social component

Having looked at Omans general development, it is well worth inspecting the social changes as well. It is only natural that a country's infrastructural development is much faster than the one happening on a social level. While the advancements on the judiciary, legislative and executive branch have been evident there are still many changes lying ahead, only this time they might not (only) come from "above". The Sultanate is one of the most developed Arab countries, but it is also one of the youngest countries to reach this distinction.

Just as one will find a lingerie billboard right next to the women's prayer room in a mall, or a smart-phone of the latest technology hidden in the pockets of the traditional 'dishdasha' (traditional Arab dress for men), it is fairly easy to notice a chasm between old and new in almost all aspects of daily life. This is most certainly an enormous and diverse subject to address, yet highly interesting to observe within the urban context and behaviour patterns.

With greater age difference this collision of old and new, traditional and modern or even Arabic and Western get more and more frequent. The fact that the younger generation is a better indicator of this observation does not only rely on the much greater amount of commodities or the political stability young people get to enjoy nowadays. A young Omani person is exposed to a much greater variety of influences, such as television, the Internet and music from abroad. Still one will find many pictures in international magazines blackened and many scenes cut out of a movie; everything deemed as inappropriate does not find its way directly to the consumer. Certainly, in most cases it is far from impossible to get to the 'explicit' material, but in any case this is not necessarily the kind of material that makes the difference.

Today a young person growing up in Oman is usually confronted with two quite opposing worlds. One world might be the one brought about by his/her parents. Here one will learn that the bond of the family stands above all other things. Cultural and religious values are transmitted, sometimes emphatically, other times in a more liberal manner. In most cases young men and women learn the behavioural do's and don'ts within the Arab society from their family and from their teachers in school. The religious ethics and a certain code of conduct (with its restrictions) is a great part of these lessons.

The other part would be the influence from abroad. A young Omani nowadays knows just as much about the most recent US hit-series, the latest musical hit from a hip-shaking singer or the newest fashion trends from Europe, as his/her counterpart from any western country does. One or the other might even enjoy one of those 'products' too much for his/her custodian's liking.

But certainly music, movies or fashion are not the only influences a young Omani gets from the media.

Today's Omanis enjoy more possibilities to travel and see other cultures than ever before. The number of young Omanis visiting western countries or even studying abroad is rising. All the impressions gathered and differences seen are an influence one way or another. And such influences do tend to make people think and usually do polarize opinions, regardless of the subject being politics, religion, society, women's rights, etc.

Even just a short look at the numbers of schools and universities that emerged during the last 40 years and the

resulting numbers of Omanis with proper education is a hint towards the impending change of perception within the population.

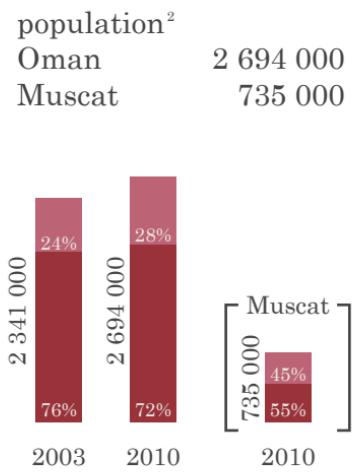
Another important element in this process is the different economic system Oman is based on today. While in the past the family and the tribe would take care of each other, providing work to the younger members and support to whoever was in need, things do not work that way nowadays. The function of a tribe as a self-reliant community does no longer exist. In order to find employment in most cases one must have had some sort of education. Parents know that the better their child's education, the better its chances to a prosperous life. The costs, that accompany such an approach, are in turn one of the reasons for an ever-decreasing fertility rate.

There is a gap developing between the generations and it seems that the upcoming crop of young men and women will have some decisions to take.

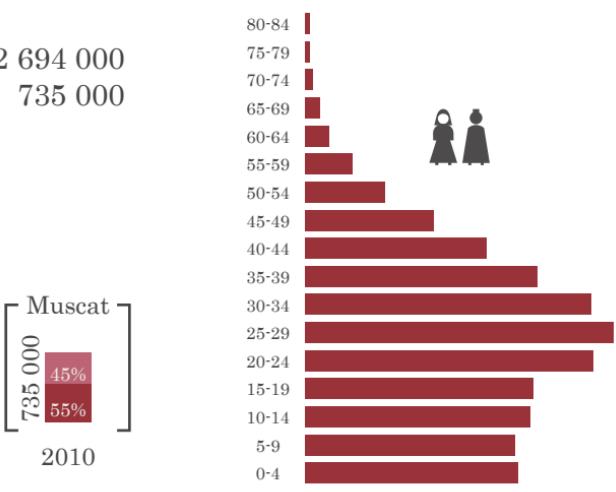
In almost every part of Omani life one will find western influences, starting from life in public, to the way of living within one's own four walls. Within architecture many teachings of the traditional, climate oriented way of distributing space and proportions seem forgotten, as more and more Omanis follow the trend of building western style villas with big glass surfaces in the façade and a big wall around the premises. The fact that the glass needs to be tinted due to the high temperatures (and for privacy-reasons) doesn't seem to appear comical to anyone; just as it doesn't seem to irritate, that the unity, dynamic and safety provided by a neighbourhood (just as it used to be in the past) is being completely wiped out of the urban context.

Oman quick stats¹

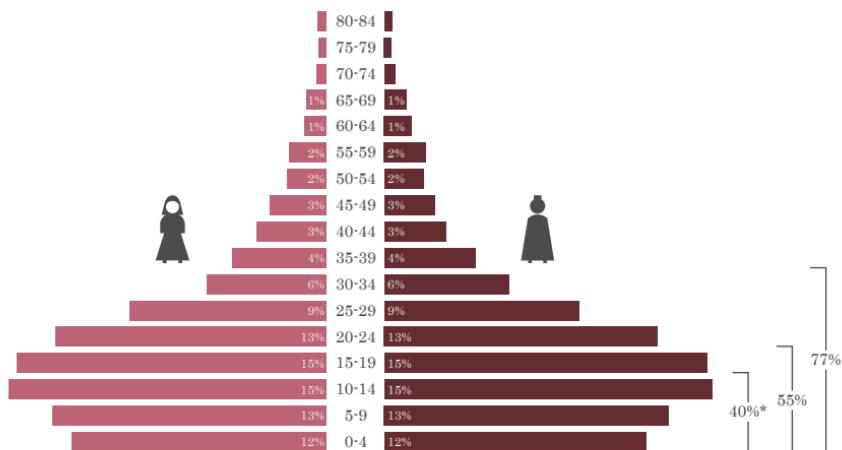
name	Sultanate of Oman
location	southeast of Arabian Peninsula, 16°40' & 26°20' N, 51°50' & 59°40' E
climate	summer up to 52°C in Muscat, inland up to 57°C winter 25° - 35°C
size	309.500 km ² (approx. size of Germany)
capital	Muscat (population 735 000)
language	arabic (business language english)
population	2 694 000 (2010 census of Oman)
ethnic groups	Arabs, Baluchi, African, South Asian (India, Pakistan, Sri Lanka, Bangladesh)
religion	Islam, 88 % Muslim, mainly Ibadi branch
form of government	monarchy (sultanate) with two advisory bodies Council of Ministers (Majlis al-Wuzarā) & Consultative Council (Majlis al-Shūrā)
head of state	HM Sultan Qaboos bin Said bin Taimur Al Said, since 23.07.1970
political parties	none
currency	1 Omani Rial (R.O.) = 1 000 Baizas 1 R.O. = 2.60 \$ US
gdp	46.1bn \$ (2009)
gdp per capita	20 254 \$ (2009)



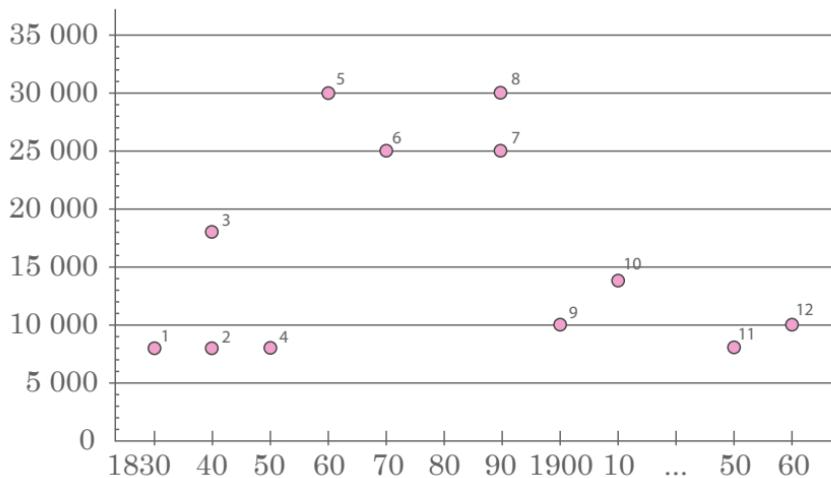
■ Omani
■ expatriate



total population in Muscat³
by Age Group (2004)



total population in the Sultanate³
by Age Group and Sex (2004)



- 1 Roberts 1833
- 2 Henshaw 1840
- 3 Ruschenberger 1838
- 4 Osgood 1854
- 5 Stiffe 1860
- 6 Palgrave 1868
- 7 o.V. 1888
- 8 Birks 1895
- 9 Landen 1967
- 10 Rabot 1911
- 11 Encyclopedia Britanica
World Atlas 1960
- 12 o.V. 1956

population development Mutrah
(1830 - 1960)⁴

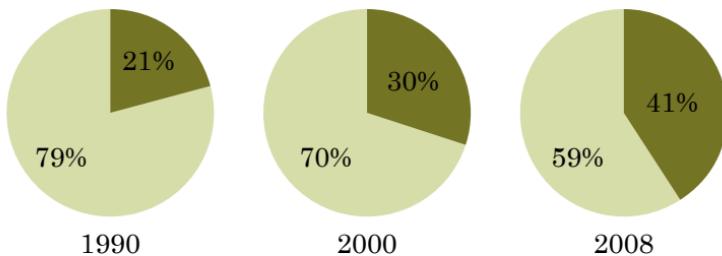
	1993	2003	2010
population below 15*	52%	40%	35%
size of household		8	7.5
fertility rate	7.20 (1973)		3.05
life expectancy			74
literacy rate		78,1%	87,8%
computer use		16%	53%
internet use		7%	33%

Oman census 2010
preliminary results

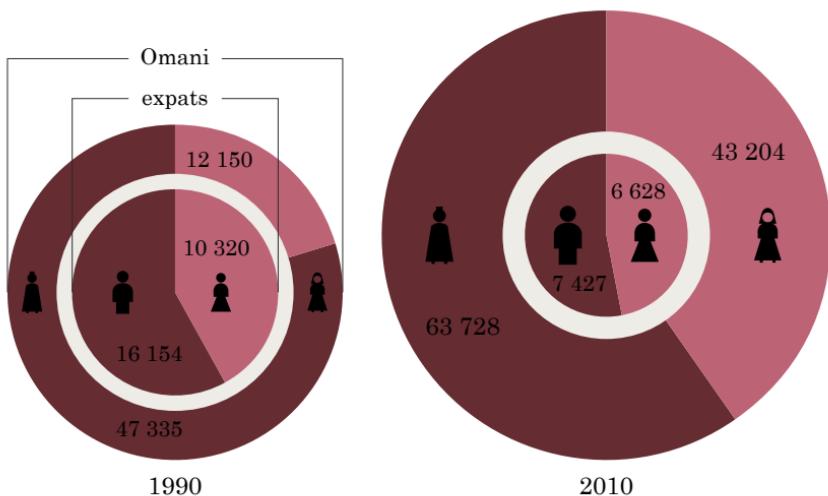
prayer times	
winter	summer
04:50	04:00
12:00	12:00
15:30	15:30
18:00	19:00
19:20	21:00

	1970	2008
ROADS (km)	paved roads	10
	schools	3
	teachers	30
	students	900
EDUCATION	literacy rate	4.5%
	phone lines	557
	hospitals	2
	life expectancy (years)	49.4
COMMUNI- CATION	fertility rate	7.20
HEALTH		75.9
		3.05

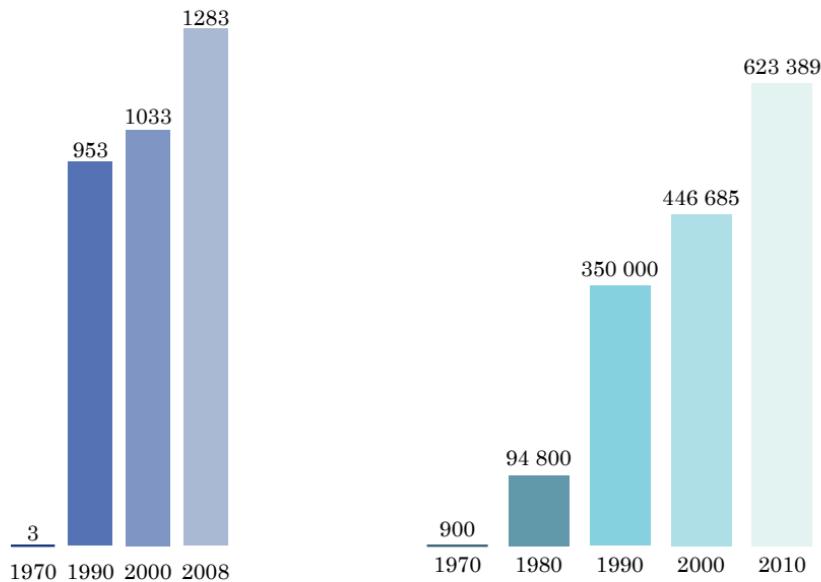
social & infrastructural indicators
1970 / 2008⁵



paved roads
 unpaved roads⁶

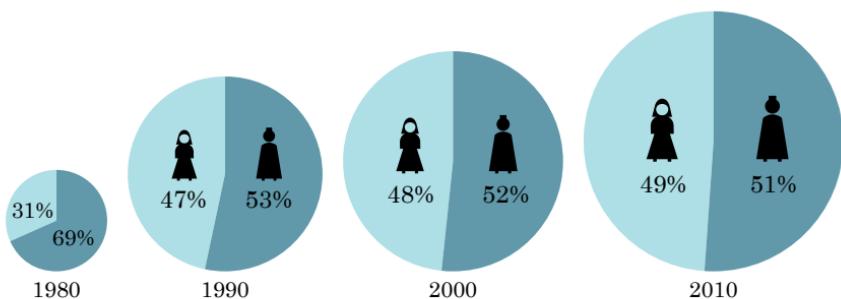


employment female / male
(expat / Omani)⁶

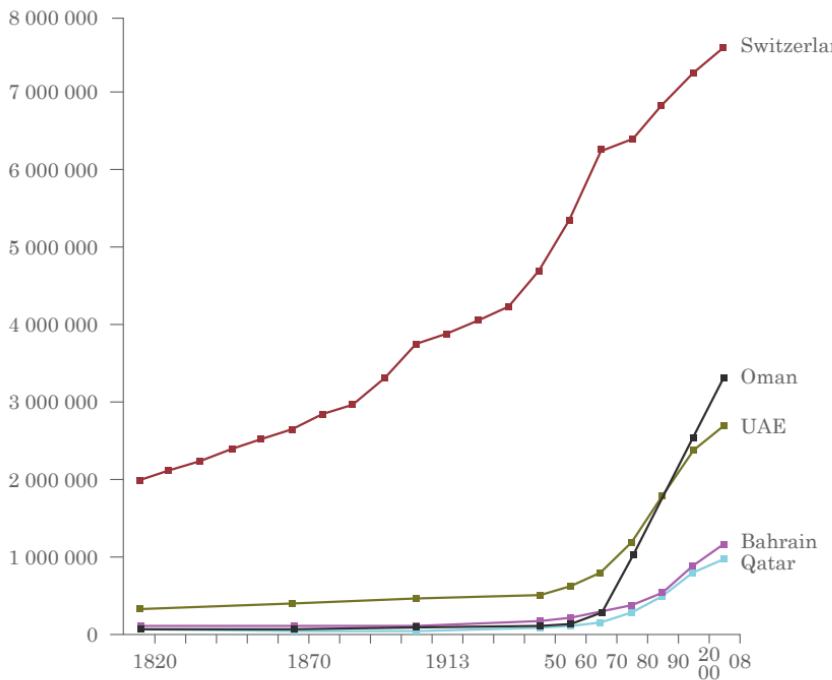


number of schools^{5,6}

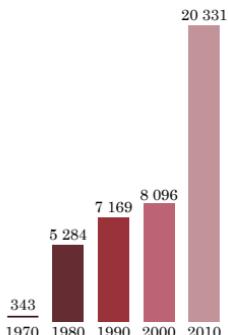
number of students
(primary & secondary education)^{5,6}



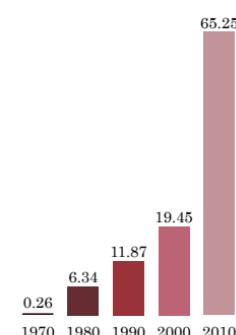
number of students female / male
(primary & secondary education)^{5,6}



demographic growth
in Switzerland, Oman, UAE, Bahrain, Qatar⁷



Oman per capita GDP (\$)
(2010 expected figures)⁵



Oman nominal GDP (\$bn)
(2010 expected figures)⁵

sources: demographics

- 1 Auswärtiges Amt, indexMundi, Statistisches Bundesamt
- 2 census of Oman 2010 preliminary results
- 3 Ministry Of National Economy, Sultanate Of Oman
- 4 Fred Scholz ; Muscat, Sultanat Oman: Geographische Skizze einer einmaligen arabischen Stadt; 5.1 Drei Indikatoren; Das Arabische Buch, 1990; p. 100
- 5 Dudley, Dominic; Reflecting on 40 years of Sultan Qaboos' rule; <http://www.meed.com/sectors/economy/government/reflecting-on-40-years-of-sultan-qaboos-rule/3008038.article> ; 04.04.2011, 19:41 (Sources from World Bank, National Economy Ministry of Oman)
- 6 "Four decades of progress"; Times of Oman: 29.11.2010
- 7 EPFL Lapa, Institut d'architecture, Faculté ENAC École Polytechnique Fédérale de Lausanne; Bahrain Lessons, Teaching and Research in Architecture; Chapter 2, Analysis; p.37

II.1 Muscat ... Mutrah

Mutrah as a city does not enjoy much notice in historical documentation until the 16th century. The city had to wait until the early 19th century to step out of Muscat's shadow and become the main focal point.

The history books reveal a lot of writings about the importance of the Omani coastline ever since the maritime trade began. It is known, that there have been trade relations between the Meluhha, the Majan and the Mesopotamians, as early as in the 3rd millennium B.C. The main goods of trade were wood, reed, aliment, copper, diorite, alabaster, pearls and incense.

By the 3rd century B.C. these trade routes had expanded to the east, beyond India and by the 1st century B.C. to the eastern coasts of Africa.

It is unsure how much influence Muscat had by that time, as Sohar is the first harbour mentioned during the 3rd century A.D. Amid that time the peninsula's trade connections had reached China.

The earliest historic notes about Muscat come from the 9th century A.D. It is described as the starting port for the ships to Kulum Mali and India. A century later Al Muqaddasi will describe Muscat "as a fine town, rich in fruits, the first place which the ships from Yemen reach".³

During the 15th century an Omani seaman who supposedly accompanied Vasco da Gama to Calicut describes: "Muscat is a port unequalled in all the world... it is the port of Oman throughout the whole year. There, boats take on cargoes of dates – fresh and dried – and horses and sell cloth, oil, slaves and cereals".³

In its earlier history, Muscat lost its influence once superior powers became competition in the maritime business within the Indian Ocean and the Indian trade came under European control. It was the final blow in the shift of commerce towards Mutrah.

Once Sultan Qaboos came to power the already existing development plans for Muscat were put forward. It was one of the Sultan's first decisions to make a capital out of Muscat and to develop the Muscat Capital Area.

According to Fred Scholz the diversity, which has been the main characteristic of the lively Muscat from the past, does no longer exist. Its function has been reduced to mere representation.⁴

Mutrah does not get away with more flattering words either, as Prof. Dr. Scholz says: "The city of Mutrah, (...) has lost its former identity almost completely and today poses a quarter of the Capital Area with a very limited function."⁴

As mentioned above, Mutrah does not really appear much in history books until the 16th century A.D. This has a fairly simple reason: until the 19th century the inland trade was of no importance. The economically significant region was the coast with all its major harbour cities. When European powers interfered in the Indian Ocean trade, Oman and Muscat were more or less out of the competition. Re-orientation is what followed, and merchants began looking towards the inland. Mutrah became more and more interesting, because in contrast to Muscat, Mutrah did have a direct link to the interior of Oman. In the early phase of this trade-shift Mutrah served as a mediator between Muscat and the rest of

Oman. But it didn't take long for Mutrah to replace Muscat as the main trade destination.

Ruschenberger writes in 1889: "large droves of camels and dromedaries, from the interior, arrive daily, loaden with weat, dates, grapes, etc."⁴

In another description from 1889 Keun de Hoogerwoerd writes: "All products from the inland arrive here by caravans and are brought to the market. Here the Bedouins from the inland also do their purchasing."⁴

In the 19th century Mutrah was inhabited by few Hindus, Arabs of mixed tribes, Bayasirah, Africans, Baluchi people and four districts belonged to the Khojas. The latter was the economically and socially most important group and their imposing settlement Hellat Soor al Lawatiya was one of the most striking architectural elements of Mutrah.

A few years after the above descriptions, Miles writes about Mutrah: „The town of Mutrah is defended by a strong wall with two gates and four bastions; at the east end the citadel is on a commanding eminence, and in the centre of the town is a walled enclosure called the Soor al-Lowatya, occupied by the Khoja community, into which no others are admitted. The leghth of the town, bounded by two high rocks at each end, is about half a mile, having some good houses, while the bazaar is larger and better stocked than that of Muscat. The inhabitants, who are very cosmopolitan, are located entirely within the walls, the exposure to hostile raids by the Arabs of the interior preventing the people from residing outside. The harbour is wide and capacious, with good anchorage for native craft.“

In another writing, Morris compares Muscat to Mutrah: "Muscat, the home of the Sultans, the consulates, viziers and the Muscat-Rifles (...) was reminiscent to a noble club-district in London. Mutrah on the other hand was a loud, lively,

happy, money-raking place, where camel drivers spent a few nights before returning to the mountains and Arab sailors stretched on their boats.”⁴

Apart from the Lawatiya settlement, Mutrah mainly consisted of one storey stone- or mud-buildings. The stone buildings that rose above one floor often had a colourfully painted balcony. These houses usually belonged to residents of Indian origin. Within the residential areas weavers, blacksmiths and carpenters had their shops, while Nazi Moja and the Souq Saghir offered mostly tailoring and laundry services. The Khoja community dominated the souq (until 1990).

II.2 changes in Mutrah

Even though Mutrah was subjected to various changes since Sultan Qaboos came to power, its development was somewhat stagnant until then. This is due to a construction ban forced upon by the previous Sultan Said bin Taimur. According to that law, it was not allowed to perform any constructive changes upon a building unless it was a necessary repairing. In that case the original materials were to be used. This led to Mutrah not changing much until the early 1970ies.

One noticeable change however was the replacement of the roof from the souq with one of more fire resistant materials after an accident.

Once Sultan Qaboos rose to power he introduced his plans of instituting the “Muscat Capital Area”. For Mutrah it was planned to connect the port area with the rest of the city and to even forward the connection towards Muscat by introducing a Corniche. Apart from that the planning aimed at a further connection towards Ruwi in the south. In 1970 the construction of the new Port Sultan Qaboos began and after the completion in 1974 Mutrah became the main commercial port of Oman.

The Corniche also had an immediate impact on Mutrah. With this new and easy access the revenues of the souq multiplied, as now more and more Omanis owning a car came to Mutrah. But the feelings of the consumers soon changed, as it became increasingly difficult to find parking spaces. Apart from that a new type of souq started emerging in almost every residential area of Muscat: the mall.

II.3 Mutrah today

Today the Wilayat of Mutrah consists of eight residential districts (Muttrah City, Greater Muttrah, Al Wattia, Ruwi City, Wadi Addi, Annat, Qurum (east of the Nature Park) and the Port of Al Fahl) and has a total population of 154 316 of which only 30% are Omani. This project will focus on Mutrah City, which is mainly known for its famous souq and the port Qaboos.

As Muscat increasingly served representational needs, it lost its liveable character, becoming a place to visit, but not to live. It seemed as if the entire area had turned into an outside museum. Mutrah on the other hand has maintained its status as the people's old town, even if it has lost its commercial influence from the past, ever since Ruwi became the business district and each area within Muscat became more and more self-dependent.

In Mutrah the residents assemble a multitude of ethnicities and cultural influences. The population is estimated around 15 000 people. The project area can be partitioned in 12 sections with a total of 1704 housing units. In some parts slight culminations of certain ethnicities are noticed. The main nationalities or backgrounds found in Mutrah apart from Omani Arabs, who do not form the majority, are East – African, Hindus, Pakistani and in general South – East – Asian, while the main religions represented are Shia, Ibadi or Sunni Muslims and Hindus.

The majority of employment activities are related to the souq (retail, storage, distribution) and the port. Apart from that Mutrah has a lot of laundry-, tailoring- or coffee shops, while many residents seem to work in nearby Muscat or Ruwi as well.

The city's most striking elements apart from the souq and the port are the Lawatiya settlement with its impressive mosque on the Corniche, the Mutrah Fort, which was built by the Portuguese after 1578 and the countless watchtowers always appearing in the background. The fish market in the north and the museum Bait al Baranda are two further points of interest.

II.4 Mutrah's urban fabric

But Mutrah has more to offer than punctual attractions. Certainly Mutrah does not consist of an accumulation of world heritage objects, nor does it offer the postcard-perfect monument as other parts of the city do. Yet looking at the urban fabric of Mutrah it is clear to see, that this is the only part of Muscat featuring an historic urban pattern in use.

Due to its function as a centre of trade Mutrah has always been a melting pot of ethnicities and cultures. As mentioned above there are groups of different backgrounds living harmoniously together within the city. When talking about the historic urban pattern of Mutrah, it is important to see, that the structures around the souq do not necessarily represent the archetypical old Arab town. It is much more a mixture of influences that have led to Mutrah's appearance. These ever changing influences and cultures are what the city has grown upon and this is what makes Mutrah unique.

II.5 Mutrah's short-term future

Despite all its potential the city seems to have fallen into a state of light sleep. This does not mean that there is no activity whatsoever in Mutrah. On the contrary: Mutrah welcomes more and more visitors each year, the problem is, it does not seem to prepare for what's looming in the future. Looking at the tourism sector it is hard not to notice the ever-increasing numbers of tourists coming to Oman. The Sultanate, as mentioned in the previous chapters, does invest in tourism and projects such as the Blue City (Al Madina A'Zarqa), a fully functional sustainable city for roughly 250 000 people just outside Seeb is the perhaps most obvious example. On the projects official website one will read: "In accordance with the 2020 vision of His Majesty, efforts are now being made to establish Oman as an international destination for Tourism and Trade. It has also enabled markets to open up for varied industrial sectors."⁵

In Mutrah the rising numbers of visitors are easily seen with a quick look at the cruise ship schedule. In 2006 Mutrah welcomed 37 cruise vessels in total. In 2008 the number increased to 84 and it reached 120 by 2009. The same year 109 605 tourists visited Oman from the Port Sultan Qaboos. In 2008 it had been only 69 463, which means within one year there was an increase of 57,8%.⁶

During high season (February, March) up to five vessels arrive in Mutrah within one week. Looking at the tourist facilities and the limited possibilities in offer, it is no surprise that a visit in Mutrah usually doesn't last longer than two hours. Foreign visitors will come to Mutrah mainly to see the souq. Their expectations of a 'mystical Mutrah', a fairy-tale like city that takes its visitor on a journey in time, back to Sindbad's adventurous era, is a bit exaggerated and usually

leaves visitors impressed by the souq, but disappointed by – well, only the souq. Having analysed the visitor's movement within Mutrah during different hours of the day, fairly simple patterns emerge. In general, a visitor coming from a cruise ship will walk along the Corniche, passing by the Lawatiya settlement until the souq entrance. Inside the souq he will spend not more than 1,5 to 2 hours, not even necessarily reaching the other end just in front of the old city gate. After an intensive walk in this maze of alleys where each vendor will confront him with the most 'unique and cheap' products in the whole of Oman, the already familiar entrance point with two average restaurants will be the next destination. Here some choose to have a refreshment before walking back to their ship, taking a taxi back to the hotel or waiting for the tour bus to pick them up from the very same spot. The fort is 'admired' from afar, the Bait al Baranda museum usually stays unnoticed and the adventures of Sindbad-like explorations are forgotten.

But the increasing number of visitors is not the only major issue coming up to Mutrah. Since many years now, there have been discussions about relocating the commercial part of the port. "The government is considering whether to relocate or convert Port Sultan Qaboos fully or partially into a dedicated cruise tourism port," Saud bin Ahmed al Nahari, Chief Executive of PSC.⁶

The effect such a change could have for Mutrah is immense. Not only would it change the city's main source of income, it would also change its demography and its conception as a whole. Up to this point though, there is no official plan for that area.

Therefore it is difficult to make any predictions about the relocation regarding the “re:think Mutrah” project. The only assumption that seems certain is that there will be an increase in visitors coming from the port and there might even one day be a touristic area, functioning as a counterpart of the city centre or a starting point for walks.



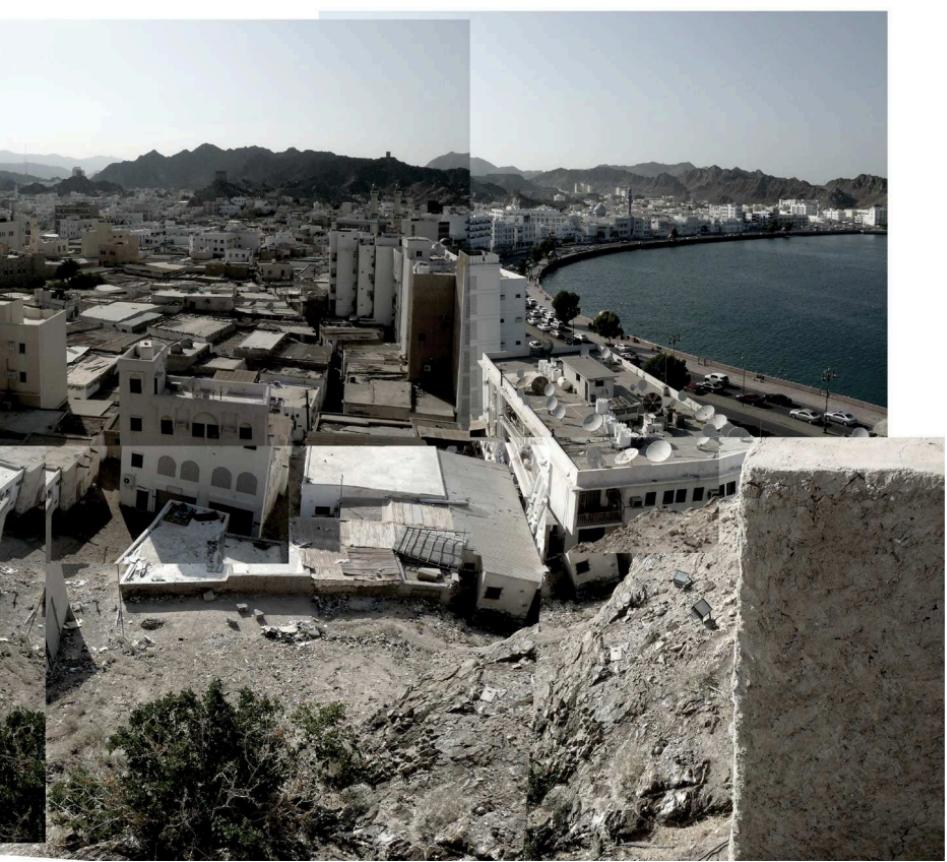
diagnostics 2011



views on Mutrah



top view on Mutrah from fort





top view on Mutrah from tower



top view on Mutrah hill-top

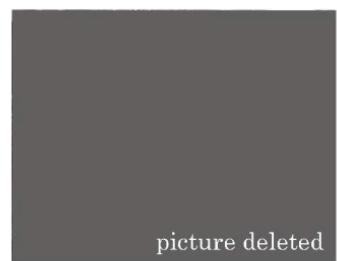




past / present comparison



before 1970



picture deleted

souq Saghir, date unknown



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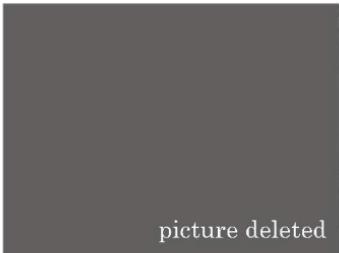
coastline, date unknown



photos past / present Mutrah

model old Mutrah, 18th century (early Al Bu Said era)

during 1970's



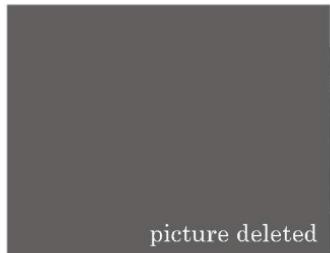
souq Saghir, 1974 & 1982

today



souq Saghir, 2011

picture deleted

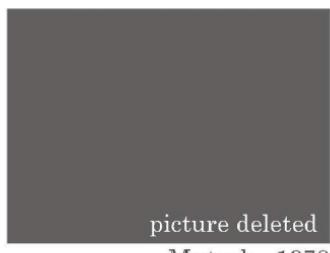


corniche, 1976



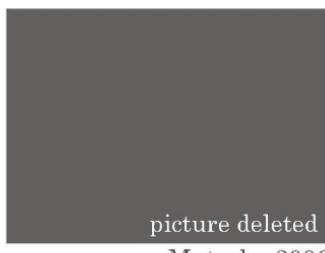
corniche, 2011

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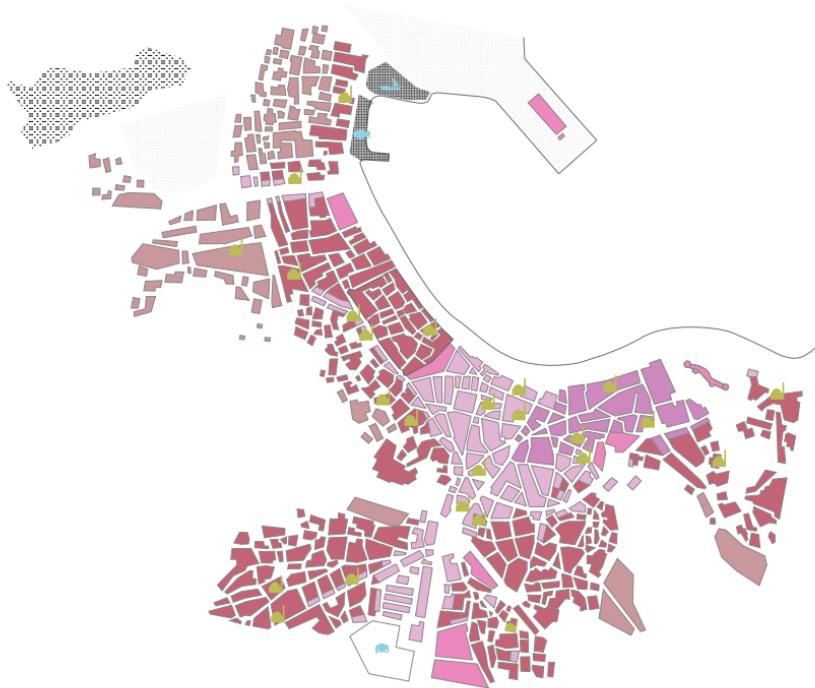


Mutrah, 1978

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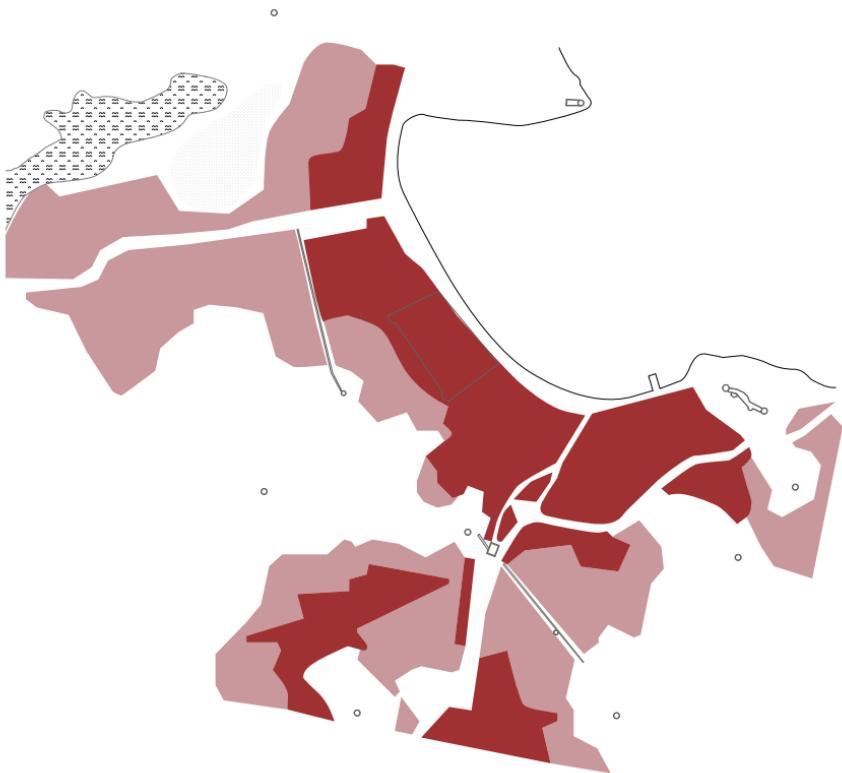
Mutrah, 2006



uses Mutrah 1974¹

- [Red square] residential mud / stone
- [Brown square] residential barasti
- [Pink square] public buildings
- [Light pink square] retail
- [Purple square] wholesale
- [Dotted pattern] port
- [Graveyard icon] graveyard
- [Taxi stand icon] taxi stand
- [Boat repair icon] boat repair
- [Fish market icon] fish market
- [Mosque icon] mosque

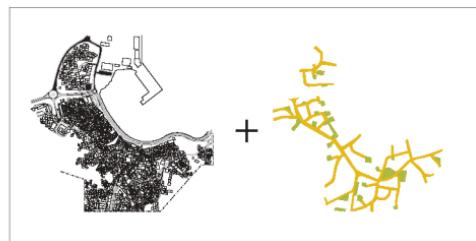




building condition Mutrah 1968¹

- █ mud / stone
- █ barasti
- ~~~~~ graveyard
- lake remains





planned infrastructure 1982 vs. today²

- planned parking 1982
- planned streets 1982



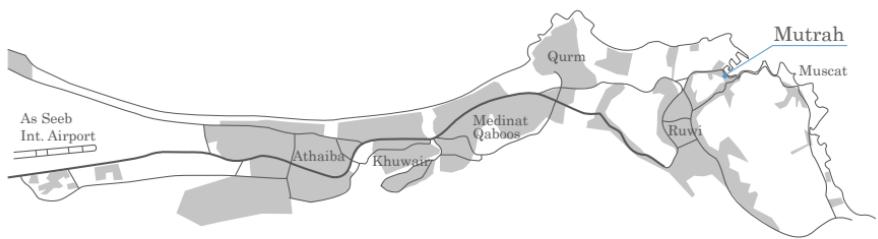
0 100 250 500

sources: past present comparison pictures (from top to bottom)

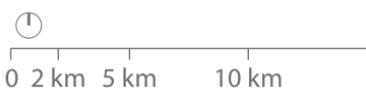
- 1 Andreas Klozoris
- 2 Andreas Klozoris
- 3 Andreas Klozoris · picture taken at the Bait Al Baranda Museum

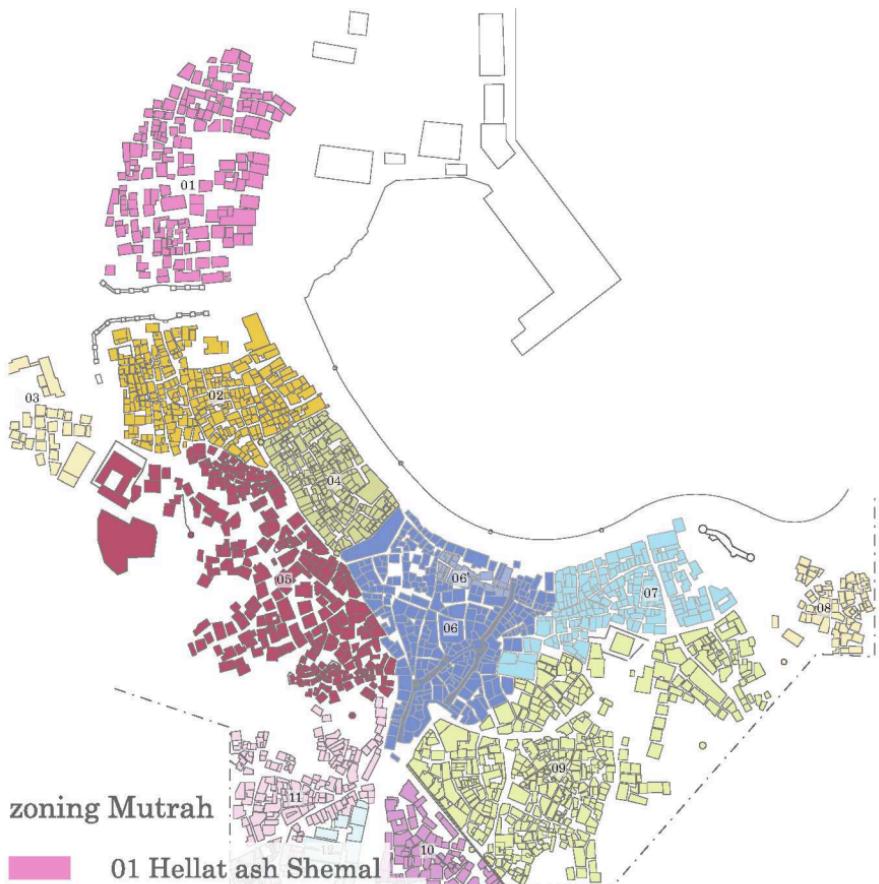
sources: past present comparisons

- 1 Fred Scholz: Muscat, Sultanat Oman: Geographische Skizze einer einmaligen arabischen Stadt: Die Geschäftsstadt - das Geschäftsviertel: Matrah?: Das Arabische Buch, 1990; p. 247 & 251
- 2 Fred Scholz: Muscat, Sultanat Oman: Geographische Skizze einer einmaligen arabischen Stadt: 3.4 Planung und Perspektiven, Matrah: Straßenplanung 1982: Das Arabische Buch, 1990; p. 315



map Muscat

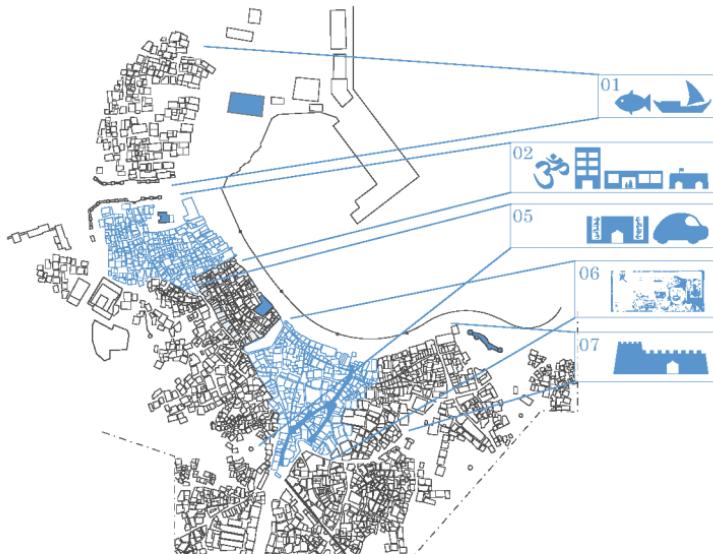




zoning Mutrah

- 01 Hellat ash Shemal
- 02 Hellat Hinood (Hana)
- 03 Hellat Darwazah
- 04 Hellat Soor al Lawatiya
- 05 Hellat Nazi Moja
- 06 Souq Saghir
- 06' Souq al Dalam (Dark Market)
- 07 Souq Kabir
- 08 Hellat Mutaireh
- 09 Hellat al Aryaneh
- 10 Hellat al Fada' ah
- 11 Hellat al Qassaseeb
- 12 Souq Jadid

0 100 250 400



Areas with quite different characters due to different religions, cultural backgrounds etc.

From 01 to 12 Mutrah is a melting pot of cultures and uses.

01 Hellat ash Shemal

interesting functioning fish market + history: boat construction site

02 Hellat Hinood (Hana) - mainly Hindu

great building diversity + labyrinth of alleys + Bait al Baranda museum

04 Hellat Soor al Lawatiya - Shia settlement, Koja community
impressive mosque + historically significant & oldest residential area

05 Hellat Nazi Moja - very lively mixed neighborhood

many matams + many uses + many open spaces + car access

06 Souq Saghir - main tourist attraction

one of best preserved souqs on Arab peninsula + only tourist attraction

07 Souq Kabir - storage area of souq

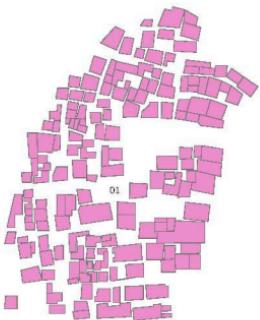
quiet storage area + potential for further usage + prominent position + fort

01 Hellat ash Shemal

Hellat ash Shemal is a mainly residential area in the north of Mutrah.

It is located opposite to the port Mina Qaboos and the fish market. In the past the area's two attraction points used to be the fish market and the facilities for ship construction. Once the new port was completed in 1974 an asphalt street was drawn around Shemal and the ship construction site disappeared. The fish market was shifted next to the port.

Today the area mainly features residential units, few grocery-shopping possibilities, two mosques and four hotels.



02 Hellat Hinood (Hana)

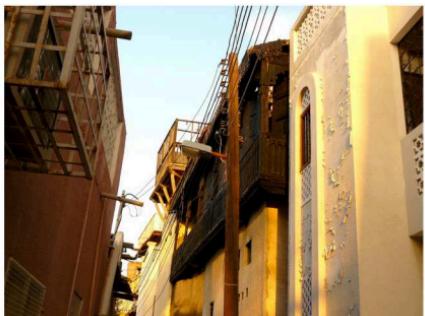
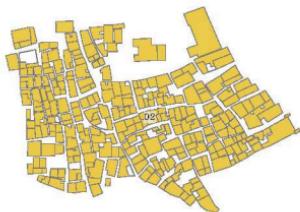
Hellat Hinood, or Hana as many locals call it, is a residential area reaching from the Bait al Baranda Museum in the north until the famous Soor al Lawatiya settlement.

Here buildings reach up to three floors with most of them being residential units. Along the Corniche the structures become higher, reaching up to six storeys. Here the uses are mixed with retail stores, coffee shops and offices occupying the ground floors. More to the inner part of this area, one will find many tailoring and laundry shops.

A very interesting aspect of this area is its mixture of building typologies. While many units (mainly along the Corniche) are fairly new constructions and high-rise, there are also a lot of single storey adobe houses to be found, contributing to the diverse character of Mutrah.

The area is rather quiet with no tourist activity. Small public spaces -hidden in the little labyrinth of alleys- are used by the neighbourhoods' children for playing football during the afternoon.

According to the rapid appraisal, the neighbourhood seems to accommodate residents with origins mainly from India, Bangladesh and Sri Lanka (mainly Hindu).



“(...) in the centre of the town is a walled enclosure called the Soor al-Lowatya, occupied by the Khoja community, into which no others are admitted. (...)” Miles (1919). The Soor al Lawatiya is an enclosed residential area with two towers on its' western front, in the heart of Mutrah that always seemed to stand out from the rest of the urban fabric. The three sides inside Mutrah are distinctive due to the tall walls and the narrowly interleaved buildings forming a clear barrier to the rest of the city. Towards the sea the architectural diversity unfolds, with round- and pointed-arch windows, decorated lattices, porches and balconies highlighting the uniqueness of this community. There is only one entrance on each of the long sides and only residents are admitted to enter.

The Khoja, a Shia community immigrated around the 16th century from Hyderabad and has been very active in the commercial sector of Mutrah controlling great parts of the souq (until today).

In 1974 it counted approx. 1350 residents. The area features the biggest mosque in Mutrah a reference point along the Corniche. Inside the settlement the alleys are very narrow and the most structures reach three floors.



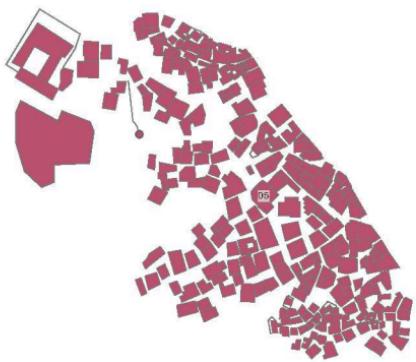
05 Hellat Nazi Moja

The Hellat Nazi Moja is a big and versatile area in Mutrah. It covers almost the entire backside of Mutrah between the Al Mina street in the north and the Mutrah Road in the south.

Nazi Moja is a, mainly Shia, residential area with a lot of additional uses. In this neighbourhood one will find five mosques, a library and several ma'tams (Hussainia) making it a culturally highly in-use area. Apart from that, Nazi Moja has a small commercial street (adjacent to Soor al Lawatiya) with every-day shopping opportunities that leads directly into the souq.

The area is cut in half by a light traffic street, which leads to a dead end. Along the street there are several nodes of open spaces that are primarily used as parking thus restraining people to fully make use of the public space.

This lively area seems to be ethnically more mixed with mainly Omani Arabs, African-origin and Baluchi people living here. During the evening time the coffee shops and public spaces are full, as the residents gather during prayer time.



During the reign of Sultan Said bin Taimur there was a rule preventing the use of new materials or additions to built structures. Ruinous structures were to be repaired only with the same material originally used, in order to maintain the buildings' original appearance. This is the main reason why until the 1970ies the souq of Mutrah was almost completely untouched by any governmental changes. The biggest change was the replacement of the palm-leaf roof, with one of more fire-resistant materials after an accident.

Among specialists the souq of Mutrah is still one of the finest to visit, in terms of activity, organization and mazy alleys. Of course the products offered have completely changed over the years (mainly due to the port and Omans' import policies), but this is the case in the entire Sultanate.

Today the souq is one of the main tourist attractions, while still being an important commercial hub for the greater area of Mutrah. Yet, nowadays one will notice many Omanis shopping outside the souq as well, as there are many retail nodes in Hellat al Aryaneh (09), Hellat al Qassaseeb (11) and at the Souq Jadid (12).



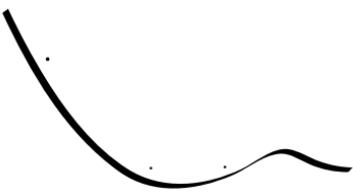
In the past it was almost impossible to transport goods from Mutrah to Muscat over land. In an historical map from 1897 (from: Oppenheim, Max v.: "Vom Mittelmeer zum Persischen Golf" Bd. 2 Berlin 1990) a "pass for unladen animals" is highlighted. The idea of connecting Mutrah with Muscat through a coastal road was already mentioned during the reign of Sultan Said bin Taimur.

Until its' completion in 1974 the coast of Mutrah was mainly featuring storages for the docking ships. Once the Corniche was realized the customer pattern of the souq changed completely. The population owning a car used the new road to reach the souq. Three- to five-floor buildings replaced the storage buildings, with banks, insurance companies, import/export offices, luxury apartments and shops taking over the newly created attractive front.

Yet the success story didn't last long.

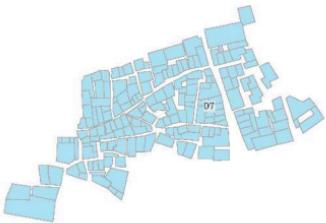
Too many cars trying to find parking space and new shopping opportunities in the surrounding areas dampened the consumers' interest in the Mutrah souq. The commercial centre had shifted to Ruwi resulting in headquarters becoming mere branches and apartments being rented to Asian foreign workers.

Today the Corniche still has an important representative function with many visitors of Mutrah enjoying the view to and from the city.



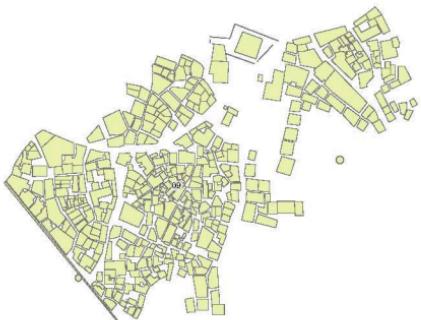
07 Souq Kabir

The souq Kabir is the wholesale market area of Mutrah. The buildings in this area are almost exclusively used for wholesale shops or storage. There is no activity at all in this neighbourhood during the evening time. Residential units can be found predominantly in the eastern part of this area, directly under the Fort. The area consists almost entirely of one-floor buildings that stand in great contrast to the high-rise structures of the Corniche.



09 Hellat al Aryaneh

Hellat al Aryaneh is a large residential area in the south-eastern part of Mutrah. It is an area with mainly new structures. Along the Mutrah road the buildings are of mixed use with small shops (tailoring, electronics repair & other retail) in the ground floor. Most of the houses are two floors high.

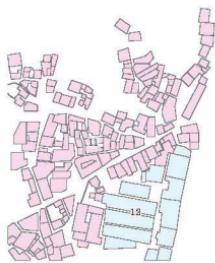


11 Hellat al Qassaseeb

12 Souq Jadid

Mutrah was never an important port. In the past it was its' connection to the inland that made it an interesting point of trade. The position of today's souq Jadid is where the camel caravans used to halt. With the widening of the Mutrah road in 1974 the souq Jadid was strengthened as another commercial area within Muttrah.

Behind souq Jadid one will find Hellat al Qassaseeb, a small residential area with one of the oldest mosques of Mutrah.





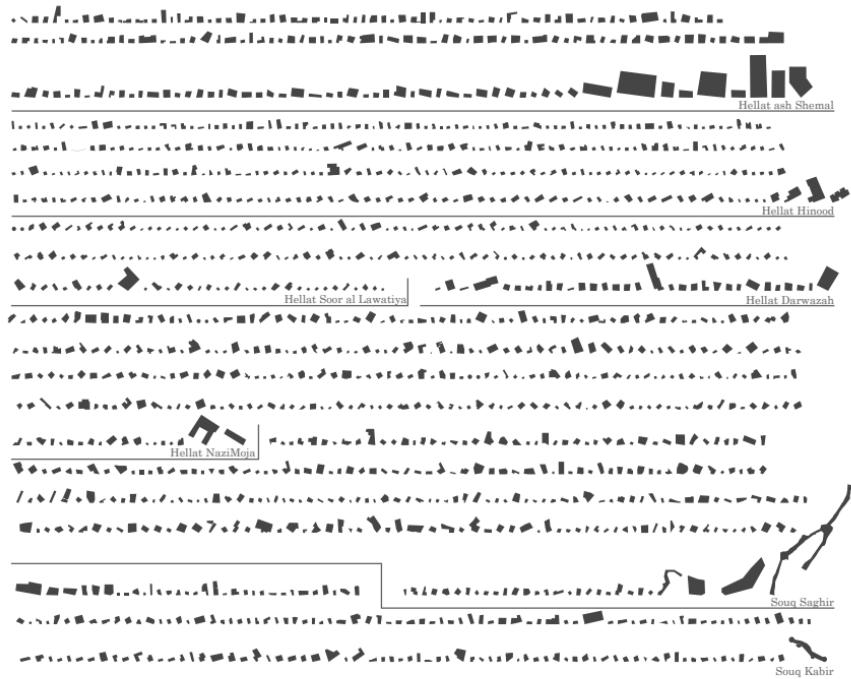
Public / Private Figure Ground Muttrah, 2011

-  public ground floor (open to all)
-  public ground floor (open to Muslims)
-  public ground floor (commercial use)
-  non-public building





potential - stepping stones from east to west & north to south

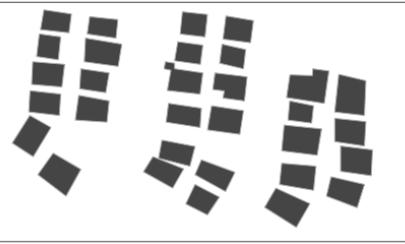


Mutrah vs...

Mutrah



Athaba



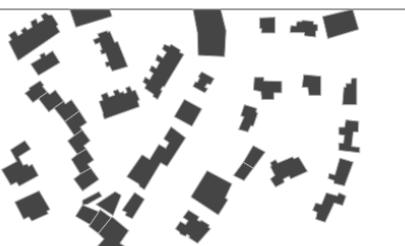
“City Centre”



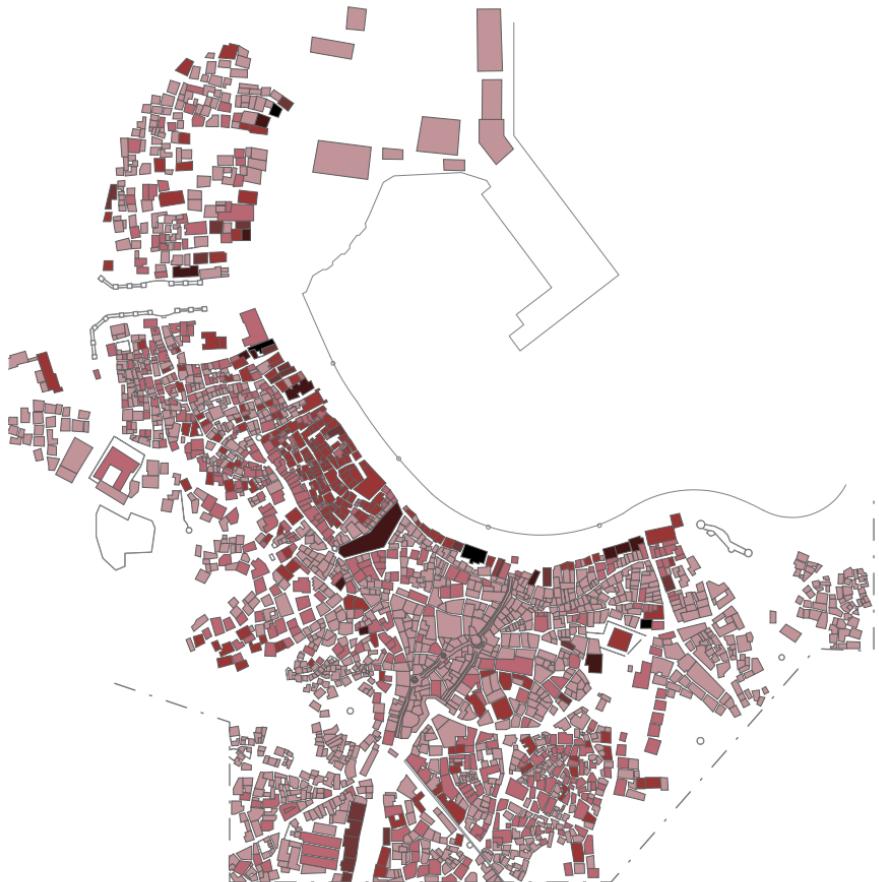
Ghubra Rbt.



Medinat Qaboos



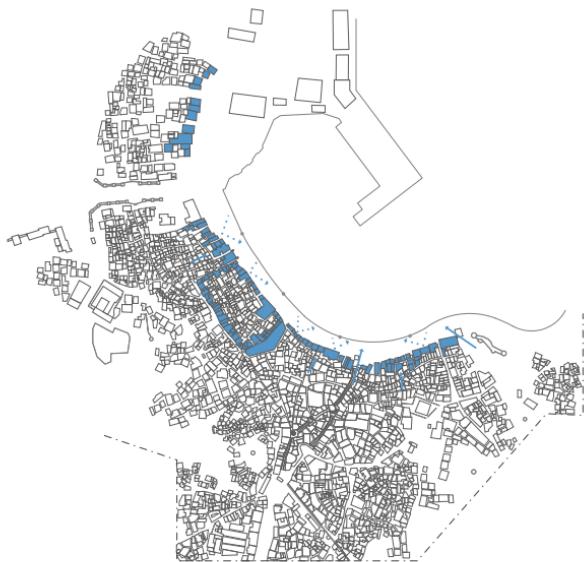
structure comparison Muscat

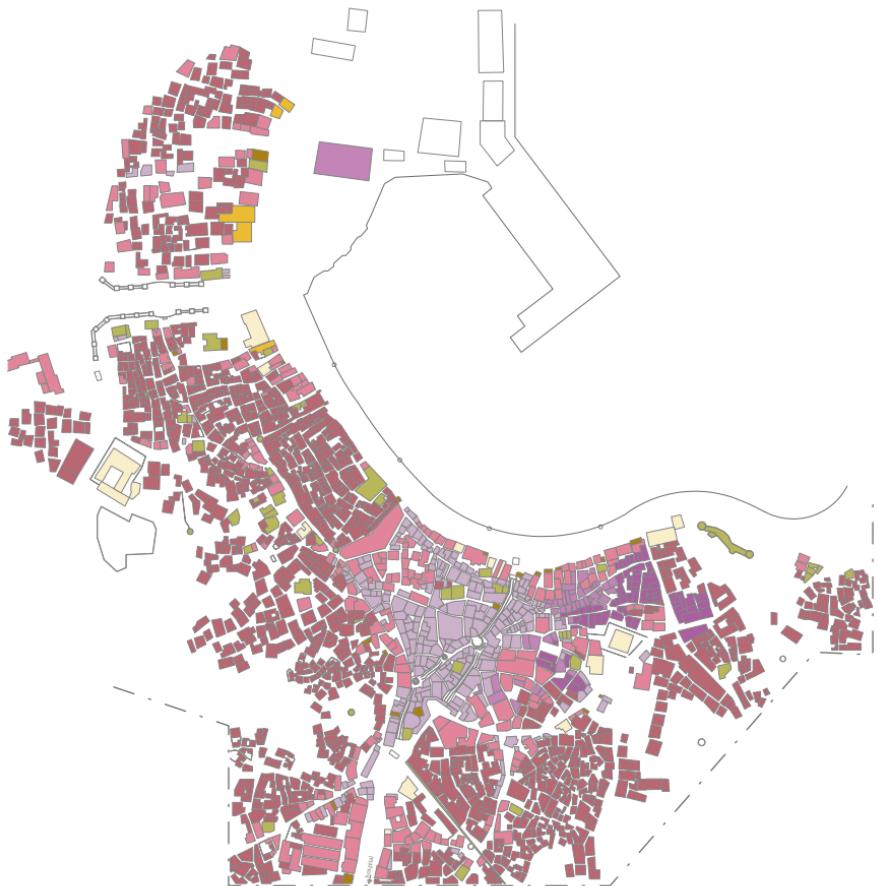


building heights Mutrah

- 1 floor
- 2 floors
- 3 floors
- 4 floors
- 5 floors
- 6 floors

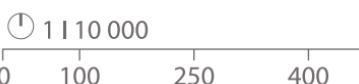


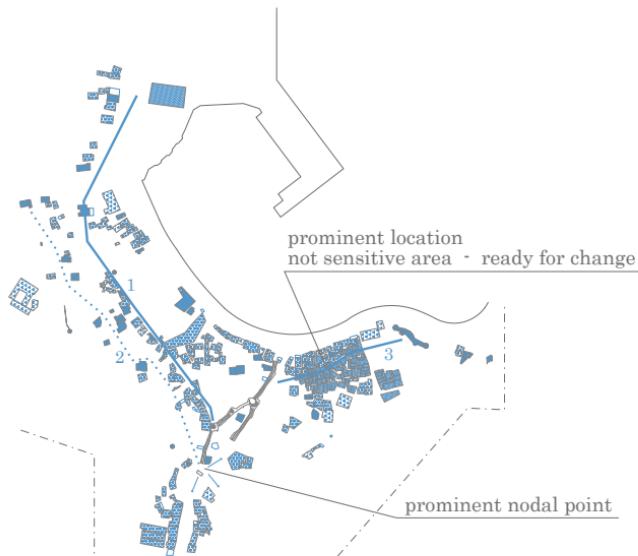




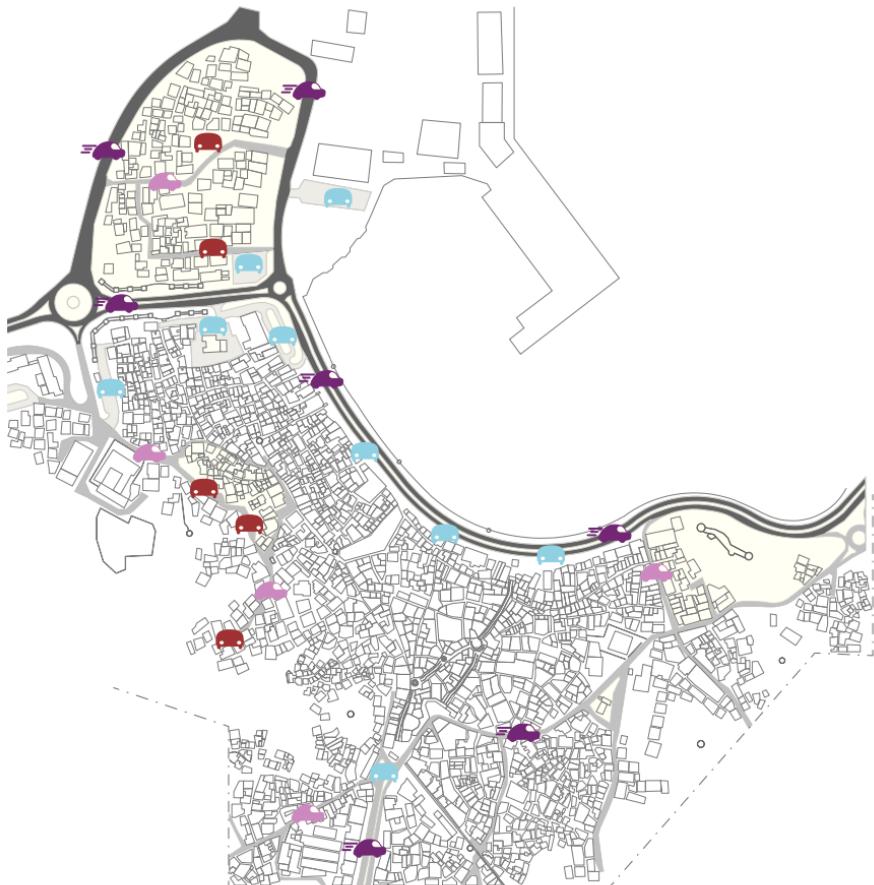
uses Mutrah 2011

- [Dark Red] residential
- [Pink] mixed uses
- [Light Purple] retail
- [Purple] wholesale
- [Dark Purple] storage
- [Yellow] public service
- [Yellow-Green] hotel
- [Olive Green] cultural
- [Brown] restaurant / coffee shop



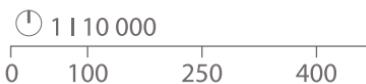


uses as they are, provide good basis for expansions
three new connections with different characters could develop
1. commercial route - users. all
2. cultural route - users. residents
3. new resident route - users. all



road network Mutrah 2011

-  vehicular traffic
-  low traffic road
-  high traffic road
-  planned parking
-  unplanned parking





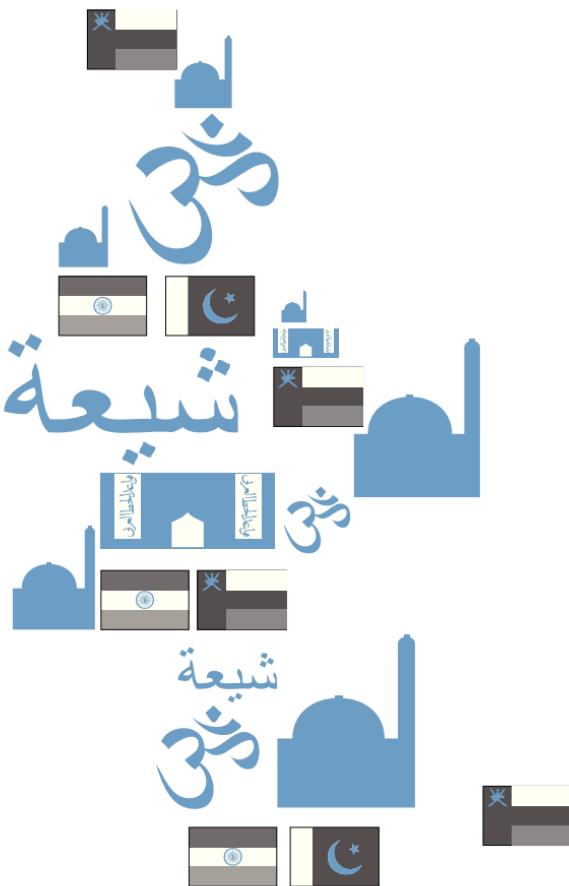
Mutrah is facing a big problem in the traffic sector. The corniche is overcrowded during the afternoon and every open spot within the city is used for parking. The foreseen parking spaces do not cover the demand. All users are affected, as the corniche loses attractiveness and the residential areas are suffocating by the pile of cars taking over the public space.



demographic appraisal Mutrah

- ◐ India / Pakistan (south-, south eastern Asia), all income classes
- ◐ Omani, low income class
- ◐ Omani, low or middle income class
- ◐ Omani middle or high income class
- | Hindu
- | Muslim, Shia
- | Muslim, Ibadi or Sunni





III scenarios

III.1 the people

As mentioned previously, making predictions is fairly difficult when it comes to Mutrah. Most demographic data found focuses on the entire Wilayat. When speaking to Mutrah's residents the opinions regarding the population vary. The majority seems to believe that there is no significant change in Mutrah's resident numbers, while few believe that the increase in cars means there is an increase in residents.

Clearly the amount of cars is not necessarily an indicator of a population growth, as there are several other reasons why a family can afford to have one or more cars nowadays.

At this point it is more important to look at the inevitable changes coming on to the Omani society.

As mentioned previously, the economic changes of the past 40 years have had a huge impact on societal conjunctions. The ties between families and tribes are no longer as important as in the past. Nowadays young Omanis know, that a certain education is of greater importance than in the past in order to reach their goals. Among women there is even a tendency to study and get a degree in order to raise their esteem with the community thus becoming more attractive for potential marriage suitors. But even the small group of women who begin their studies with such a motive will sooner or later come to the point to take a decision, whether to make use of their gained knowledge or not.

The push towards equality for women within the family and the community also has an effect in the business world. And while this development is still at its beginnings, the process has begun and it will become increasingly apparent in daily life.

Another interesting statistic to look at besides the literacy rate, the number of schools, universities and students is the fertility rate. This number, in contrast to all the others mentioned, is strongly in decline, ever since the 1970ies. It is no surprise to see that the higher the educational standards within a society, the fewer children are born. This is a development seen in many industrial countries throughout their history. Besides, thinking about education and the costs usually attached to it, it is no wonder that a young Omani family is no longer in a position to have seven or eight children. Even if so, in today's society is no longer vital. In the past the size of a family usually was directly linked to the influence this family had within its community or tribe. Size meant power and power meant wealth. As mentioned above this is not how things work today.

So what are the demographic changes, we can expect? The family size seems to be decreasing. The numbers of students are rising. Not all students live with their families anymore, as many of them visit universities outside their hometown. So we could say that there is raising number of young people living alone. Will they choose to go back to their hometown? Or could it be that once having lived independently they might want to continue doing so? The same thing can be asked about young families. Even just a look at the job market might force a young family to live in a different city and not live in the house next to their parents. It seems more and more likely that the ways of living and the necessities of space will lean towards the western model. But this is not necessarily a bad thing. We have seen similar developments within Europe in the past. Greece, for example is a country where family union is also a very important factor within society. Student housing, young-family-living, apartment

sharing communities are all still relatively new concepts in the Mediterranean country. The important part is to understand what cultural aspects and values need to be preserved and protected within the upcoming change.

III.2 the architecture

From an architectural point of view one must think about Mutrah's future with regard to the potential it has today. Therefore this project does not try to think of a plan that would change the city's structure in any way.

In a slightly adventurous comparison, I would like to think of Mutrah as a counterpart of the Plaka area in Athens, Greece. This region lies directly under the Acropolis and is a highly touristic retail area. In the ancient times it has been the main market place of the city and during Ottoman reign it became the "Turkish quarter of Athens" with a souq providing the daily goods. Similarly to Mutrah though, the area ("Ano Plaka" – upper Plaka) behind the busy commercial streets was one of high potential, with old stone houses, picturesque alleys and nostalgic open spaces lying on the foot of the famous Athenian hill. During the Junta dictatorship food, music and politics blended together in the Plaka, as the buats (restaurants with music) made it a lively area. After the dictatorship those shops closed and the neighbourhood – apart from the busy touristic streets – was left unattended. It wasn't until the early nineties that more and more people rediscovered the area. The terms 'nostalgic' and 'picturesque' seemed to be the motives for renovation – investments.

Nowadays it is one of the most sought after areas to live and one of the most expensive ones too. It seems to be a tendency to want to escape the anonymous, full and hectic urban way of living. Tranquil market places, knowing the baker or tailor from next-door and chatting with the neighbour seem to be qualities lost in modern living.

This is the hidden potential of Mutrah. It is the only area in Muscat where the hectic pace has not yet taken over. And it seems to me, that these attributes

are well worth preserving. I do not think it will take too much time until the people from Muscat stop focussing only on modern mega-projects, but long for a quiet picturesque place with history.

The same thing goes for the way of living. The Mediterranean culture is similar to the Arab one in many ways. The people do like to spend time outside and it is also no secret that southern Europeans exchange more about their daily affairs than their northern counterparts.

Lately there has been a tendency in Athenian neighbourhoods by its residents to take initiative and reclaim public spaces that had been lost due to traffic 'solutions'. Exarhia is a neighbourhood in Athens that has led by example in this quite recent development. It is an intense district in the heart of the city, plagued by a strong drug scene and many political and social conflicts being 'settled' violently between the police and the students living there. It also faces a problem with the open spaces, as most of them have been transformed into public parking. The community of Exarhia decided to react, since their pleas to the state had been ignored for many years.

On a Sunday morning the residents met on a parking place, which by that time had gotten into a legal grey zone, and created their own park. They planted trees, built up a children's playground and started spending their afternoons there ever since. This change of usage had a huge impact on the surrounding streets. Today the area is still intensely used, the drug scene has moved away and the whole neighbourhood has gained a lot in quality.

The above example is a very recent development seen in many other cities of Europe as well, yet maybe in a less dramatic fashion. It shows the desire to live in a func-

tioning community that develops, evolves and uses its space actively. Change is an absolute necessity and any structural intervention in public space that has a didactic character thus being inflexible in its usage has an expiry date written on it.



secondary diagnostics

tourist guide analysis

“Corniche

Mutrah stretches along an attractive corniche of latticed buildings and mosques; it looks spectacular at sunset when the light casts shadows across a serrated crescent of mountains, while new pavements, lights and fountains invite an evening stroll. Despite being the capital’s main port area, Mutrah feels like a fishing village. The daily catch is delivered to the fish market, by the Marina Hotel, from sunrise everyday.

Bait Al-Baranda

This new museum in a renovated 1930s house, traces the history –and prehistory- of Muscat through imaginative, interactive displays and exhibits. A ‘cut-and-paste’ dinosaur, using bones found in the Al-Khoud area of Muscat topped up with borrowed bones from international collections, is one of many striking exhibits in this excellent museum. The ethnographical displays help set not just Muscat but the whole of Oman in a regional, commercial and cultural context.

Mutrah Souq

Many people come to Mutrah corniche just to visit the souq, which retains the chaotic interest of a traditional Arab market albeit housed under modern timber roofing. There are some good antique shops selling a mixture of Indian and Omani artefacts among the usual textile, hardware and gold shops. Bargaining is expected but the rewards are not great, any discount will be small. Entrance to the souq is via the corniche, opposite the pedestrian traffic lights. Take care not to wander into the historic, Shiite district of Al-Lawatyia by

mistake, as the settlement is walled for a good purpose. A sign under the archway politely requests visitors to keep out. Turn right immediately inside the entrance and follow your nose along the gold souq; or walk straight ahead, fork right at the first junction and left at Muscat Pharmacy for Al-Ahli coffee shop.

Mutrah Fort

Built by the Portuguese in the 1580s, this fort dominates the eastern end of the harbour. Used for military purposes, it is generally closed to visitors although you can scale the flank of the fort for a good view of the ocean.”

from: Lonely Planet Oman, UAE & Arabian Peninsula

“The Mutrah Souq is famous for its traditional, authentic Arabian experience, as a visitor can pick up items ranging from incense and silver jewellery to finely crafted wares after careful bargaining.

The Corniche

The view of the harbour with innumerable ships anchored there reminds one of the maritime trade that has traditionally flourished in Oman.

Muttrah Fort

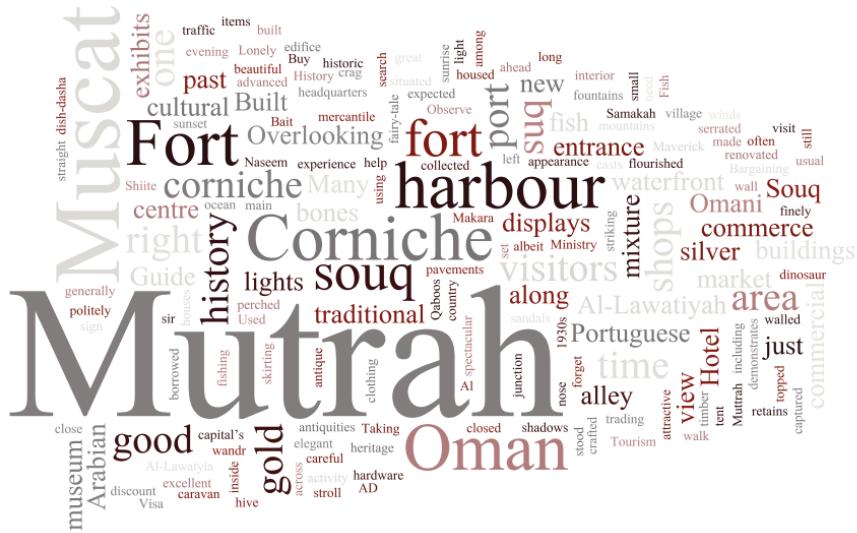
Overlooking the Corniche and the harbour, this fort was built by the Portugese in 1600 AD and was captured by the Omanis in 1654.

The Bayt Al Baranda History Museum or House with a Veranda, represents a cultural and tourism landmark in the country and making use of advanced technology demonstrates the history and heritage of the Sultanate to visitors.”

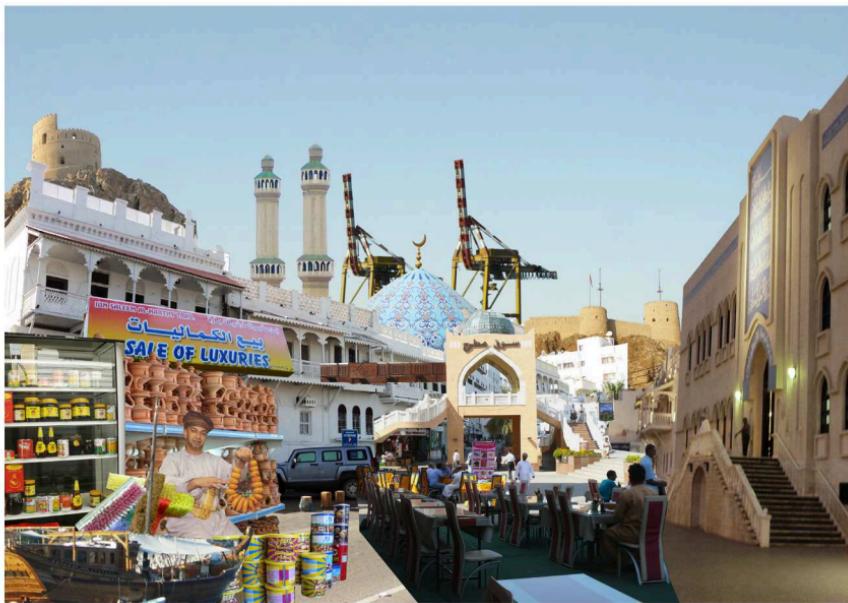
from: Official Guide & Atlas of Oman (by Ministry of Tourism)

“This has always been the commercial centre. In the past, goods transported from Muscat, or by caravan to the interior, were stored in the warehouses of Mutrah by the Al-Lawatiyah trading community, who settled in their fortified headquarters, adjacent to the present suq. Observe the elegant merchant’s houses on the waterfront and the beautiful Al-Lawatiyah Mosque. Mutrah Fort has a fairy-tale appearance by night and nearby Mutrah suq, is a hive of activity. The fish suq is situated close to Samakah, or ‘Fish Roundabout’, on the waterfront.”

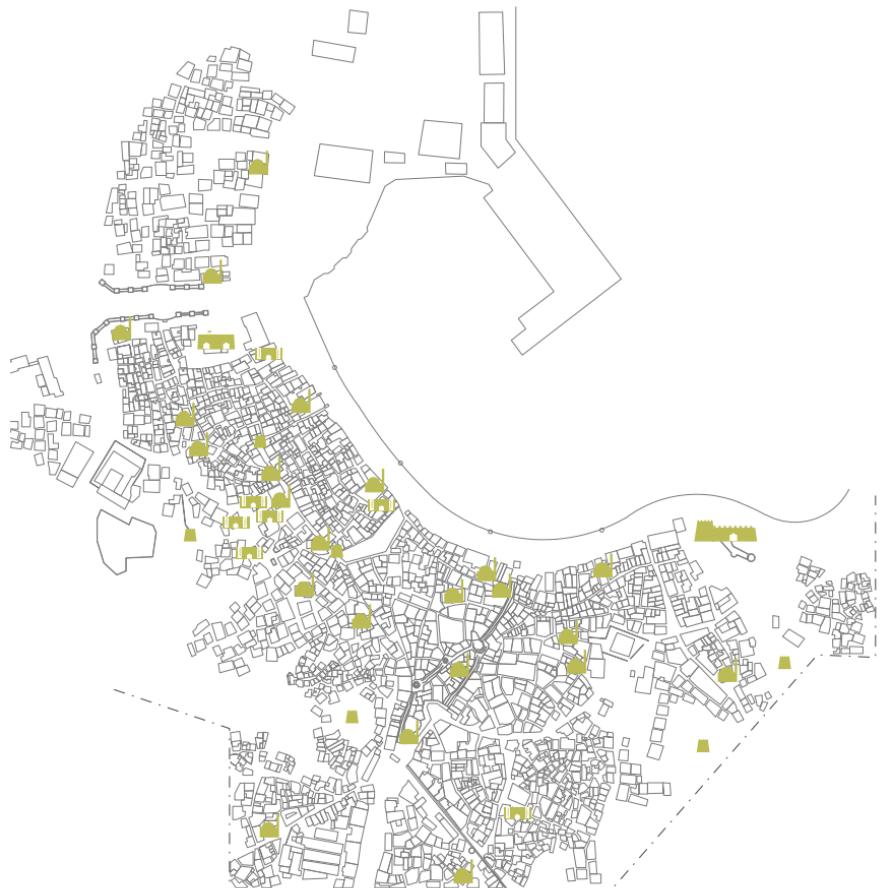
from: City Map Muscat



word cloud from tourist guide readings



collage from named objects



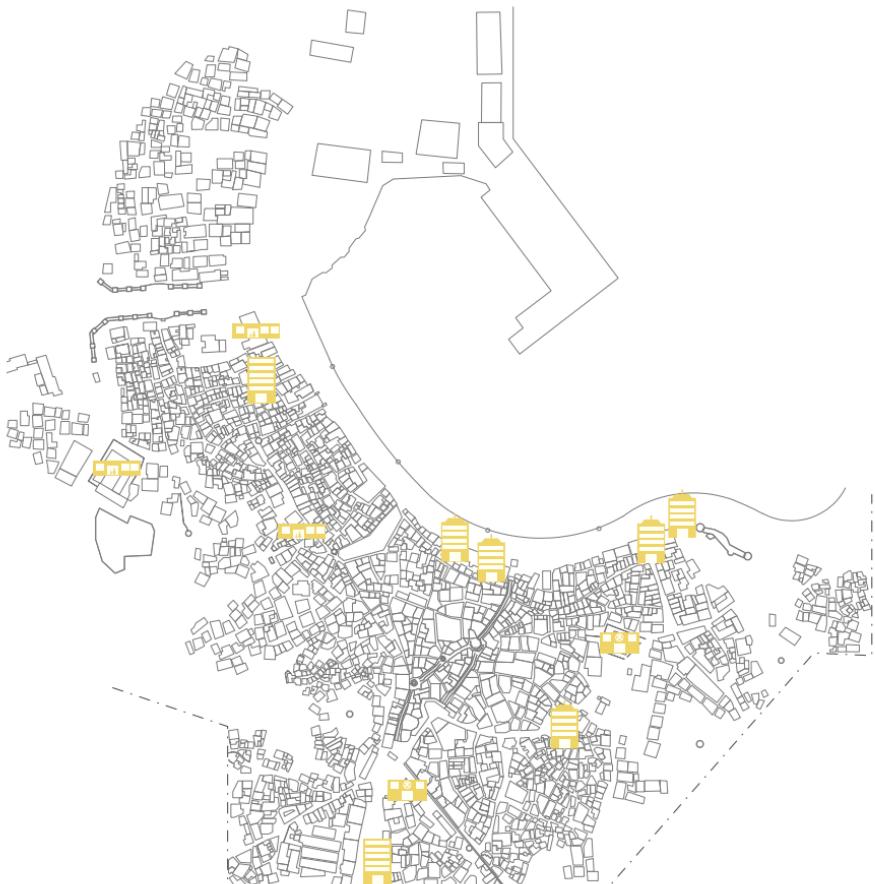
facilities cultural

-  mosque
-  matam
-  museum
-  fort / tower

1 10 000

0 100 250 400

100



facilities public service



hospital / clinic



bank



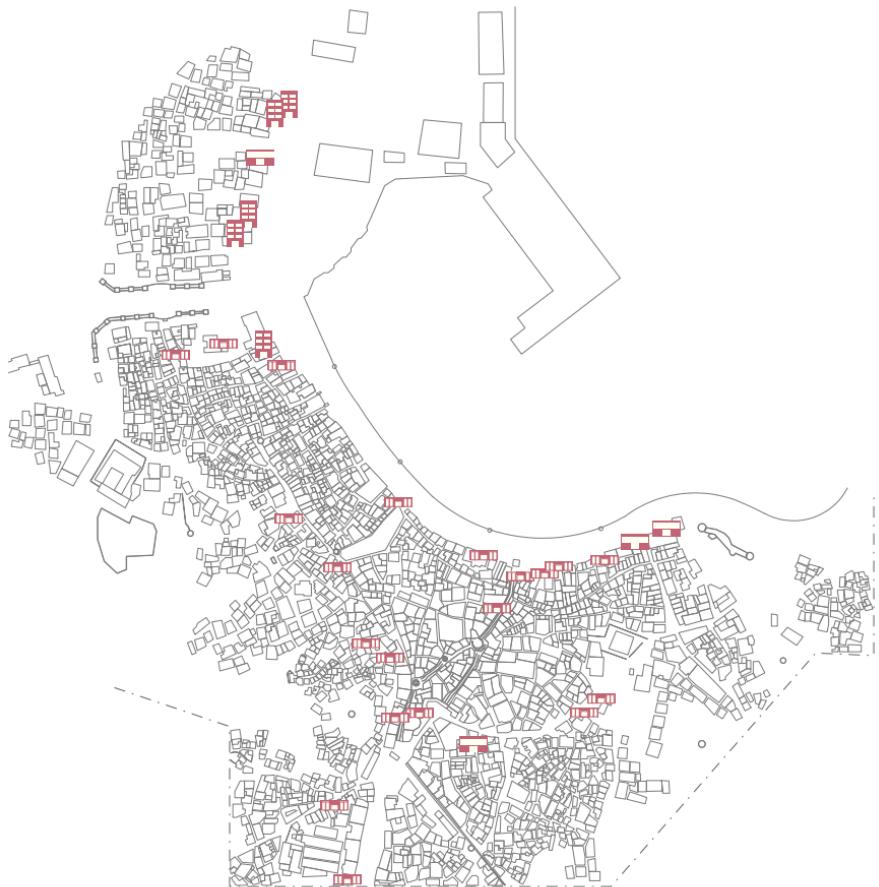
police station / court



school

⌚ 1 10 000

0 100 250 400



facilities tourism



hotel

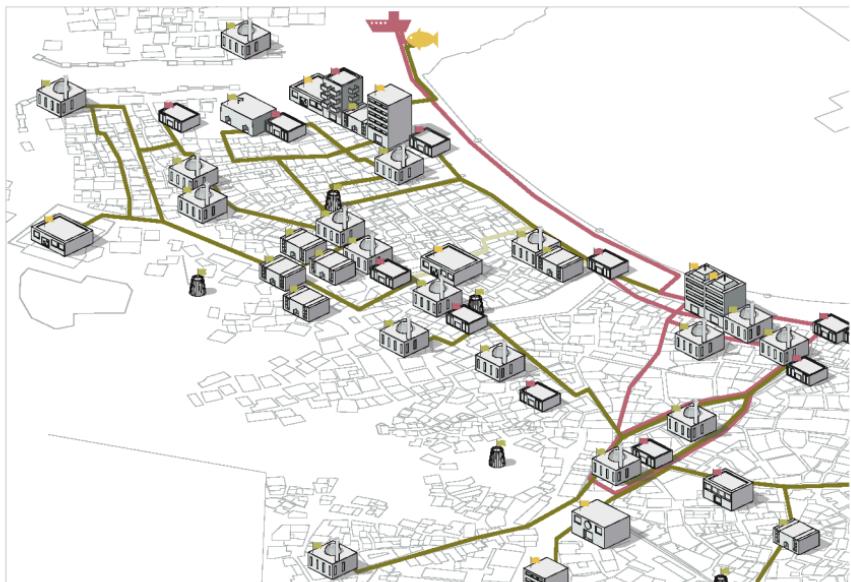


restaurant



coffee shop





facilities & main pedestrian axes

- █ cultural facilities
- █ public service facilities
- █ touristic facilities
- █ pedestrian axes residents
- █ pedestrian axes tourists



Mutrah residents

Omanis / expats

tourists

strongly used space

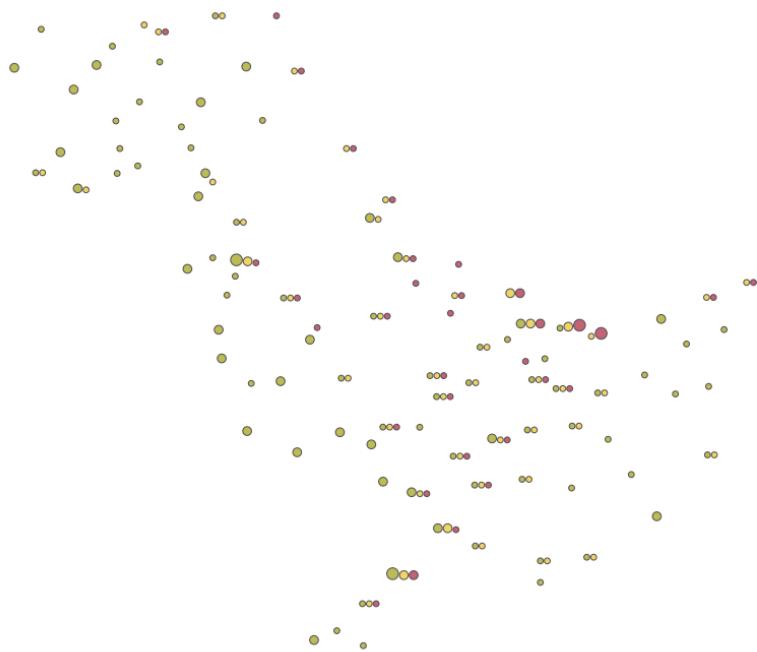
used space

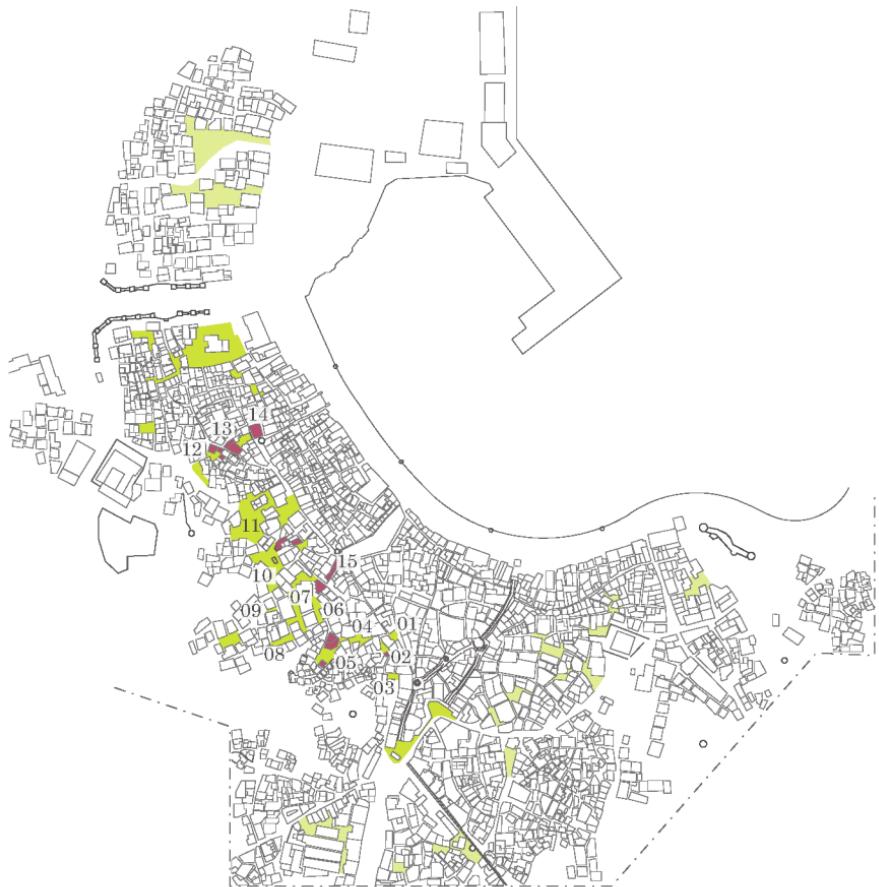
people spotted (with/without movement)

user tracking Mutrah 2011

(°)

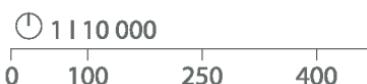
0 100 200 300 350





open spaces Mutrah

- open spaces in planning area
- open spaces outside planning area
- ruin (potential)

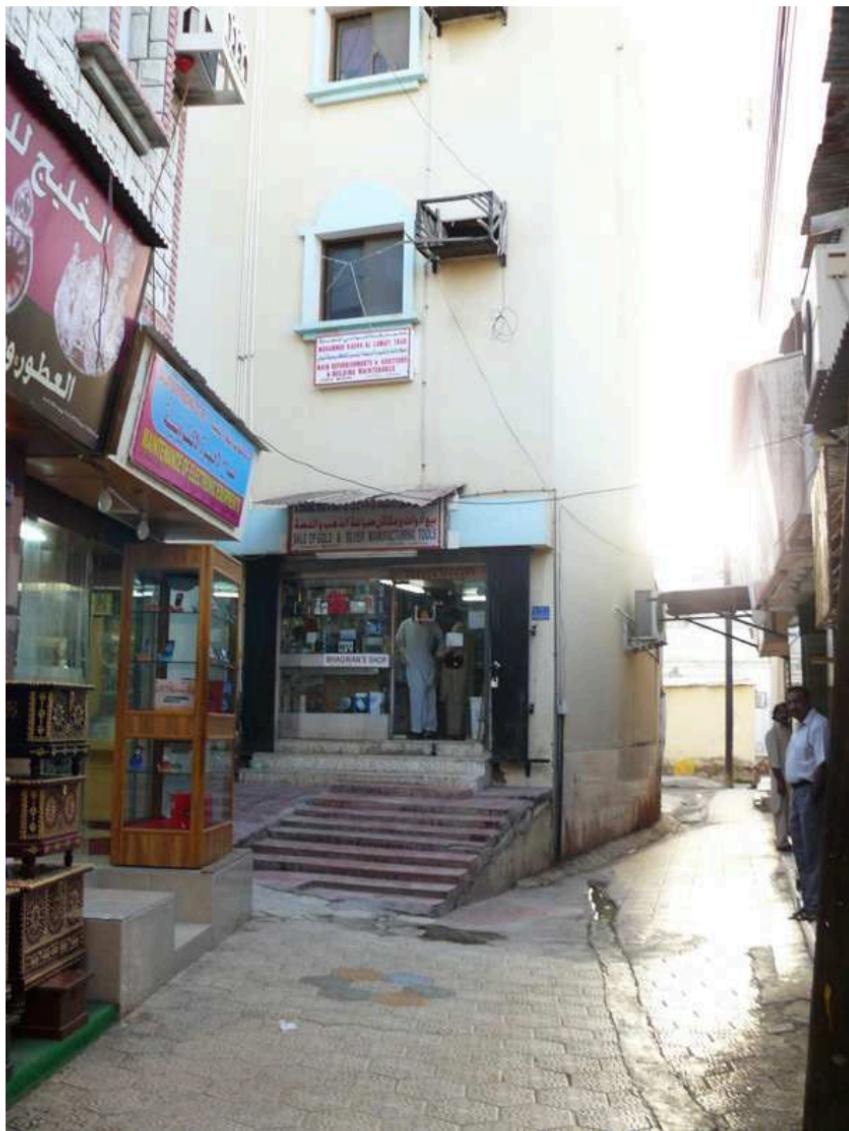






01

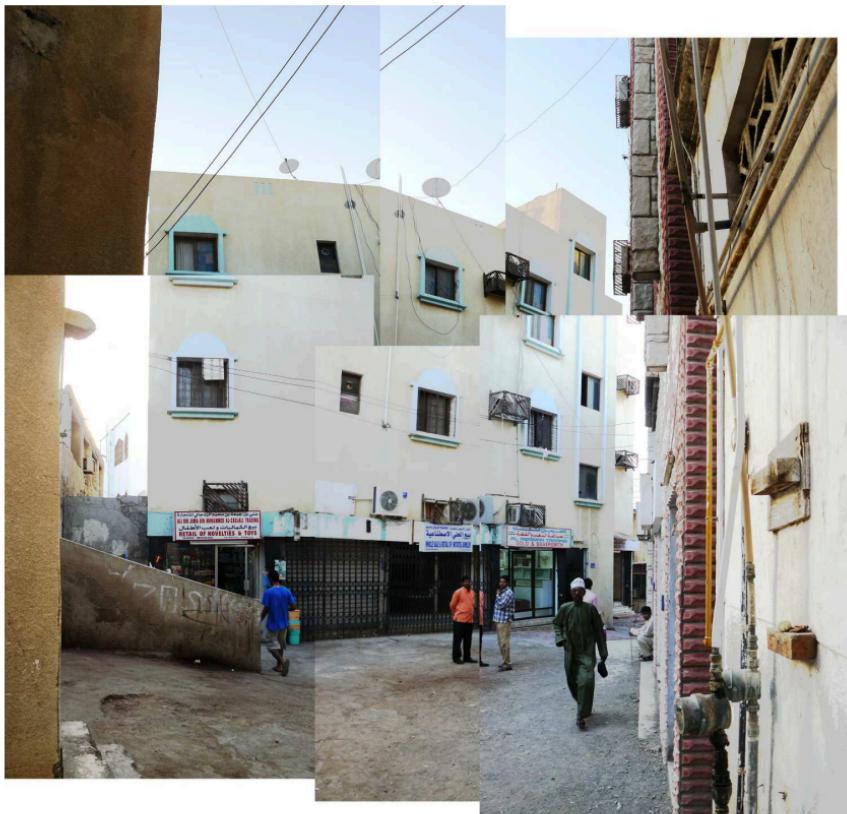
- junction leading to open spaces nr. 02 & 04
- last souq shops

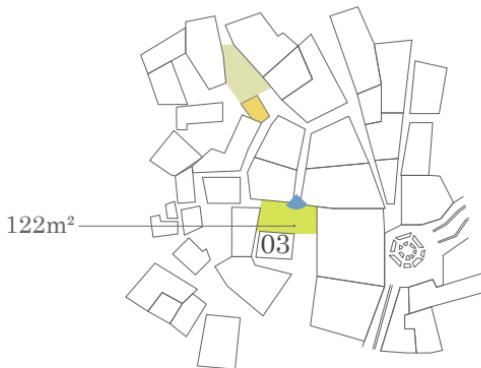




02

- small open space just outside the souq area with few shops and a coffee shop
- locked mud-house ruin on southern end





03

- small open space above the rooftops of the souq
- example nr. 1 of residents taking initiative and shaping outside space
- used by residents during afternoon





04

- open space at the border of souq area
- small coffee shop on the left

05

- open space within residential area
- used as a playground by children or gathering area during festivities





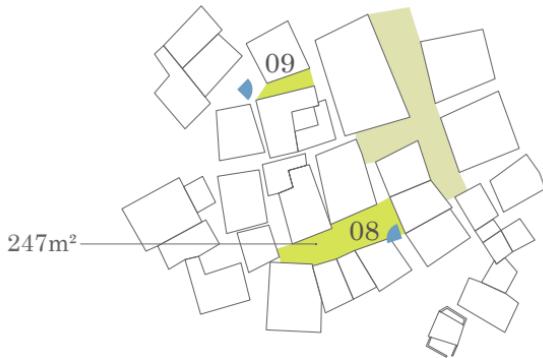
06

- opens space in front of mosque
- small grocery shop on left-hand side
- short-term gathering takes place during praying hours

07

- open space within residential area used mainly for parking
- direct connection to hill with tower





08

- private open space at the foot of the hill
- only used by residents of surrounding units

09

- Ahmed's house (interview)
- example nr. 2 of residents taking initiative and shaping outside space





10

- big open space just before road end
- used mainly for parking
- children playing in between the cars in the afternoons





11

- big open space reaching from main road to commercial road
- used mainly for parking
- many residents spend evenings here, sitting between the cars and at the entrances of matams





12

- unused open space directly at main road

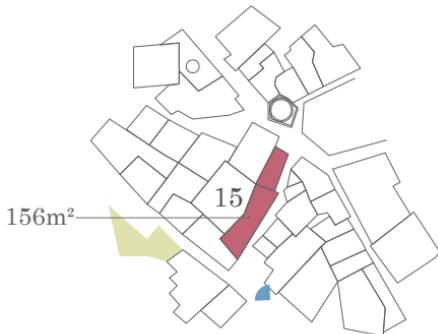
13

- small open space in private area close to commercial area
- interesting topography

14

- ruins directly at end of commercial road next to old tower





15

- ruins with potential at strategically interesting point
- coffee shop opposite
- pedestrian street connecting public with private area



Acacia tortilis (Ar. simr)

“Anyone who has visited East Africa recognizes the ‘umbrella thorn’ as part of the scenery, and Oman is lucky enough to host the same species. It is an important fodder crop, and in Omani tradition, Bedouins used to ‘own’ large specimens of this tree, such was their importance. They also provide shelter, sometimes acting as a temporary home for desert-dwellers, and the heavy wood is a slow-burning fuel. These days, charcoal made from local ‘Simr’ is on sale in shops, regrettably.”¹



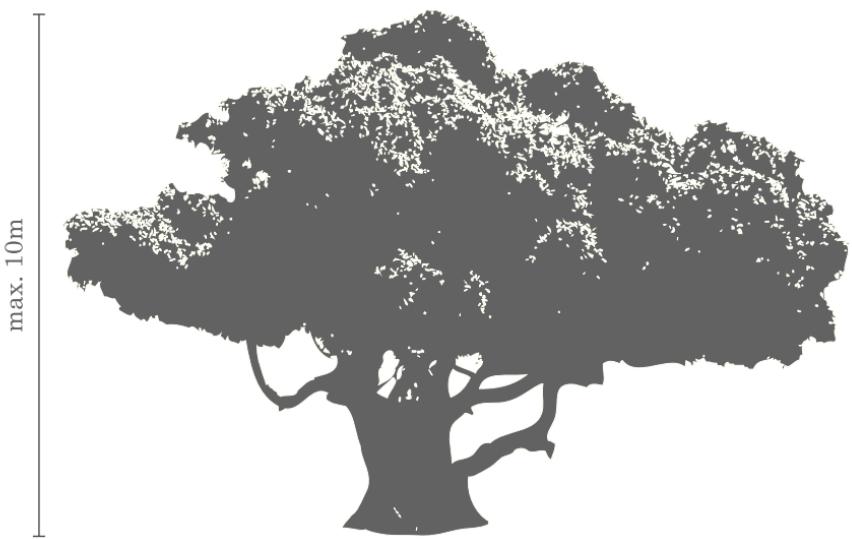
Ficus cordata salicifolia (Ar.lithab)

“*Ficus cordata salicifolia* is the most common fig variety of northern Oman. Called ‘lithab’ in Arabic, it grows better on Jebel Akhdar and in well-shaded Wadis of Dakhlia than the Batna region.

In the thickly - wooded areas of Dhofar, it may grow much more luxuriantly.

Nevertheless, it does grow in northern gardens, produces a small fruit that is rather insipid to taste, and is a fantastic provider of shade.

It is the most drought-tolerant of the Ficus found in Oman, according to Miller and Morris (1988). The descriptor ‘*salicifolia*’ means ‘willow-like leaf’, indicating the narrowness of the leaf compared to other *Ficus* species.”¹



Prosopis cineraria (AT. ghaf)

"In the garden and along roadsides, this incredible shade-provider bursts into bright green life in May when other species are beginning to aestivate. The sight of a ghaf during its principal growth period is one of the main delights of the otherwise torrid summer.

With *Ziziphus spina-christi*, it is one of the two species of tree in northern Oman which grow to a genuinely large size. It is without much doubt the most important tree for Oman's environment both past and future due to its ability to not only thrive in the sandy desert but also to reverse its encroachment.

It is believed to have extremely deep roots, perhaps up to 20 meters in depth. Roots of even small seedlings are usually very long. On the other hand, it is unlikely to be seen anywhere that there is a rocky soil, unless with a much reduced size.

It is a native of not only Oman but everywhere on the Indian subcontinent including Afghanistan.

The flowers are yellow catkins that form at the branch tips. Branches of desert specimens, with their nutritious seed-pods, very often have been trimmed to a camel-height of roughly three meters above the ground.

There is a secondary growth season from October to December.

Some quite large specimens can be seen in and around Qurum Park. Ghubra used to have considerable numbers of large ghaf trees, some of which have been removed to make way for housing. The species was once also known as *Prosopis spicigera*.

Description of *Prosopis cineraria* as a slow-growing species is exaggerated, and in the garden with average watering the species may easily grow to six or seven meters in ten years."¹



Ziziphus spina-christi (Christ's thorn, Ar. sidr)

“Sidr is one of Oman’s four or five most vital large trees from the point of view of wildlife, as it has beautifully - scented flowers in profusion for the benefit of the small native Omani bees. It grows to an impressive 10-12 meters in size. Traditionally, the fruit was dried and stored. The whole fruit, stone and all, was cooked with milk, then mashed up and eaten. In the months of March and April now, the ground under a specimen of Sidr is littered with hundreds of nabaq, the brown fruit being the size of a small cherry. Unripe unless light brown in colour, Omani nabaq has a pleasant and unusual flavour rather like dried apple. This is ironic as the ripening fruit also looks like a miniature apple.

Sidr leaves were used traditionally to make a shampoo, although the shampoo of that name that is sold in shops today may be made from leaves that are imported from Iran.

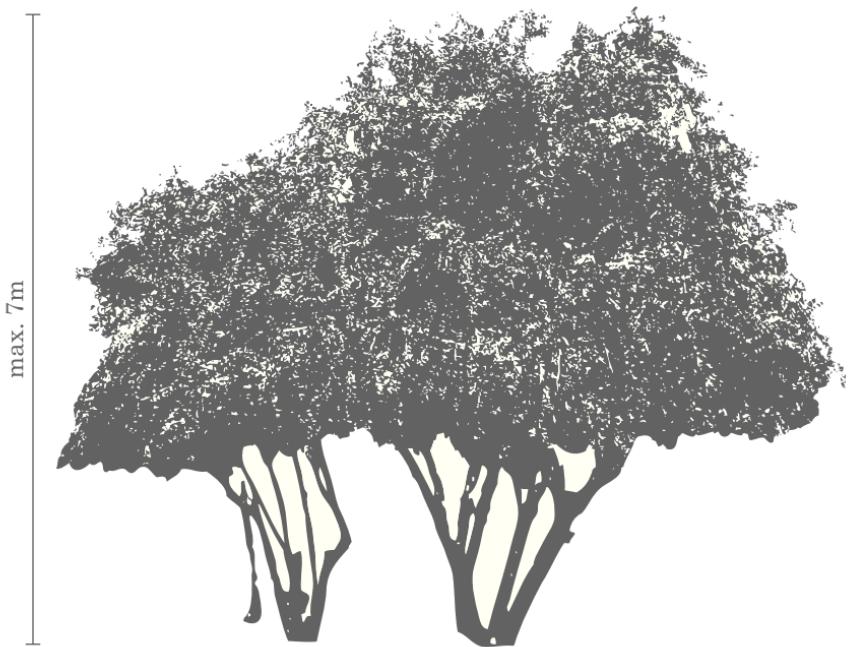
Powdered leaves may also be used to make a kind of skin cream.

Where Ziziphus is grown ornamentally along the roadsides, side shoots occasionally appear alongside the main trunk of the tree. This feature may be a sign that there is too much irrigation being applied next to the trunk without the necessary drainage.

Although it is able to tolerate extremely dry conditions (but not sandy desert) Sidr also appears commonly in gravelly wadi beds, where a young tree’s stem swings over horizontally without damage when a flood occurs.

Yet another species of Ziziphus, *Z. hajarensis* (Ar. Qasam) grows in gullies on Jebel Akhdar and Jebel Shams (and is named after the Hajjar mountains). It has tasty, if tiny, nuts, which can be cracked open with a stone. This species is much smaller than *Ziziphus spina - christi*.

Both species can be grown easily in a pot from seeds. Fortunately, it is still possible to find *Ziziphus spina - christi* in one or two garden nurseries in the Sultanate, although care must be taken that the specimen offered is not the similar Indian variety of *Ziziphus*, which has somewhat larger leaves and fruit. The larger, oval-shaped variety of Indian nabaq is widely sold in shops here.”¹



“As all dominating environmental parameters are considered the Perceived Temperature (PT) is an appropriate measure to rate outdoor comfort as well as strategies to enhance the outdoor comfort.

The 4 major climatic parameters on the thermal comfort are:
air temperature
air humidity
wind speed
mean radiant temperature”¹

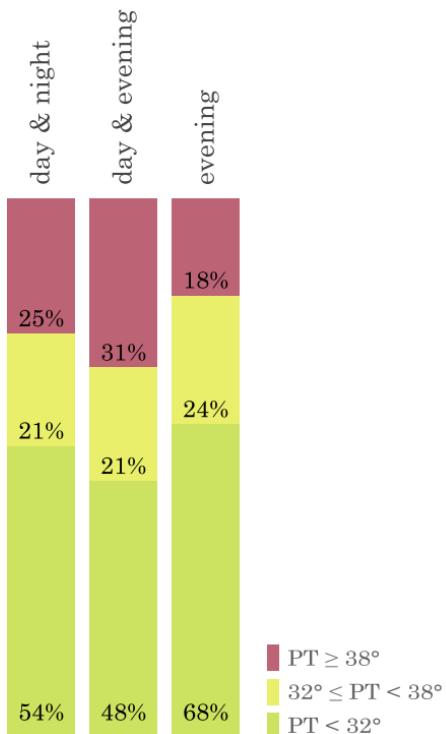
The model of Perceived Temperature assumes that people can adjust their clothing factor for cold or hot temperatures.

perceived temperature PT in °C	thermal perception	thermo-physiological stress
$PT \geq 38^\circ$	very hot	extreme heat stress
$32^\circ \leq PT < 38^\circ$	hot	great heat stress
$26^\circ \leq PT < 32^\circ$	warm	moderate heat stress
$20^\circ \leq PT < 26^\circ$	slightly warm	slight heat stress
$0^\circ < PT < 20^\circ$	comfortable	comfort possible
$-13^\circ < PT \leq 0^\circ$	slightly cool	slight cold stress
$-26^\circ < PT \leq -13^\circ$	cool	slight cold stress
$-39^\circ < PT \leq -26^\circ$	cold	great cold stress

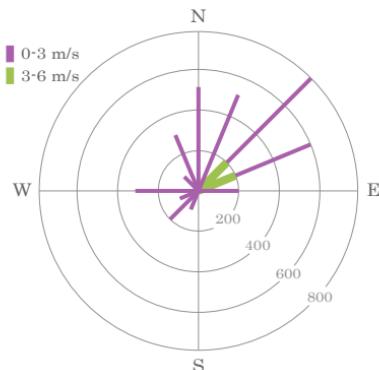
Perceived Temperature chart ¹

“The base scenario for the perceived temperature evaluations in this report is a person standing the entire year on a black street receiving full solar radiation.

Such a person will experience 54.2% a year very hot temperatures, 20.8% hot temperature and only 25% comfortable outdoor conditions. If the evaluation is limited on day and evening hours (between 6:00 and 24:00) only this person will experience 47.7% comfortable temperatures, 21% hot temperatures and 31.3% year very hot outdoor conditions. Evaluating the evening hours (17:00 to 24:00) the comfortable hours will rise to 58.3%.”¹



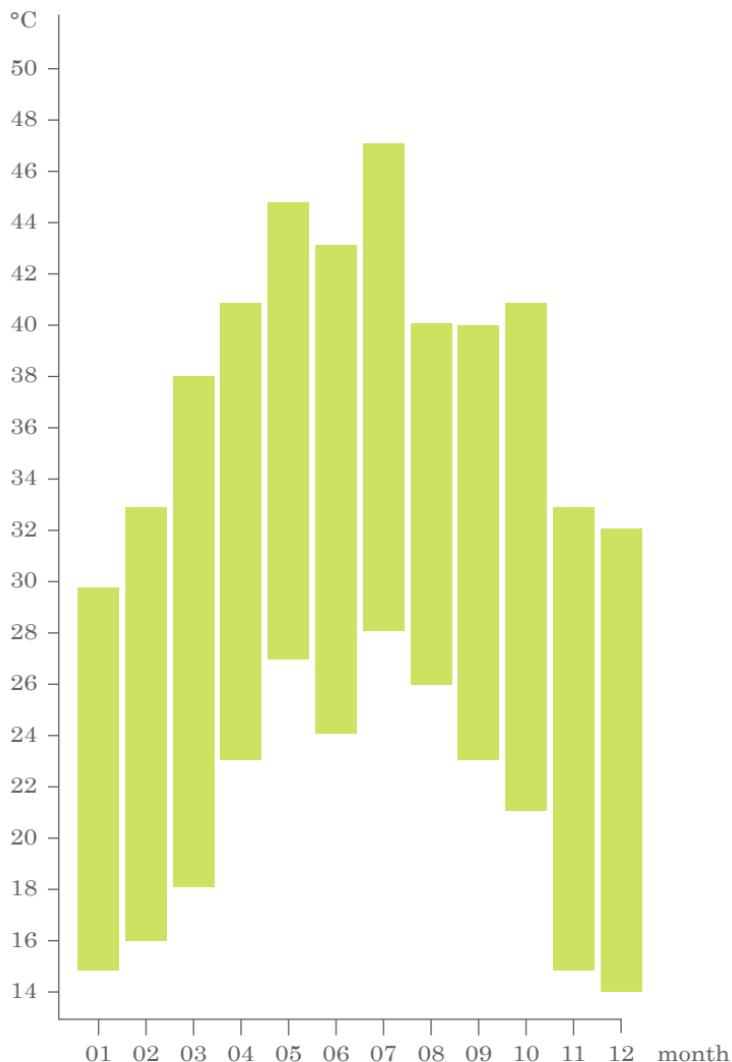
Perceived Temperature chart¹



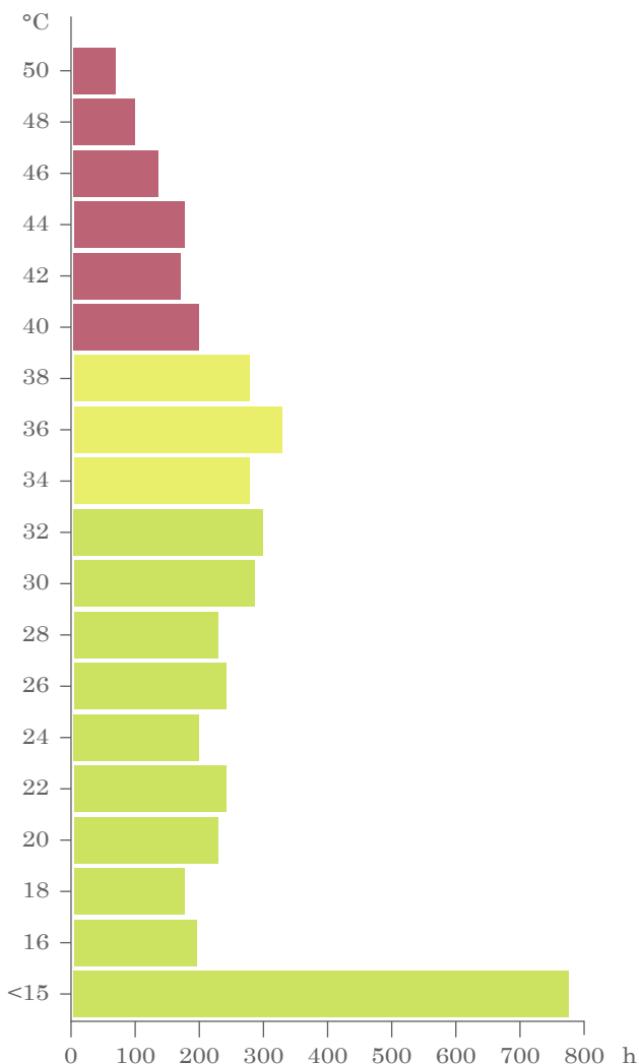
Wind Rose Muscat 2005¹

sources: climatic analysis

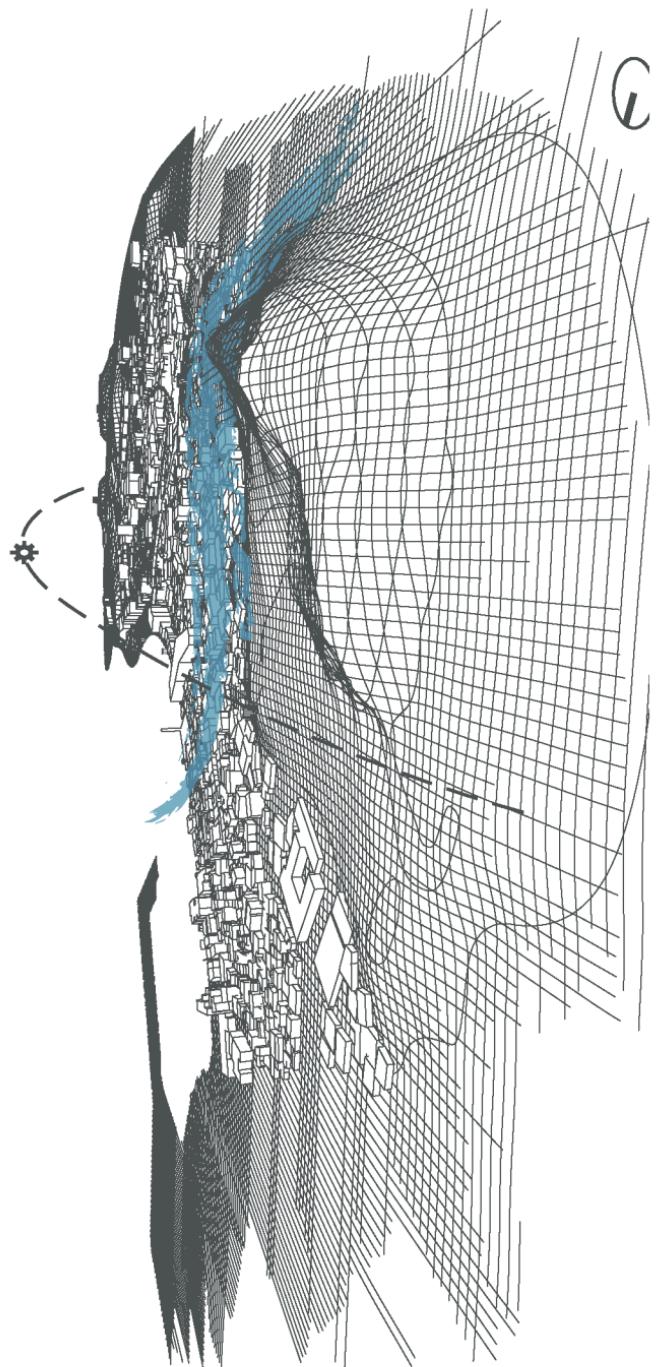
¹ Muscat, Evaluation Report Sustainability Consulting, Trans Solar (February 2010)
² www.wunderground.com



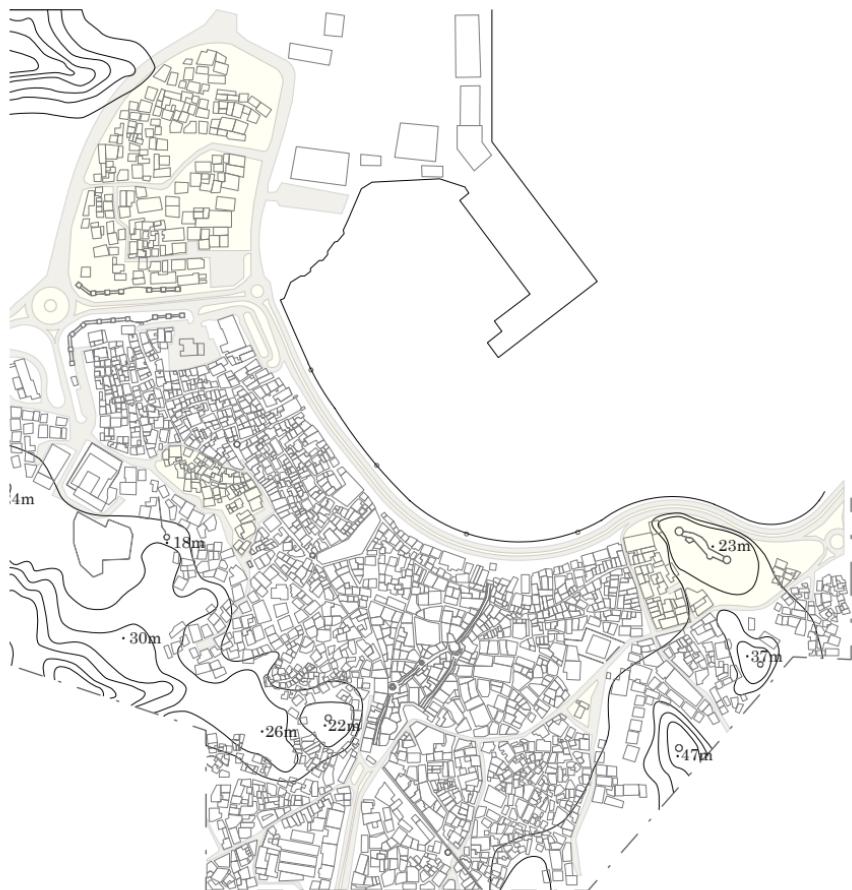
max. min. temperatures for one year, Muscat²



outdoor comfort evaluation for one year, Muscat¹
represented by perceived temperatures



topography, main wind direction & sun movement



topography Mutrah

1 10 000
0 100 250 400



interviews



Amid, 37, souq vendor

Since when do you live here?

I was born here.

What do you like / dislike about Mutrah?

I like that the people are kind, open hearted and close to each other. There are not too many new – type coffee shops for the fast - living. I also like the fact that here I see a lot of smiles!

On the dislike part, mhh there is not much coming to my mind. Of course there are infrastructure problems. The connectivity for the cars, the parking as well as the wastewater system are all still very much a problem.

Tell me about the tourists?

- Are there more in Muttrah than before?
- Where do they move around?
- Are the residents happy about tourists moving around their houses or not?

I live a little outside the centre, behind the Mutrah road. There we have no tourists. In general the Muslim community is a rather closed one, traditionally seeking for privacy. Yet especially in Oman people are very friendly and open. No one will give you a “no” for an answer and everyone are very helpful, and curious as well!

There is more and more tourist coming here each year. I get the schedule for the cruise ships, and each year there is an increase of 1.5 ships during high season!

What ethnicities and religions live in your area?

In Mutrah you will find all religions and ethnicities. And everyone get along fine. There are no problems.

No. Everyone supports everyone. Surely people of one ethnicity or religion will stick together more, but problems, no...

What do people do for a living in Muttrah?

Well I don't know it precisely. I do know that there are about 6000 shops in the souq, providing a lot of jobs. Then there is also a big number of fishermen living in Mutrah. Also many people live here but do work outside of Mutrah, mainly in Ruwi.



What kind of income classes live in Muttrah?

I don't know about the income. Many expats send money to their relatives abroad. Within the souq salaries are quite different as well.

What do you think, how many people usually live in one house?

That is also very mixed. Sometimes you have normal constellations; sometimes you have 4 -5 people sharing a small apartment that is made for 1 person...

How old are most people in Muttrah?

In Mutrah we have all ages. I see a lot of young families lately, but I cannot make any estimations...

What do you think about the population of Muttrah, does it increase or decrease?

Without having the numbers, I think it's rising. I see more cars parked in the residential areas each year. More buildings being built...

Have you heard about the relocation of the port?

What do you know about this?

What do you think about it?

I've heard that by 2015 the entire commercial part of the port shall be relocated to Sohar. There is also a dock in Misfa, but I don't know what will happen there.

The remaining facilities will be used by tourism only.

I think chaos will break out. Many people will be shifted, the prices will increase because of the transport costs and that will make the consumers unhappy.

I heard complaints about the sewage system in Muttrah. What is the problem?

It doesn't exist. Every building has a septic tank in Mutrah.

When it rains the souq is often flooded.

(A/N: the Core Bemba, the main road of the souq is located at the continuation of an old Wadi)

Where do you get your groceries, where do you pray, eat and drink?

I do not get everything at the souq. I do go to the LULU for the



most stuff, also there is a small Super Market close to my house.

What do you do in your free time?

I surf in the Internet a lot. I also watch a lot of movies and read books.

Where do you meet with friends?

In facebook!(laughs). No, I also do go out sometimes. But because of my work I mainly stay at home after a long day.

How are the open spaces used in Muttrah?

Well, we don't really have many anymore. Everything is full with cars. That is the main reason they are unused. You still see many kids playing in between them.

In Nazi Moja people have more time. There you can still see a lot of life in those spaces.

Are there still any sabblahs here?

I do not know to be honest...

Do people go out in the summer as well?

Certainly in the summer people don't go out as much. Especially in May it is very hot. But the main difference is the hours (when people go out). During the summer people will go out to have a tea or chat, but later than during the winter. Mostly after sunset.

How is the connectivity in Muttrah, by foot and by car?

By foot it's fine. In Mutrah you can still walk outside even during the hot hours of the day. By car it is not good at all. It is difficult to reach places, difficult to find parking...



Since when do you live here?

I was born here and have lived here ever since.

What do you like / dislike about Mutrah?

I like the peace in Mutrah. I like sitting outside talking to my neighbours. I think it is a great quality to sit in front of your house and talk to the people you meet.

What I don't like? Hmm (...), the cars. We have too many cars parking on the street and in any possible spot they find.

Also we have a problem with the wastewater. Every house needs a tank, we need a sewage system here!

Tell me about the tourists?

- Are there more in Muttrah than before?

- Where do they move around?

- Are the residents happy about tourists moving around their houses or not?

Yes, we have more tourists visiting Mutrah each year. I don't see tourists staying here though. They only come for a short time to Mutrah. The most of them only look at the souq. But sometimes they also come here (Nazi Moja) and walk around. It is usually younger tourists who come outside the souq.

We have no problem with that. In Oman we enjoy having guests. For me it is like sharing, and I enjoy sharing with others! I like talking to the tourists and sometimes I even show them around (laughs).

What ethnicities and religions live in your area?

In Mutrah we have many Indian & Pakistani people. In Hana (there are) maybe more than here in Nazi Moja. Here we have a lot of shia Muslims. But it doesn't matter who is from where; there are no problems between residents here.

What do people do for a living in Muttrah?

I don't really know. I study management and work at the PDO (Petroleum Development Oman) part time. My friend Ali, works for his fathers insurance company. Many work in the harbour others



go to Ruwi to work.

What kind of income classes live in Muttrah?

A difficult question. I don't know about these things. I think it is obvious that we are not the richest area in Muscat, but I do not know the numbers. I think it is diverse. Almost all Indian and Pakistani people working in the souq must share apartments...

What do you think, how many people usually live in one house?

That depends on the price. It can be two or three or even seven and eight people sharing an apartment.

How old are most people in Muttrah?

Well I know that in Oman we have many young people. But in Mutrah I think it is mixed. All ages I would say...

What do you think about the population of Muttrah, does it increase or decrease?

Uff... again, a difficult question. I would say it stays the same. I haven't noticed too many new neighbours. There are some new high-rise buildings close to the souq, but I don't know if they are apartments or offices... I think there is not much change in the numbers...

Have you heard about the relocation of the port?

What do you know about this?

What do you think about it?

I have heard that they are thinking of relocating it. But this story goes around for quite a while now... I don't know if it's going to happen.

I am not sure what it might mean for Mutrah. I know many people who work there...

I heard complaints about the sewage system in Muttrah. What is the problem?

Yes, as I said: We do not have a proper sewage system in Mutrah. We all have septic tanks. When it rains many houses have problems.

Where do you get your groceries, where do you pray, eat and drink?
For small things I go to Shemal (Hellat ash Shemal) or even to the

souq Jadid and the Mutrah Street. But for the main things I drive to the LULU market.

For praying I go to the mosque right behind my house. It is close and I meet many friends there.

I try to eat at home, cause it's cheap. When I eat outside I go to the coffee shops.

What do you do in your free time?

Mhh, many things. I spend time with my friends, watch movies, surf in the Internet; on the weekends I go to the desert or to a wadi if I have time.

Where do you meet with friends?

We meet at the coffee shops or at home. We often sit here (in front of his house Ahmed built a little porch) and chat. Sometimes we go to the Croniche and others we take the car and go to the Shatti.

How are the open spaces used in Muttrah?

Unfortunately there are too many cars parking around at the moment. But people do use open spaces! Especially in the cooler months people go out and meet their neighbours. Often it is combined with the afternoon prayer. Sometimes the entire family is outside with the children playing on the street.

Are there still any sabblahs here?

Sabblahs no, I don't think so. The coffee shops are where men meet now.

Do people go out in the summer as well?

Yes, of course; but later! The prayer times change during the summer. All activities outside take place a little later when it is cooler. But I also think there is more activity during the winter.

How is the connectivity in Muttrah, by foot and by car?

Walking is ok in Mutrah. The houses are built close to each other so the alleys are shaded. But by car it's difficult. You cannot drive from one side of Mutrah to the other easily and finding a parking spot can be very difficult.



image does not correspond to actual person

How long are you in Oman for?

How long have you been here already?

I'm here for one month, and I've been here for one week already.

How did you get to Muscat?

I arrived here by plane.

Was it your first time in Mutrah?

Yes.

Would you visit Mutrah again or is once enough?

If yes, what do you wish to do the second time?

I think I will come again to buy souvenirs.

How much time did you spend in Mutrah?

I think I was here for two to three hours.

What did you see? Where did you go?

I was mainly in the souq. And I walked along the Corniche to see the port.

What did you like / dislike?

I liked the products and the souq itself.

I don't like the frankincense smell so it was tough for me (smiles).

The vendors are calling you from everywhere, non-stop; but I have experienced worse.

I hired a car to drive through Muscat and I had trouble with the parking here in Mutrah, except that I cannot think of anything.

Can you think of something that was missing?

I was missing more information on Mutrah, the souq and the possibilities. I think there should be some kind of tourist information, maybe to know where to go and see more of Mutrah.



image does not correspond to actual person

How long are you in Oman for?
How long have you been here already?
14 days. Today's our fourth day.

How did you get to Muscat?
We came by plane.

Was it your first time in Mutrah?
Yes, first time.

Would you visit Mutrah again or is once enough?
If yes, what do you wish to do the second time?
We liked it, but I think once is enough.

How much time did you spend in Mutrah?
We spent about three hours here.

What did you see? Where did you go?
We were in the souq. That's why we came to Mutrah. Later we will go to the palace in Muscat.

What did you like / dislike?
W: I liked the souq. It had a nice atmosphere.
M: Yes, and it wasn't too full also. It was a pleasant walk. I was also tempted to go into the narrow streets leaving the souq, but we decided not to...

Can you think of something that was missing?
No, I don't think so...

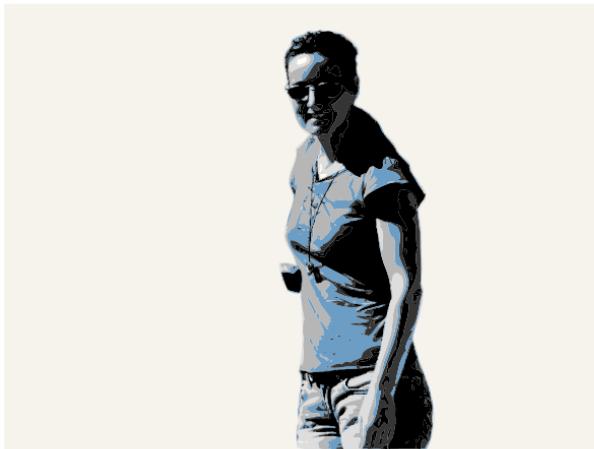


image does not correspond to actual person

Claudia. 41. Germany

How long are you in Oman for?
How long have you been here already?
I am here for 4 days and it's my first day here.

How did you get to Muscat?
I came with the (cruise) ship.

Was it your first time in Mutrah?
Yes, first time in Oman, first time in Mutrah.

Would you visit Mutrah again or is once enough?
If yes, what do you wish to do the second time?
I think I would if I had more time, but not with the cruise.

How much time did you spend in Mutrah?
I think it's been two hours, maybe three.

What did you see? Where did you go?
Well we (with husband) came from the ship, along the main road (Corniche) and entered the souq. We went to the other end of it and came back.

What did you like / dislike?
Well, we had a look at the hotels (at the Corniche) for some friends and we were disappointed. Also we would have liked to experience the fish market, but I guess we would have to wake up very early. We would like to see more of Mutrah, not only the souq. Maybe go to the fort and see the city from above. (A/N: the fort is closed to the public).

Can you think of something that was missing?
I think there should be more public facilities, like toilets and information desks. Other than that I don't really know. We saw the souq and there everything was fine...

IV main questions & goals

IV.1 constructing society & the need of public space

An interesting passage in the book “Bahrain Lessons” reads:

“Our society seems to find itself in an era that is radically rethinking its terms of cultural identity. Architecture has always been a cornerstone of identity in every society and religion. In an age when the local and the global collide, architecture is faced with the question of whether to embrace specific cultural values or universal goals of civilization. Architecture should pursue both these aims. But with the tendency towards iconic architecture, any radical revival of religious, tribal, family or corporate values harbours the risk of architecture tending to favour the quest for cultural unity and uniqueness, at the cost of universal values of civilization. In other words, architecture runs the risk of losing what Leon Battista Alberti described in the 15th century, as its claim to be the “construction of society”. Even though the task of actually constructing a building may no longer be taken for granted by today’s architects, they still have to face up to the responsibility of “constructing society” if their trade and craft is to survive at all.”⁷

As public spaces seem to play a vital role in this project, another quote comes to mind, that instigates further thought regarding the use of space. Richard Sennett seems to hit the mark perfectly in the case of Omani society of today: “for communities that are poor, or in times of scarcity, sharing between individuals and families in a necessary element of survival. [...] It is the hallmark of abundance that the need for such sharing disappears. Each family has its own vacuum cleaner, its own set of pots and pans, its own transport, supply of water, heat, etc. Thus the necessity for social interaction, the necessity to share, is no longer a driving force in communities of abundance; men can withdraw into their

self-contained, self-sustaining homes. This means that the feeling of community, of being related and bound together in some way, is cut off from a region that in the past furnished communal experiences.”⁸

IV.2 main questions

The main questions for this project are the following:

- Is there a way to prepare Mutrah for the upcoming social, economic and demographic changes –with the expected effect they might have on the urban living environment– without replacing the historic and unique urban fabric with a completely new master plan?
- What are the city's potentials that might turn into strengths, given the fact that the social changes within Oman (education, opening to the West & cultural influences from abroad) bring along changes in the perception of architecture, art and social togetherness?
- What is the best way to revitalize Mutrah and redefine it as a destination without loosing the main anatomy of such an historic structure?

IV.3 goals

The target of this project is to answer the above questions with a minimum of intervention on the already existing structures. I believe that this project must be seen from two perspectives:

One is the economic perspective, where finding solutions for the upcoming wave of tourism is a priority. That does not only mean to find spaces and restructure them. It means to find strategies to attract investments in certain areas and to extend the “Mutrah experience”.

The second approach focuses on the residents. Here it is important to understand the Omani way of living, respect it and even find out what elements of it might be in danger of extinction. In addition a delicate approach is necessary in order to avoid potential conflict of interest between residency with all its cultural characteristics and tourism. Different typologies of spaces are necessary, reaching from public and open to all users (even tourists) to more private (only residents).

I believe that public space is the one layer in such an urban context that does have the potential to serve both groups. The examples of Athens mentioned in the previous chapters are only a small taste of the ability hidden within the usage of open spaces. I believe a chain reaction of investments could begin if the public spaces are revitalized thus strengthening the community and the neighbourhood. This project will try to add life in the streets of Mutrah, feed the flows of different user groups and as a result enhance the quality of life and upgrade the entire neighbourhood.

base

goals

economic shift (shortage of raw materials)
strengthening of tourist sector

Mutrah does not utilise its potentials to the fullest
relocation of the port

Omani population is loosing interest in Mutrah



attract attention of international community
souq & old city among the most attractive
of the entire Arab peninsula

redefine Mutrah as a destination
economic growth & enhance welfare

prepare for change
demography
economy
perception



understandings, methods, strategies

Mutrah does not consist of an accumulation of world heritage objects, but it does have a unique historic urban fabric.

Mutrah has one permanent tradition: change



What are the city's potentials that might turn into strengths, given the fact that the social changes within Oman (education, opening to the West & cultural influences from abroad) bring along changes in

the perception of architecture, art and social togetherness?



re | define urban fabric
re | connect spaces, areas, neighbourhoods
re | claim open spaces

strengthen neighbourhood, fight anonymity, bring life to public space
offer more to tourism, but protect cultural privacy

"picturesque places", "nostalgic area"

"picturesque places", "nostalgic area"

re | pair ruins, dwellings

re | vitalize old town



IV.4 concepts - re | think Mutrah

re | define - urban fabric

re | connect - spaces, areas, neighbourhoods (pedestrian, car)

re | claim - open spaces

re | spect - historic structure

re | member - living traditions, areas with heritage

re | act – to modern typologies of separation

re | form - perception of open spaces

re | pair - ruins, dwellings



concept & intervention



diagnostics Mutrah



lost objects



high rise buildings



distinctive areas



pressure point



delicate (preservation)



parking problem



street direction

1 10 000

0 100 250 400



traffic system Mutrah

- > road towards Mutrah
- < road leaving Mutrah



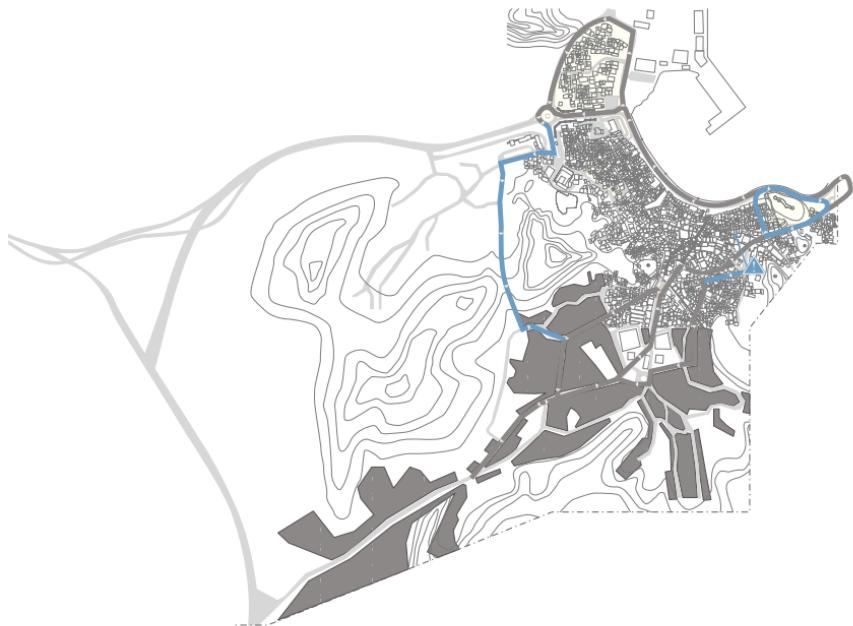


traffic system Mutrah

 existing traffic loops

⌚

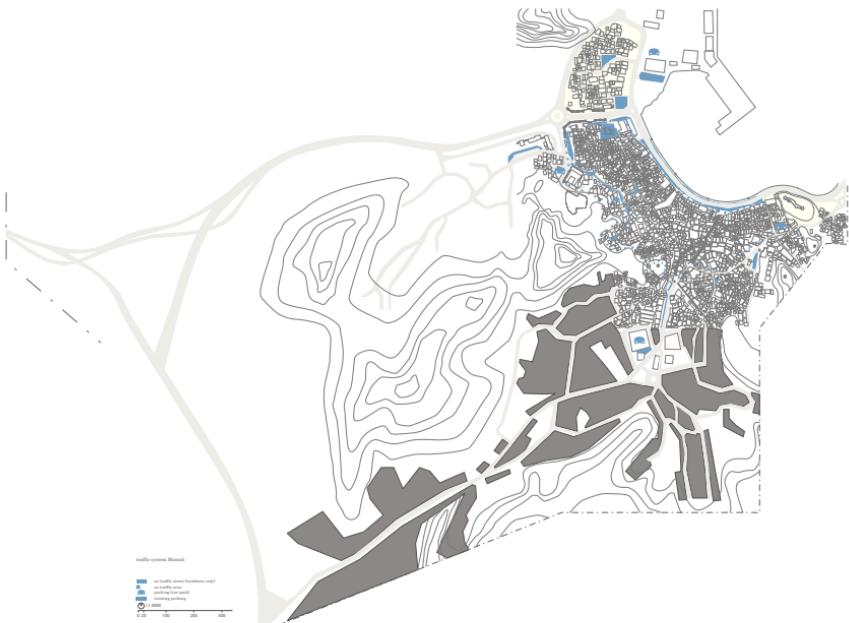
0 200 500 1000



traffic system Mutrah

- ▶ new traffic loop
- ▶ existing traffic loop





traffic system Mutrah

- no traffic street (residents only)
- no traffic area
- parking (car park)
- existing parking

0 200 500 1000

assessment Mutrah

capacities



action / proposition



no action

protect / preserve /
no action



commercial capacities



cultural capacities



ruin with potential



sound barrier (no action)

concerns



action / proposition



no action



no connection



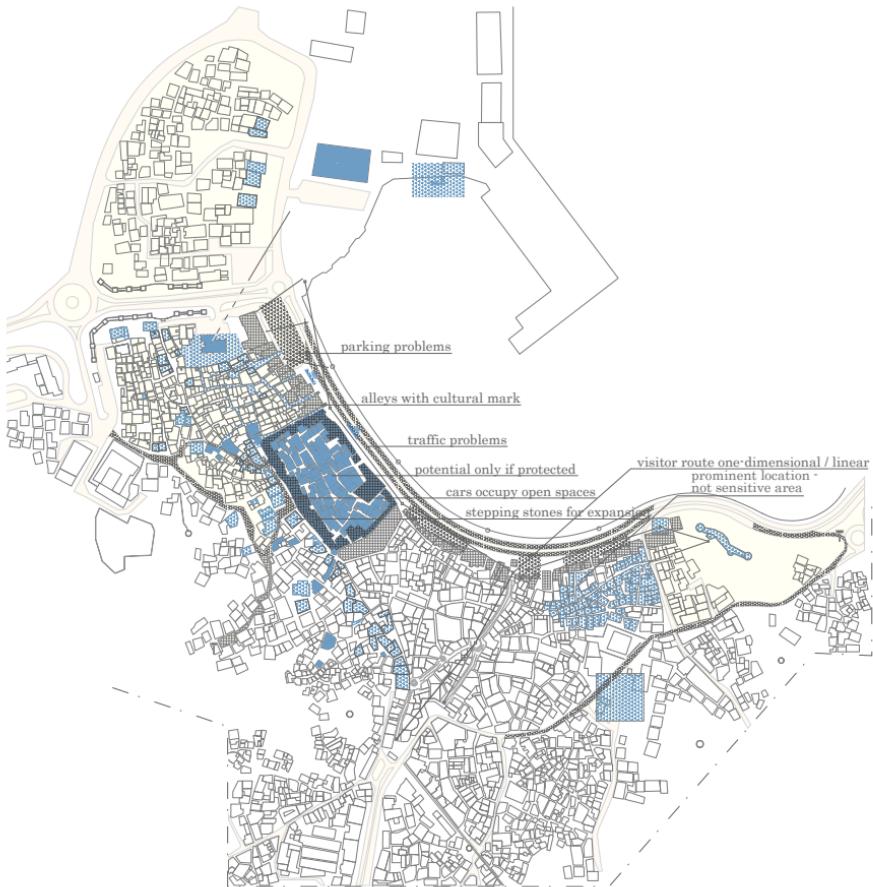
existing connection



no visual connection



no passing for vehicles



1 10 000

0 100 250 400

re I think Mutrah

re I define urban fabric
re I connect spaces, areas, neighbourhoods
re I claim open spaces
re I spect typologies, historic structure
re I member living traditions, heritage
re I act to modern typologies of separation
re I form perception of open space
re I pair ruins, dwellings
re I vitalize old town

we...
learn play read
pray talk cook build
teach eat



"we", "us", "together" instead of "I", "you", "alone"



neighbourhood

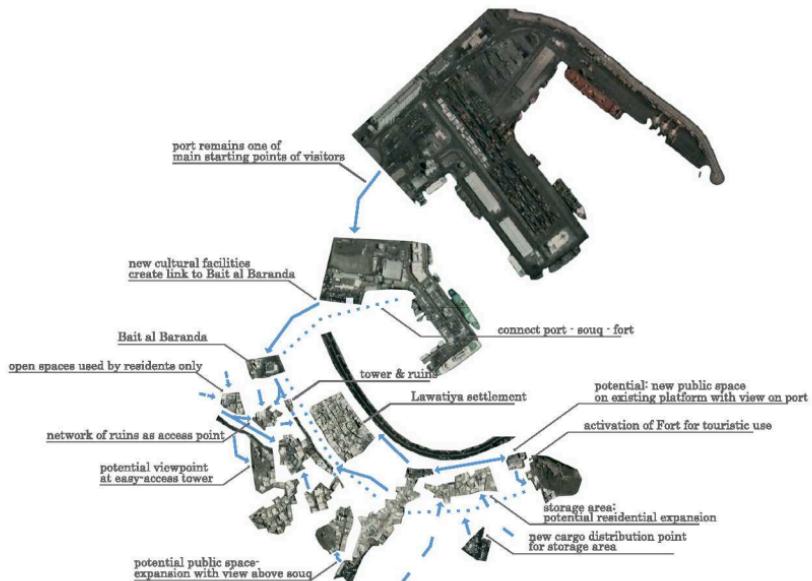


tradition

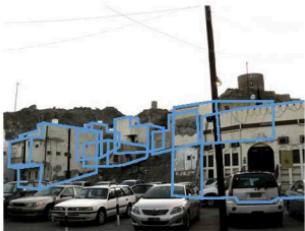
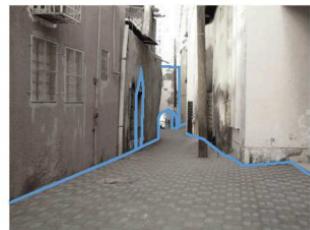
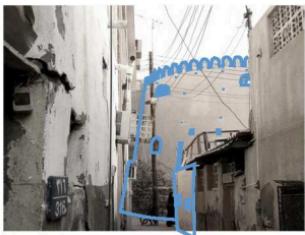


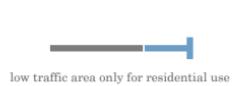
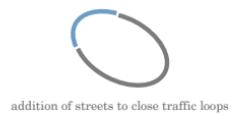
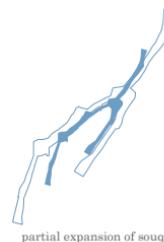
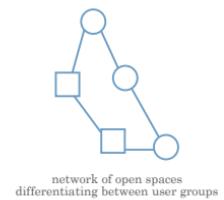
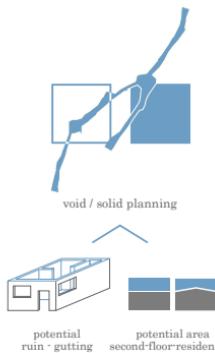
actively (re) - arrange open space

protect the unity
community vs. fear / separation



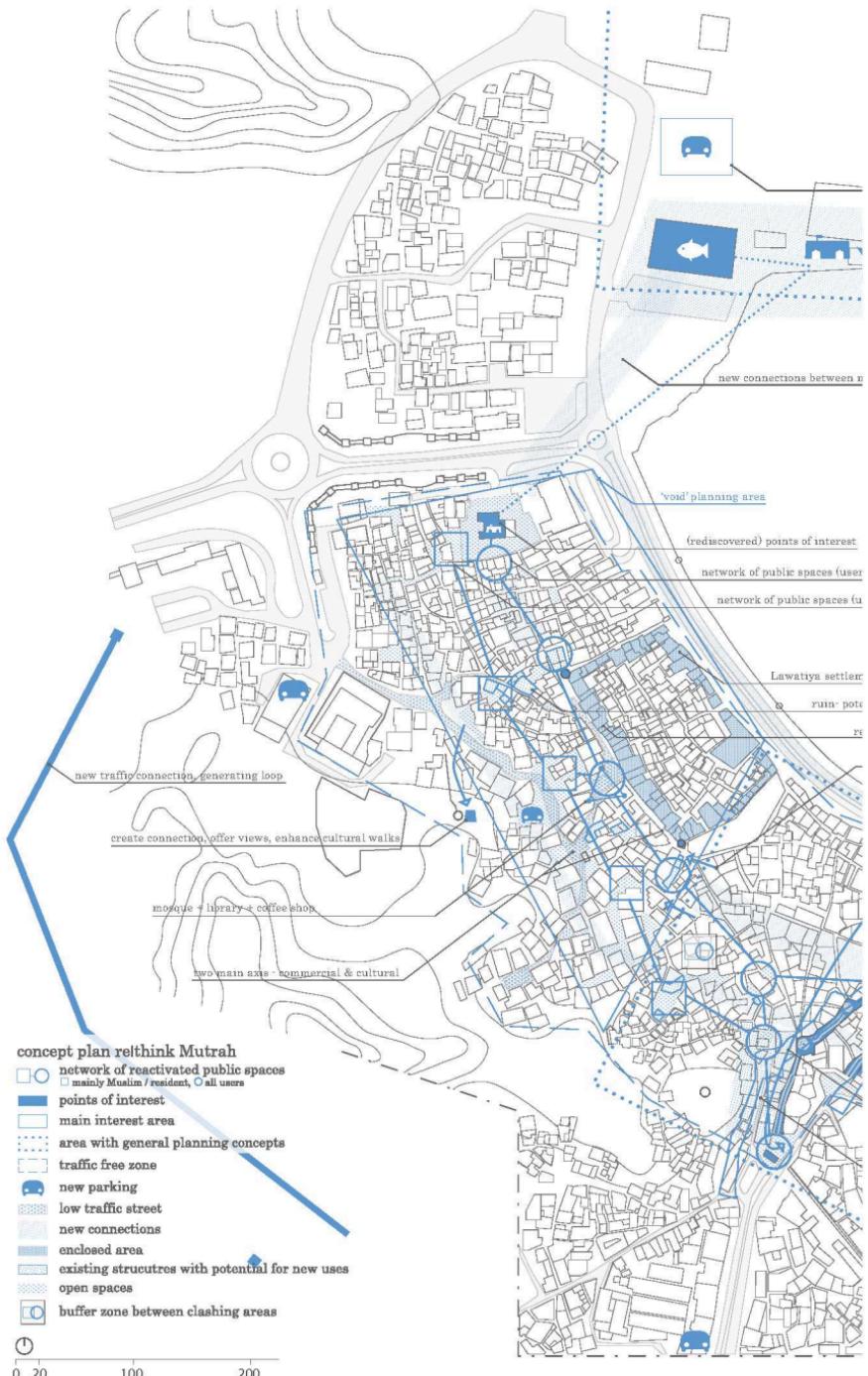
protect the built

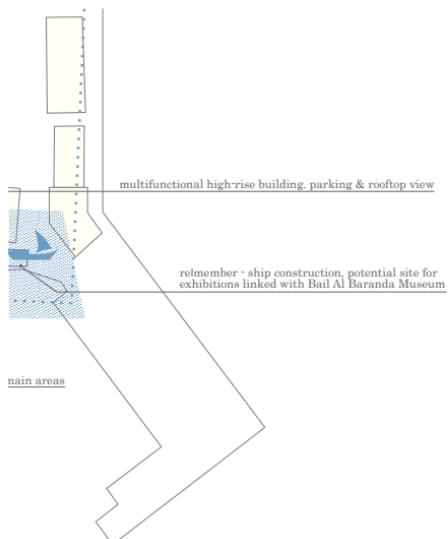




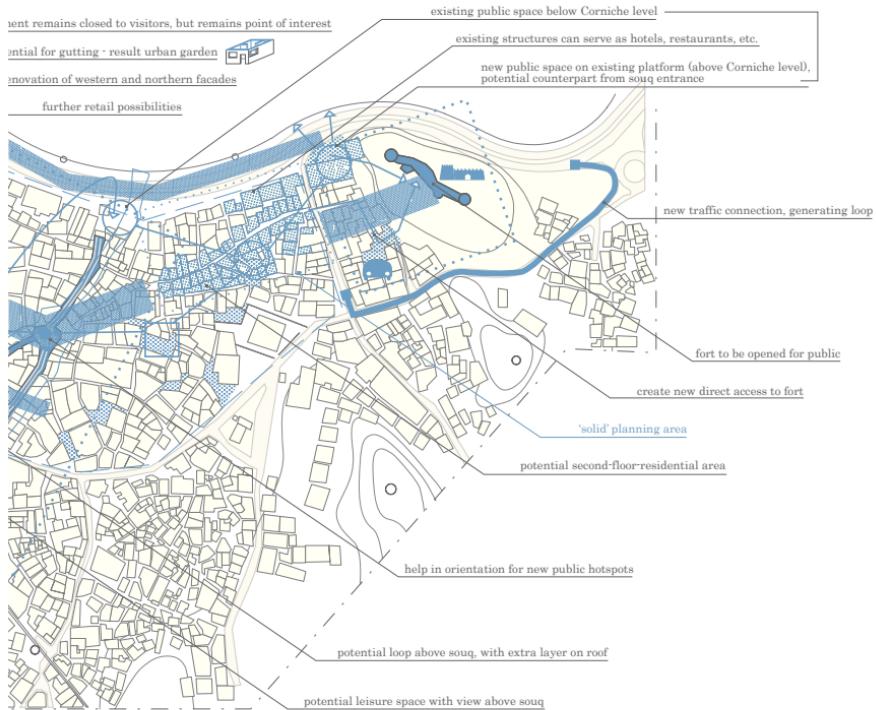
pictograms for concept plan re l think Mutrah

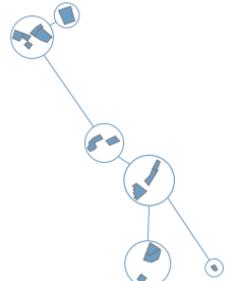
iterations





· all)
ser resident)





move through negative spaces, dwell in positive spaces



ruin = box



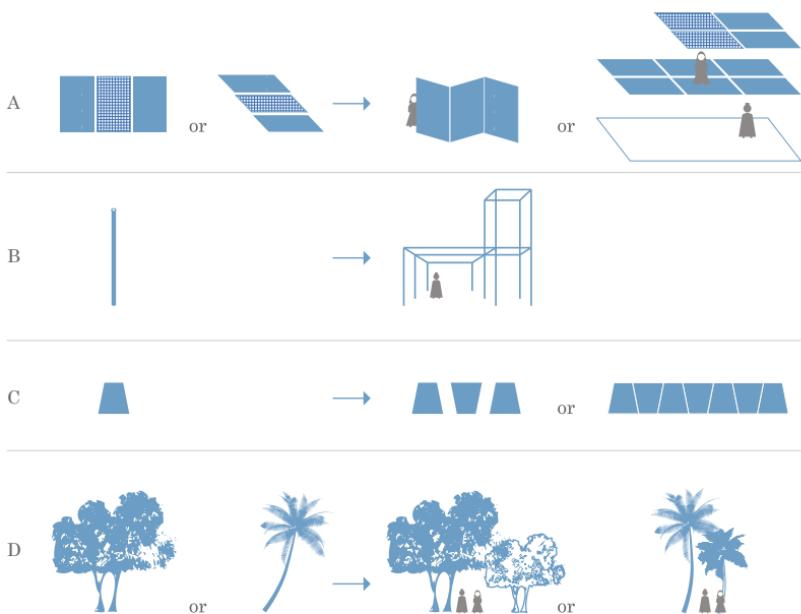
ruin - roof = urban garden



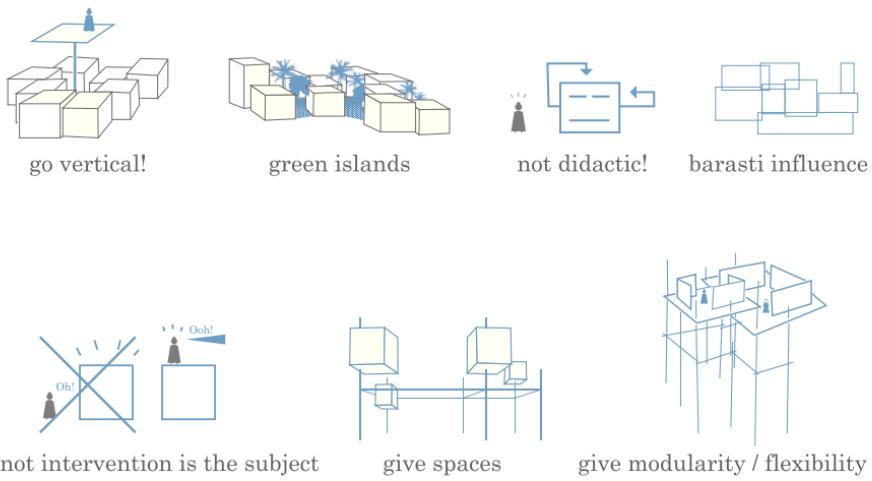
urban garden = attracting effect on the surroundings



going vertical = communication and overview over maze and hotspots



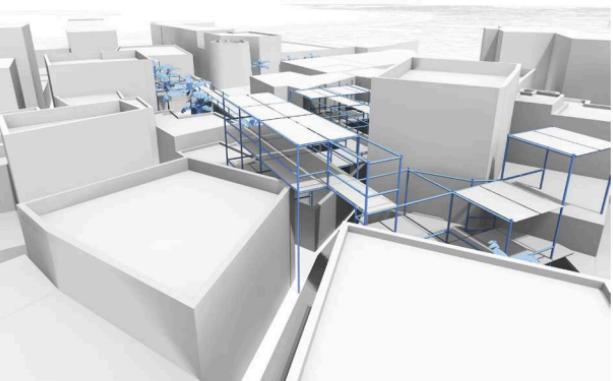
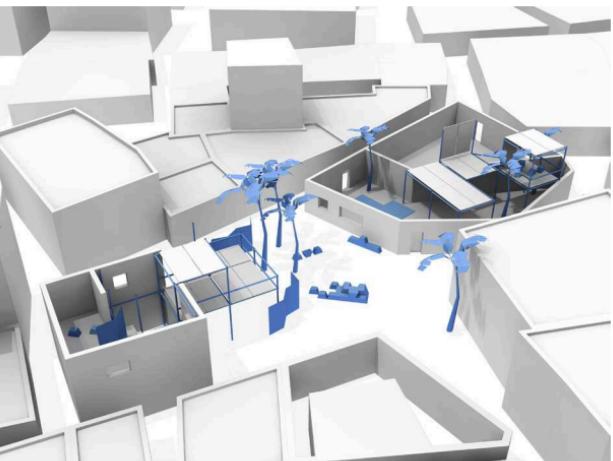
modular system

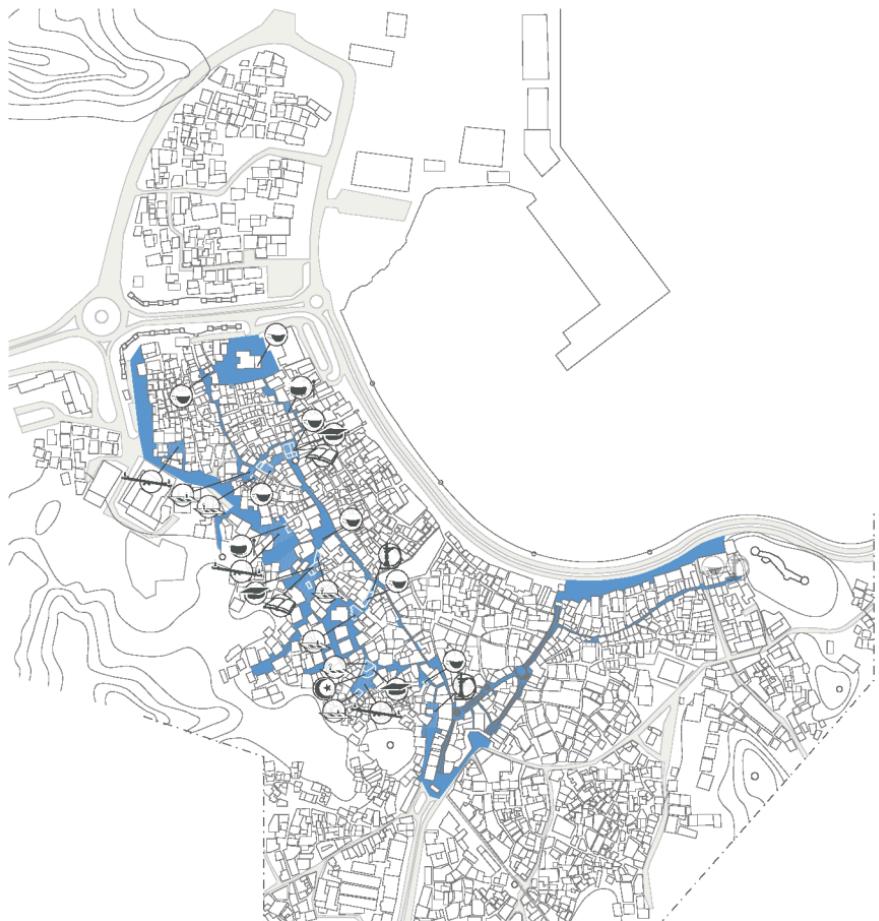


intervention basics



urban island example images





uses	users	activities
religious	♂	pray, discuss (mosque, matam, prayer room)
sabblah	♀	meet, talk, chai, dates
'mu'asaraat'	♀	meet, talk, chai, dates
coffee shop	♂ ♀ ♀ ♀	meet, talk, eat, chai, coffee, dates, shawarma
shisha bar	♂ ♀ ♀ ♀	meet, talk, chai, smoke
kitchen	♂ ♀ ♀ ♀	meet, cook, eat
play ground	♂ ♀ ♀ ♀	play, learn, family
school	♂ ♀ ♀ ♀ ♀	learn, teach
library /reading corner	♂ ♀ ♀ ♀ ♀	read, exchange, learn







V sources text

sources: demographics

- 1 "Oman"; <http://en.wikipedia.org/wiki/Oman#Tourism>; 12.06.2011
- 2 Dudley, Dominic; Reflecting on 40 years of Sultan Qaboos' rule; <http://www.meed.com/sectors/economy/government/reflecting-on-40-years-of-sultan-qaboos-rule/3008038.article> ; 04.04.2011, 19:41 (Sources from World Bank, National Economy Ministry of Oman)
- 3 Fred Scholz ; Muscat, Sultanat Oman: Geographische Skizze einer einmaligen arabischen Stadt; Die Küstensiedlung; Das Arabische Buch, 1990; p. 16-19
- 4 Fred Scholz ; Muscat, Sultanat Oman: Geographische Skizze einer einmaligen arabischen Stadt; Das Arabische Buch, 1990; p. 240 - 243
- 5 "Introduction, How it all began"; http://www.almadinaazarqa.com/dynamic_pages/index/2/Introduction.html; 12.06.2011
- 6 Conrad Prabhu; "Decision on proposal to convert Port Sultan Qaboos into tourism port imminent: PSC"; <http://main.omanobserver.om/node/3844>; 02.05.2010
- 7 EPFL Lapa, Institut d'architecture, Faculté ENAC École Polytechnique Fédérale de Lausanne; Bahrain Lessons, Teaching and Research in Architecture; Introduction; p. 11
- 8 Richard Sennett [1970]; The uses of disorder; Norton, New York – London; 1992; p.48

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