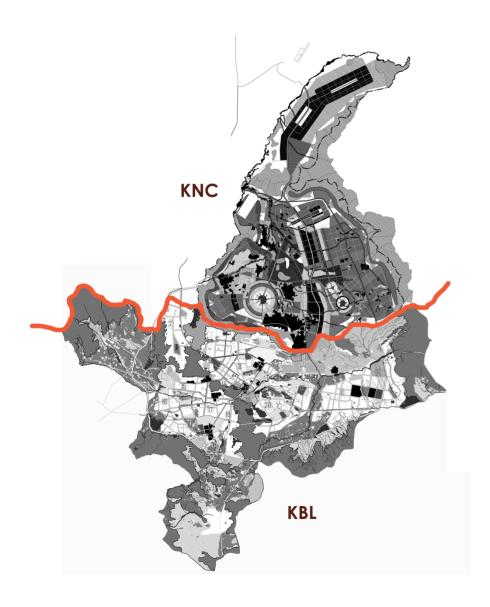


THE VISION OF A NEW CITY



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Dedicated to People Believing in the Future of Afghanistan.

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ABSTRACT/ KIVONAT

In a world of constant changes and perpetual information exchanges through mass-media, social networks, and the permanent and almost seamless interconnectivity via the Internet-the "virtual-space"-, the idea of 'topos', the real space-place and the vision of creating new livable and haptic spaces for vivid societies through urban planning, seems left a side.

The dissertation is built upon personal observations and experiences gained through the Kabul New City (KNC) project that envisioned a modernist city in a Muslim and ancient country of great history and prehistory, which did not go through a real democratization process in the "Western" sense.

Having had the chance of being part of the implementation stage of an urban planning attempt for Kabul New City, this dissertation tries to understand the discrepancies and failures of a city vision, which was planned out of cultural and social-economical feasibility. It was an abstract, perfect, technocratic planning rather than a planning for the actual necessity of the present Afghan society.

In consideration to this personal experience with urban planning and visionary planning for a developing, post-war conflicted, fragile country such as Afghanistan, the city concepts and visions of the 20th century and new attempts in urban planning of the 21st century will be introduced.

The dissertation will also give an explanation of how planning could be more successfully and effectively carried out in a non-industrialized country, in a country that was and is based on trade and agriculture, and which never really went through an industrialization process in the sense of the Developed or "Western" countries, such as England or emerging countries, like India and Brazil.

The great visions for Kabul New City will be compared to three visionary cities implemented in the 20th century, such as Chandigarh - the modernist city - in India, Brasilia - the utopian city - in Brazil and Milton Keynes - the "smart city" comprehensive planning - in England.

There will be an extensive description of Kabul New City project and its top-down planning approach, after the description of the old and existing Kabul City, whose existence is based on evolutionary growth and historical conditions.

The concluding part discusses why urban planning visions- the blueprints- did work out in other cities and why they failed in Kabul New City.

It will further underline the importance of rethinking urbanism and participatory, bottom-up approaches of place-making and proposes measures for space-making in a more and more globalized world, where the loss of identity and cultural context is endangered, but could be saved through an appropriate and creative planning procedures.

Advocatory alternatives for up-to-date planning criteria's of infrastructural projects, such as water or electricity as well as improved management of national land and private land property and a recall on 'inherited knowledge" of planning accomplishes this dissertation.

(Free Hungarian Translation)

Egy olyan világban ami állandó változásban van és folyamatos az információ áramlás a tömegkommunikációs eszközök és közösségi hálóknak köszönhetően és szinte zökkenőmentes a kapcsolattartás az interneten keresztül, a "toposz" fogalma, miszerint a valódi tér-hely és azaz elképzelés hogy új, jobb és élvezhetőbb tereket alkossunk jól működő társadalmak részére a várostervezés elhanyagolja.

A disszertáció személyes megfigyelésekre és a Kabul New City (KNC) – Kabul Új Város – projekt révén szerzett tapasztalatokra épül, amely egy elképzelt modern város egy több ezer éves történelmi muszlim országban, és amely még nem tapasztalhatta meg az igazi demokráciát.

Megvolt a lehetőségem, hogy részt vehettem Kabul New City várostervezésének megkísérelt végrehajtási szakaszában, eltéréseket disszertáció megpróbálja megérteni az tévedéseket a várostervezési koncepcióban, amely nem volt gazdasági kulturális, társadalmi és megvalósíthatósági összefüggésben. Sokkal inkább egy absztrakt, technikailag tökéletes terv volt, ahelyett mint amire ténylegesen szüksége lett volna a jelenlegi afgán társadalomnak.

Tekintettel erre a személyes tapasztalatra a várostervezésben és víziótervezésben egy fejlődő, háború utáni, törékeny országban mint Afganisztán lesz bemutatva a 20. század várostervezési koncepciói és viziói és a 21. század új kísérletei a várostervezésben.

A disszertáció magyarázatot ad hogy a tervezést hogyan lehetet volna sikeresebben és hatékonyabban lebonyolítani egy nem iparosított országban, egy országban ami kereskedelmen és mezőgazdaságon alapult és alapszik, és soha nem zajlott le az iparosodás mint a fejlett "nyugati" országokban, mint Angliában és gyorsan fejlődő országokban mint India vagy Brazília.

Kabul New City hatalmas elképzelései lesznek összehasonlítva a 20. században készült három víziókat követve felépült várossal, mint Chandígarh – a modern város – Indiában, Brazíliaváros – az utópista város – Brazíliában és Milton Keynes – az "okos város" átfogó tervezésen alapuló – Angilában.

Részletes leírás mutatja be a Kabul New City projektet és annak felülről-lefelé haladó tervezési felépítését, miután bemutatásra kerül a régi és meglévő Kabul város, amely evolúciós fejlődéssel történelmi körülmények között jött létre.

A befejező rész bemutatja, hogy a városépítészeti víziók – tervrajzok – miért működtek más városokban és miért bukott el Kabul New City esetében. Továbbá kiemelve részletezi a várostervezés újragondolásának fontosságát és a részvételen alapuló - alulról-felfelé haladó tervezési megközelítést - a helyteremtésben és intézkedéseket javasol a térképzésben az egyre jobban globalizálódó világban, ahol a az identitás elvesztése és a kulturális kontextus veszélybe kerül, de megmenthető egy megfelelő és kreatív tervezési folyamattal. Javasolt alternatívákat adva korszerűsített tervezési kritériumokra

Javasolt alternatívákat adva korszerűsített tervezési kritériumokra az infrastrukturális projekteknél, mint például a víz és az elektromos hálózatra ugyanúgy mint a jobban működő ügyintézésre mind a köztulajdonú földek mind a magánföldek esetében és végül a disszertáció zárásaként az "örökölt tudás" felelevenítésével a tervezés során.



1: Dehsabz Sunset and Barikab River, May 2013 (Where the sun is shining and water is still flowing, there is always a Hope for Visions, Adiba Amani, (Images by Author)

PRFFACE

Each individual has always his or her own very personal and subjective perception of the world that is surrounding him or her. The same appears to the individuals perception of the immediate 'space-place' that person is living or staying in for a longer period. As a child these individuals might have a very narrow and even more subjective view of their environment or they might live in their fantasies inspired by books, stories told by their parents, television or simply their every day experienced world.

When I was nine years old, my parents took the decision to leave Kabul and Afghanistan due to the political situation in the country as the Soviets invaded the country in 1979 and thus my parents, as a more liberal and Western orientated people, were threatened.

Back then, all the spaces I was confronted with were the city sightseeing's my parents took us to and the enjoyable trips out of the city of Kabul to the great nature surrounding it, and sometimes, at wintertimes to other cities such as Jalalabad, as schools were closed in Kabul due to lack of heating systems like the school of Lycee Malalai that I visited till the 3rd grade.

When I started the Doctoral of Liberal Arts (DLA) at the Moholy Nagy University in Budapest 9 years back, my intention was never to write about Kabul New City project nor about city visions, but to preserve the Óbudai Gázgyár in Budapest and proposed a new function for it as well as made many research on it.

But as it should not be this way, I was requested by my mentoring Professors to rather write about my experiences during my stay in Kabul where I used to work as the Director of Public Facilities and Area-wide Guidelines Architect for a total of 4 years.

It was in 2011 that I decided to depart back to Afghanistan after deep consultation with my Professors, as I got the unique chance to be part of the mega city-planning project "Kabul New City" and to contribute to the planning and realization of this mega project that was under the direct lead of Dehsabz City Development Authority (DCDA).

Professor Turányi, Gábor of the Moholy Nagy University of Art and Design in Budapest, where I was just finishing the 3 years obligatory school part, said to me that this chance will never come back and I should go for it. His mental support at that time and my own eagerness to fulfill a promise I gave to my grandfather, gave me the strength to leave all behind and just jump into the almost unknown after 31 years.

Back than, it was also more that Promise that I gave to my grandfather, while he was still in coma, after his tragic accident, on the way to buy some strawberries to end the fasting time with, being heavily injured by a bicycle on a dark evening in 1991. I remember very well, holding his hand and telling him: 'Agha Gul, I will go back to Afghanistan and help to built it up again'.

When I had my interview with the CEO of DCDA, Mr Hassanzadah, for the position as an Area Wide Guideline Architect, I did tell him about the Promise and he was touched to the extent to hire me and later on to promote me as Director of Public Facilities.

Sitting now in the peaceful and quiet city of Budapest in Hungary, where especially on Saturday mornings everyone is happy as the weekend is still ahead, I look back sadly to my memories of Kabul; a city incomparable to any other cities: chaotic, dynamic, vivid, dangerous, unorganized, multicultural, loud and polluted, dense, full of young unemployed man and woman, working kids under 9 years of age even, beggars with their babies, homeless people, drug addicts, internally displaced people and returnees.

Budapest is different: the majority of inhabitants has everything that is desirable for an enjoyable live: A shelter, sufficient water and electricity, an enormously well-organized social infrastructure and entertainment facilities, well functioning touristic attractions, playgrounds for kids to play and be a kid, and, of course, a rich soil with a lot of thermal water. And: it is a beautiful city, a city with genius loci as well.

The Kabul city's architecture and infrastructures are nowadays degraded, miss-functional and even unpleasant to look at, though the location itself and its climate are incomparable and the city is a genius loci for its many mountains surrounding it, and with around ~300 days of sunshine per year.

Budapest has become my second home by my own choice, but I will always stay a stranger in any other countries, except in Afghanistan; this I realized during the last 5 years of my stay in my country of birth.

For the first time in my entire live so far, my soul felt at home and arrived, as I felt deep inside unsettled till than.

During those five years, I have experienced the big gap between the visionary planning and the every day difficulties inhabitants including myself were facing day by day in Kabul City, that gave me the push on writing about it.

Many observations during the research period are manifested in pictures, therefore I have tried to insert many photographs and images to be more able to transfer my viewpoint and understanding of given circumstances at that time and as a

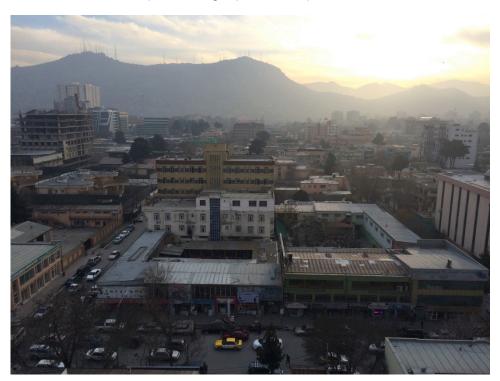
professional, who's personal vision and approach is based on a holistic and authentic methodology and philosophy of sensing spaces and places and not simply thinking them.

Looking back, I could only survive these harsh times because of an intuitive awareness of its profound richness in culture and nature, which I have had neglected for so long, but which becomes obvious to me while getting confronted with it through this work.

I hope this negligence will not be repeated, as it is of crucial importance to keep visions and promises alive, so that following generations can built upon these visions and ideas.

Even though the Kabul New City project visions has ended up in the shells of the already vanished and transformed Authority of Dehsabz since 2016 to CREDA, it turned to be the best time of my personal life and I am happy to have had that opportunity as a grown up professional to recall all my childhood memories and feel the strength and power of my roots.

Adiba Amani, Budapest/Hungary, February 2017



2: City View of Existing Kabul City, 2016^[1]

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¹ Image by the Author

1 VISIONS AND CONCEPTS OF CITIES

To create visions is an eminent ability of any person of creative and intellectual mind. It can also be a collective idea that might lead to a vision or a single person's imagination for certain fields, such as in city planning.

Thus, it has to be assumed that visions for cities has been existing in human kind since the four ancient urban civilization of South Asia, China, Egypt and Mesopotamia and probably on the entire earth since mankind exists.

As of the geographical closeness to Afghanistan, the Harappa civilization of the Bronze Age, dates back to ~ 2500-1700 BCE, will be noted here in order to understand better the city planning conditions of Afghanistan later in this document.

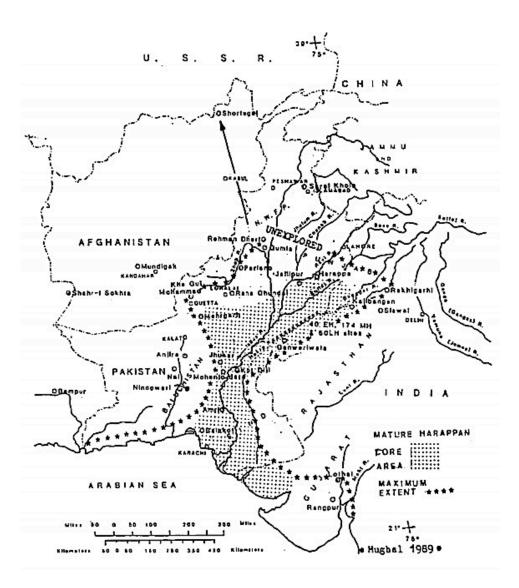
Harappa belongs to the ancient Indus Valley Civilization. The area is so far estimated to have been extended between todays Afghanistan, Pakistan, and India.

Major cities such as Harappa and Mohenjo Daro were highly urbanized and these cities were well planned with streets, public and private wells, drains, bathing platforms and reservoirs. According to archaeological excavations of cemeteries in Harappa, a continual intermingling of communities from the West and the East were testified (Bryant, E.F./ Patton, L.L. 2005: 4/491).



3: Public Bath in Mohenjo-Daro in Eastern Pakistan, 2008^[2]

² National Geographic Society (2008)



4: Mature Harappan Period in the Indus Valley $\ ^{[3]}$

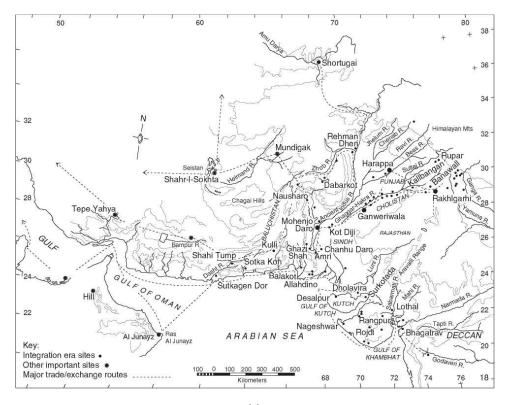
³ Mughal, M. Rafique 1992: 218

In the region of Northern Afghanistan (former Bactria area) farming and city communities existed.

Soviet archaeologist found a city called Dashly in late 70th of the 20th century, which dated back to 1200 BCE belonging to the Namazga culture (Kohl, Philip L. 2016: 186).

A Chinese geographer noted two millennia ago about the habitants of Bactria, centered on the Oxus river (Amu Darya) in nowadays northern Afghanistan, not very far from Dashly, as being legendary negotiators and traders: its capital city was home to a market where a huge range of products were bought and sold, carried from far and wide (Frankopan, P. 2016: xv).

Both civilization, the Namazga and the Indus Valley Civilization must have had a functioning trade relation that can be proofed by the linguistic evidences and cemetery excavations as of today.



5: Trade routes during Harappan Period [4]

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⁴ http://www.worldhistory.biz/prehistory/90417-chronological-framework-origin-to-decline.html

Nothing else than a wealthy, healthy and functional society shall be living within an urban area, including well proportioned and functional urban forms and areas, these to be assumed as the primary visions of the humankind of the Bronze times in Central Asia and the Indus Valley 5000-3000 years ago.

The planners and architects of the 20th century in contrary were rather interested in so called "Modernism", in "Mega Structures" and "Group Form", cleaning up everything and starting anew while neglecting all existing traditions and habits of the local population.

Suddenly, the forms and structures were more important for a society than a technically well functioning city.

The transportation and traffic system became substantial than the actual well being of urban civilians, so were and are mass commerce and beneficiary mass production of goods in form of mega shopping malls more prioritized.

The sense of community seamed to have disappeared from the urban societies, especially in the Western societies.

Planners felt the urge of planning centers of encounter and constancy, such as the Capitol of Chandigarh, the Three Powers in Brasilia or the Shopping Center in Milton Keynes but somehow they missed to create spheres and "Topos"- that means place-space according Aristotle's in his Book IV Physics (Heidegger, M 2007: 7), which would attract people.

No matter for what reason and by which coincidence people would stay in certain areas, fact is, that places and spaces nowadays have become more and more like 'airports': Looking almost every where identical as Rem Koolhaas mentions in his essay 'Generic City':

"The generic city stands for everything the archetypical urban sociologist does not like: sprawl, sameness, repetition. It is literally, a city without history created on a plane, a surface. Koolhaas thematizes the phenomenon of urban sprawl as an essential characteristic of the future in which density is artificially created in the form of urban simulacra: shopping malls, theme parks and museum environments." (Hajer, M. Theory, Culture & Society, London SAGE 1999: 140).



6: Shopping Building of Milton Keynes $^{[5]}$

Existing traditions and rituals, as well as, daily habits were not even taken into consideration and the top-down approach was never questioned in the modernist area of city planning, while it was very much part of the great vision of the Garden City Movement.

In the following chapters of this research paper, three major and rather known cities of the modernist times are taken as examples to emphasize the importance of authentic 'Topos' and 'Culture" planning of cities, that has been missed in Kabul New City project as a comparison.

Chandigarh has been taken as an example to show how urban planning in a modernist way can succeed, though being not authentic to the given nature and tradition of the society.

But as it was guided by the planner, though a foreigner, namely Le Corbusier and his team, through a fairly long implementation period, it could become as envisioned and as desired. Also the political conditions were right and necessary decisions were taken appropriately on time, such as assuring to have the land for planning under the Sate control.

⁵ Urban Design Groupe: Milton Keynes at 40, Issue 104, 2007, p. 20

Brasilia has been chosen, for it was though a top-down approach, it did not miss to be announced as competition, there was a step towards public contribution and engagement in an urban planning process and most of all: the winning competitor was a local architect and planner.

A rather young city that has been planned basically on a drawing board is Milton Keynes (MK), which shall demonstrate how even planned cities with a top-down approach can be successful, if the community has been backed up by a certain political party with a vision of being environmental friendly through a 'Planting Policy'. MK has been also chosen as it its planning was argued through the introduction of the effects and impacts the traffic on cities will have in future and how important a planning from the view of a motorized individual would be.

In case of Kabul New City (KNC) the vision was to accelerate the socio-economic development of Afghanistan linked with the global socio-economy by integrating the neighboring areas for broader resource base and more diversified socio-economy through a city planning project.

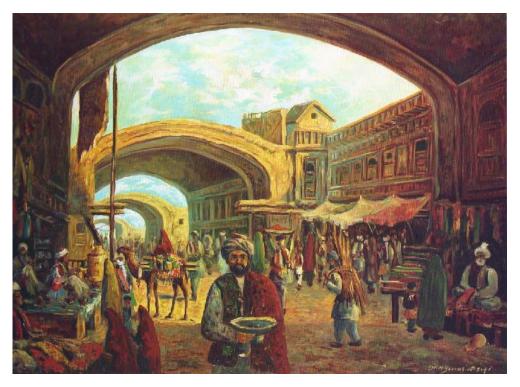
The great social ideas of the Garden City Movement were incorporated, as well as the pioneering idea of a perfect traffic and transportation system based on the topography and preservation of existing gullies.

This vision was set by the Japanese International Cooperation Agency (JICA) in 2006 after H.E. the former President Hamid Karzai, was announcing the urgency of a new city as the population was massively growing in the capital.

Even though the existing trade culture as a vision for the Kabul New City Project was somehow authentic, it did not succeed of being built. It stayed a vision despite its perfectionism.

Maybe it failed because most of all KNC was a political decision, where society was not involved neither informed and at least asked how they would envision their "new city", and if they think that it would be of necessity.

This will be discussed in the last chapter of this research paper.



7: Char Chata (Means four roofs)- Old destroyed Bazar area of Old Kabul $^{[6]}$

⁶https://www.google.hu/search?q=charchata+kabul&client=firefox-b&source=Inms&tbm=isch&sa=X&ved=0ahUKEwjkiNmvrNHRAhVsDcAKHc_3A74Q_AUICCgB&biw=1416&bih=675#imgrc=S6s0CHAVwE7O-M%3A

1.1 MODERN CITY - CHANDIGARH - INDIA

Chandigarh is the capital city of the states of Punjab and Haryana of todays India, located 388 km north of New Delhi. It is the first city to have been planned after India's Independency in 1947 from the British Colonial Power.

It is also a "most visible example" of a rasterized city of his time, planned by western planners and architects for an eastern country with a rich culture, history and tradition.

British India was divided into two nations: India and Pakistan. Because of the bifurcation of India between 1947 and 1951 about 6.2 million Muslims left India for Pakistan, and 7.5 million Hindus and Sikhs came to India from across the border.

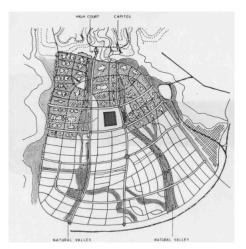
Also the Second World War, additionally to the bifurcation, accelerated the refugee influx and the growth of urban population during the decade 1941-51 up to 6.2% (Kalia, R. 1987: 1).

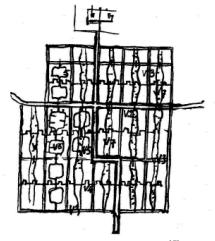
1.1.1 BACKGROUND OF PLANNING CHANDIGARH

In 1948, the government of East Punjab with consultation with the government of India selected the site of Chandigarh as its capital and was supported by the Prime Minister Javahar Lal Nehru, who said on his first visit to Chandigarh: "The site chosen is free from the existing encumbrances of old towns and old traditions. Let it be the first large expression of our creative genius flowering on our newly earned freedom." (Kalia, R. 1987: 12)

Unfortunately, the freedom that was earned from the colonial power of the British, did not made it easier for the Indians to carry out neither the planning nor the construction of a new planned city. The British left a "large and sophisticated bureaucracy but no technical tradition, thus India was forced to look to the West for the construction of the city." (Kalia, R. 1987:ix)

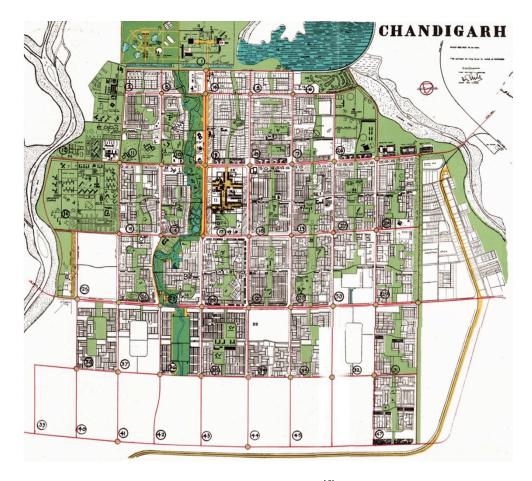
The American architects Albert Mayer and Mathew Novicki were appointed as the first planners, who provided the initial master plan for Chandigarh, which was finally put in place, with modifications by the Swiss-born French architect Charles-Edouard Jeanneret, known as Le Corbusier, his cousin Pierre Jeanneret, and the English couple team of Edwin Maxwell Fry and Jane Beverly Drew.





8: Initial Proposal of A. Mayer (left) and Le Corbusier (right) for Chandigarh [7]

⁷ G. Avasak, N. Mathur, P. Kamineni: Chandigarh-Urban Planning Concepts-, A Comparative Study with Residential Development, QT8, Milano. 2015



9: Final Plan for Chandigarh by Le Corbusier (right) [8]

The city was originally planned in his first revised phase for a population of 150.000. The second phase should inhabit up to 500.000 people on a land area of 8,500 acres (~3439 ha).

Today, the city is one of the fastest growing cities of India and inhabits about 1,165,565 Million people with a growth rate of $\sim 5\%$ annually (http://www.indiaonlinepages.com)

Chandigarh has become an attractive city because of its unique concept and is known as 'City Beautiful'. It is one of the greenest city of India with its green belts / parks/ gardens.

⁸ G. Avasak, N. Mathur, P. Kamineni: Chandigarh-Urban Planning Concepts-, A Comparative Study with Residential Development, QT8, Milano. 2015

It is also the hub of political and bureaucratic activities of adjoining States. "The high profile services provided by Chandigarh Administration & Municipal Corporation is a role model for other urban cities" (Lal Nehru, J. 2001-2004: 1).

The maintenance of basic urban service is altogether different than the conventional old cities.



10: Assembly Building in Chandigarh by Le Corbusier ^[9]

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⁹ http://gijonarquitectura.blogspot.hu/2013_06_01_archive.html

1.1.2 VISION AND CONCEPT OF CHANDIGARH

The political vision of Chandigarh was to provide for the masses of displaced Punjabis a new capital, as they had lost Lahore to Pakistan caused by the partition of the subcontinent.

Chandigarh was thought to be the symbol of India's break with his past as a colony.

By providing jobs and homes for refugees, "absorbing excess population and encouraging economical growth in depressed regions", the political vision of Chandigarh to express the nations' faith in the future of India was set.



11: Sectorial Detail Plan, based on a 800m x1200m Grid Structure, Chandigarh ^[10]

The conceptual planning of Chandigarh was of coincidental luck:

If Albert Mayer's partner, Mathew Novicki would have not died in 1950, Le Corbusier never might have gotten the chance to realize his vision for a modernist city in a very traditional orientated country part, he even was not inhabiting India, but just frequenting twice a year Chandigarh for one month, but over a period of 10 years.

G. Avasak, N. Mathur, P. Kamineni: Chandigarh-Urban Planning Concepts-, A Comparative Study with Residential Development, Q18, Milano. 2015

Le Corbusier rectified the plan of Mayer by emphasizing the existing natural landscape and putting upon it a gridiron/sectorial and linear concept.

That plan, rectangular in form with 2 cross-axis in the middle and divided in sectors of ~800mx ~1200m, nevertheless represents Le Corbusier's lifelong obsession with the idea of a city as an organism.

The concept somehow was analogue to the human body in an abstract way:

On the top of the plan was the "head" in sector 1, where the Capitol Complex is situated, its "heart", the commercial city center in sector 17, its "brain" in the parklands, where universities, museums and libraries are situated, its "lungs"- the leisure valleys, open spaces and sectorial green areas, its "bones" – the structure of roads and finally the "hand", here the symbol for its light industrial area.

Le Corbusier used also the existing natural landscape conditions in favor of his concept: By placing the original plan on the inclined plain of a Google Earth map, it is visible how accurately the liner green zones of Le Corbusier's plan adapts the natural flow of its rivers, which are channeled in Chandigarh.

Le Corbusier's plan has these 'green belts' with the water channels only in the direction of the slope of the plans, while A. Mayer's was planning it in different directions, which was against the natural irrigation-slope.



12: Overlapping of Envisioned Plan on Existing Situation of Today [11]

Although the Periphery Control Act was passed by the Punjab government In 1952, providing a permanent greenbelt around the city and keeping the character of the plan, several unauthorized constructions have emerged within the periphery zone, threatening the planned character of Chandigarh.

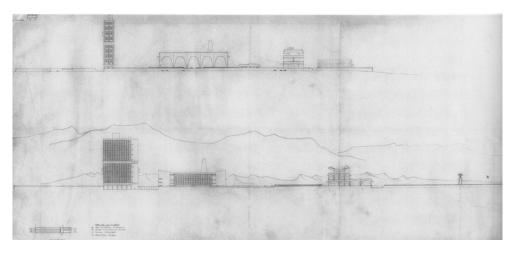
"The idea behind the act was to protect the surrounding rural community from degenerating by contact with urban life and also to regulate development within a five-mile radius beyond the city. Le Corbusier called the act "a happy event" and urged the city administrators that "it must be carried out at all costs."

As long as Le Corbusier lived, he fought hard to preserve the character of the city that he had planned. Nearly ten years after starting work on Chandigarh, he wrote to Nehru: "The construction of the 'Capitol' and its lateral elements has brought to Chandigarh such a marvelous landscape (lake and mountain) which no city in the world possesses. Let us not destroy it!"(Kalia, R. 1987: 120)

¹¹ http://chandigarhurbanlab.org/the-shivalik-hills-and-the-plan/

1.1.3 THE MODERNISME IN LE CORBUSIER'S MASTER PLAN

The Modernism approach for the planning of Chandigarh lays certainly in his design philosophy of Le Corbusier:



13: Elevation of The Capitol skyline and the Secretariat as a skyline [12]

"The city, he said, is man's "grip" upon nature. "It is human operation directed against nature It is a creation." To him the idea of integrating architecture and nature in the manner of Art Nouveau became anathema." (Kalia, R. 1987: 82)

"A building must be a clear, sophisticated statement, ..., and it should stand in contrast to nature, rather than appear as an outgrowth of some natural form. By their differences, nature and architecture should enhance each other, creating a sort of harmony by contrast." (Kalia, R. 1987: 83)

As Le Corbusier was fascinated by the geometrical forms, still would and did keep the natural beauty of the existing landscape of Chandigarh.

He created the "harmony" by contrasting the nature through his rigid gridiron plan and his geometrical building forms can be described as "modern", though modernism in the sense of geometrical form-giving has been existing since the Muslim area.

He would note himself:

"India had, and always has, a peasant culture that exists since a thousand years! India possessed Hindu temples (generally in

¹² Vikramaditya Prakash: Cahndigarh's Le Corbusier- The Struggle for Modernity in Postcolonial India, Mapin Publishing, Ahmedabad. 2002, p. 68

carved stones) and Muslim temples in red stone, the architectural beauty of which is very geometrical. But India hasn't yet created an architecture for modern civilization (offices, factories, buildings)." (Kalia, R. 1987: 87)

"Preferring the rigor of geometric forms, the axis, Le Corbusier argued that "man walks in a straight line because he had a goal and knows where he is going; he has made up his mind to reach some particular place and he goes straight to it. ... For him, the classical equilibrium of rectangles and pure volumes was "a symbol of perfection," and the disequilibrium of curved lines, jagged surfaces and unclear decoration represented an inferior effort of an equally inferior civilization.

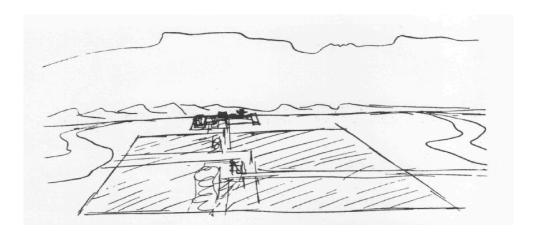
Some of these ideas appear more suited to the Islamic nation, where religion exhorts men to walk on a straight line with a purpose, rather than for the Hindu nation with the concept of samsara" (Kalia, R. 1987: 89) - the continuous cycle of life, death, and reincarnation.

"Modern" was also Le Corbusier's "walkable city" concept: The sectorial area of 800x1200 meters would make it possible for the pedestrian to be within 10 minutes from each corner of a sector into the center of the sector.

The sectors were self-contained and self-sufficient in character, a sector was bound by fast -traffic roads, running on its four sides and permitting only four vehicular entries into its interior.

This was to secure and welcome the modern area of vehicleorientated society and the fast growing industry.

Each sector would have shops, schools, health centers, places of recreation and worship, in order to guarantee a health and economical life for the citizens of Chandigarh.



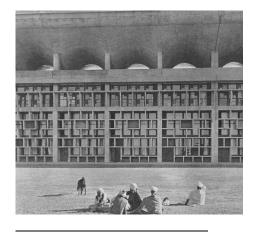
14: Initial Proposal of A. Mayer (left) and Le Corbusier (right) for Chandigarh [13]

Le Corbusier was visualizing the "modern" or the city of "tomorrow" to be a "Radiant City" with glass and steel skyscrapers set in parks that is totally administrated by a great bureaucracy.

He was therefore the great visualizer of the "smart cities" with extensive digital administration and maintenance for the "comfort" of the citizens- except that todays administrative and bureaucratic work could be done from anywhere- even from a cave with an internet access.

Chandigarh is a modern city because it has broken with all previous rules of planning of the western society, but just inherited some principles of "The Garden City Movement", which shall be explained later on.

It emerged out of a vision for a new beginning of an independent nation- a nation with an identity.



15: View of workers published by Le Corbusier in his Complete Works- (Le Corbusier 1957, p. 61) [14]

¹³ Vikramaditya Prakash: Chandigarh's Le Corbusier- The Struggle for Modernity in Postcolonial India, Mapin Publishing, Ahmedabad. 2002, p. 47
¹⁴ Ibid, p. 84

1.2 FUTURISTIC CITY -BRASILIA- BRAZIL

Brasilia was aimed to become the manifestation of a new Brazilian society through its planning vision and idea as the new capital of the todays' Federative Republic of Brazil.

Brazil used to be under the Portuguese colonial power until 1822, when it achieved independence by the creation of the Empire of Brazil- a unitary state with a constitutional monarchy and a parliamentary system. Since 1889 it became a presidential republic till 1964.

In 1956, Juscelino Kubitschek, the president of Brazil, paved the way for the "two-centuries-old dream of spreading the country's population into the hinterland of Brazil" and set the sign for a new society in the "means of establishing a radiating sovereignty, as the means to consolidate, civilize, and populate his nation-continent." (Holston, J. 1989: 201)



16: Photo by Eliot Erwitt: Oskar Niemeyer's National Congress Building, 1961 [15]

28

https://www.facebook.com/Domus/photos/a.385546111119.172921.377437046119/10154117060321120/?type=3&theater

1.2.1 BACKGROUND OF PLANNING BRASILIA

Before announcing a national competition, Kubitschek created two principle umbrella organizations. The first was the state enterprise-Companhia Urbanizadora da Nova Capital do Brasil (Novacap) and the Grupo de Trabalho de Brasilia (GTB) (Holston, J. 1989: 203).

By legislative act, Novacap was launched in the same year of 1956 and was charged with the authority of building and administrating the city. It sponsored also the national competition, where the entry by Lúcio Costa (1902—1998) won the first price, chosen by an international jury, and which organized the technical teams to "develop and coordinate the realization of the Master Plan." (Holston, J. 1989: 202)

GTB was in charge of the human resources to be recruited for which the capital was mainly built: the civil servants of the federal bureaucracy. GTB was founded in 1958.

Both organizations had in their developed objectives to distribute the same rights to different social groups and categories. A so called "egalitarian mixing of different classes in the same residential units"- the *superquadras* (superblocks) (Holston, J. 1989: 206).

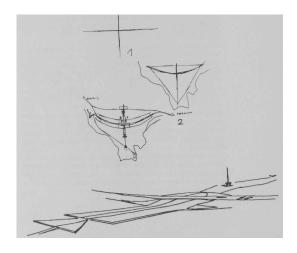
1.2.2 VISION AND CONCEPT OF BRASILIA

The political and social vision of Brasilia was to create a city based on the "principle of equality".

In order to achieve this aim using architectural means, Oscar Niemeyer (1907—2012), who was chosen already by President Kubitschek as the principal architect of the capital for the design of major public buildings and residential prototypes, demanded a competition.

The requirements of this competition was to deliver two basic documents: a basic layout of the city with its major structures and spatial organization together with a supporting report.

The emphasize was on the form that would "express the city's fundamental character as the capital of Brazil." (Holston, J. 1989: 62)



17: Lúcio Costa, competition sketches for the Master Plan of Brasilia, 1957 ^[16]

As Lúcio Costa's design was representing best "the ideology of the design", the jury awarded in March 1957 the first prize to him. Though Costa's plan was not featuring any technical drawings, land use studies, population charts, nor schemes of economical studies, but only sketches and a brief statement of 23 articles, it was praised for its "unity of artistic conception, clarity, elegance and simplicity" of its idea (Holston, J. 1989: 63).

Even though it was highly controversially discussed in public and within the jury members causing a *brincadeira*- "a joke", five of six voting members gave the first prize to Costa's idea.

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¹⁶ Ibid, p. 63

The executive plan of the design idea compromised two distinctive areas: the administrative *civitas* and the residential everyday *urbs* (Lampugnani, V. M. 1995: 736).

The administrative functions were organized on the main east-west axis, the Esplanade of Ministries, lined with several public buildings, the executive, legislative, and judiciary palaces, such as the National Congress, the Ministries' and the Federal Supreme Court House. All these civic centers were designed by Oskar Niemeyer as Brasilia's celebrated icons.

The residential area was spread out along the north-south axis parallel to the freeway (autoroute).

The areas were called residential quarters or superblocks, which were conceived in terms of neighborhood units and would accommodate together 500.000 inhabitants including commerce, services, and educational as well as health facilities.



18: Simplified Drawing of the Pilot Plan of Brasilia [17]

"This division of the urban fabric between the civic space and the residential areas was highly deliberate. It was intended to make possible the speedy completion of the most prominent civic

¹⁷ Kenneth Frampton: Building Brasilia- Photographs by Marcel Gautherot, Thames & Hudson. 2010, p. 31

structures to create an emblematic vision of the nation's new capital."

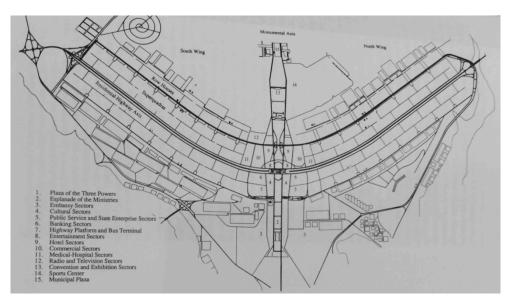
(http://www.getty.edu/conservation/publications_resources/newsletters/28_1/brasilia.html)

This strategy of dividing the civic centers and the residential areas was effective as the necessary civic buildings were built and accommodated without delay. By April 1960 the inauguration took place, after which around 150.000 population inhabited already the Federal District.

Todays Federal District has a population of more than 2,5 Million, while Brasilia as the Federal Capital counts only a population of ~215,000, according to a survey in 2012.

Thus, Brasilia originally being planned for half a million citizens has even not reached the half of its aimed population size.

Many satellite cities have grown around Brasilia, where more and more people prefer to rather live there instead in Brasilia city center, and tendencies are growing.



19: Sectorial Organization and Traffic Plan of the Pilot Plan [18]

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¹⁸ James Holston: The Modernist City- An Anthropological Ctritique of Brasilia, The University of Chicago Press. 1989, p. 155



20: View from the Municipal Plaza towards the Plaza of Three Powers [19]

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¹⁹ Kenneth Frampton: Building Brasilia- Photographs by Marcel Gautherot, Thames & Hudson. 2010, p. 153

1.2.3 BRASILIA - ASPECTS OF A FUTURISTIC CITY

In order to understand how the design as it emerged from Costa's hands, Le Corbusier has to be mentioned as the most influential architect upon his work.

Costa and his students were systematically analyzing Le Corbusier's work and accepted it as the foundation of modern art in Brazil as "the scared book of architecture." (Holston, J. 1989: 36)

Le Corbusier's work was well known this way by the Brazilian architects and specially Costa. He was the head of the Ministry of Education, which was formulated by Le Corbusier but finalized by Costa and his students, of which one was also Oskar Niemeyer.

As Le Corbusier was the core organizer and manifesto of the International Congress of Modern Architecture in 1928 together with Sigfried Giedion, which eventually led to the Athens Chartera condensed version of the core ideas and principles of modern architecture and urban planning, which called for a remaking of cities in the industrial world to make them more efficient, rational, hygienic and equal.

CIAM was aimed to advance the cause of "architecture as a social art" and as many diverse avant-garde movements of that time were contributing to the outcomes of CIAM, it had also and explicitly the purpose of giving a framework and to create a consensus among groups of different architectural and political positions.

Because of that consensus it was possible for Brasilia to be "planned by left-center liberal, designed by a Communist, constructed by a developmentalist regime, and be consolidated by a bureaucratic-authoritarian dictatorship." (Holston, J. 1989: 40)

This was possible because the idea of the design was influenced and based upon earlier studies, observations and resolutions of avant-garde movements of architects and planners and foremost Le Corbusier.

CIAM gave the intellectual background for the futuristic and an "egalitarian mixing" of a modern urban planning.

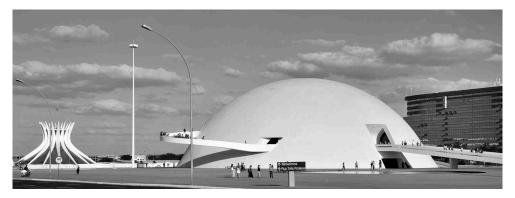
Between 1930-35 Le Corbusier proposed the prototype of The Athens Charter, which abolishes the satellite system and incorporates all classes within the city: "I had created the prototype of a classless city, a city of men busy with work and leisure in surroundings that made this possible." (Holston, J. 1989: 50)

In Brasilia's Master Plan this classless and radiant model has been adopted by forcing all classes of the federal bureaucracy to live within the superblock (residential units).

The theoretical approach for such a futuristic city with its ideal purpose of inhabiting a classless society was supported by the CIAM manifestation and the Athens Charter.

The practical approach for a futuristic design expression was manifested by Niemeyer's gigantic public buildings.

It is futuristic because of its design vocabulary that is absolutely detached from the human scale, even though vast and simple in his look on a drawing, the spacious formations make the master plan a unique futuristic gesture.



21: The National Museum, also designed by Oskar Niemeyer and opened in 2006

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http://www.getty.edu/conservation/publications_resources/newsletters/28_1/brasilia.html

1.3 LATE MODERN - "SMART CITY"-MILTON KEYNES- ENGLAND

Since the Second World War, where England's cities has suffered the loss of vast city structures and housing quarters, modern town planning characterized by "Utopian Comprehensiveness" was the base of planners and politicians.

The "Utopian Comprehensiveness" suggestion was to start from scratch and being radical in the sense of their aesthetic appearance, as well as in the whole-scale clearance of existing city structures. In other words, "to construct an imaginary world which would be desirable to be brought into being" (Taylor, N. 1998: 23).

This seemed to be possible as there was the belief that the large industrial cities of the late 19th and early 20th century were deficient as settlements.

Influenced by this new urban dynamic and the modern tendencies to reconstruct towns anew, the British government decided in the sixties, to enhance the constructions of new towns in South-East of England to relieve the housing problems, specially in London.

Also the huge impact of cars on English towns in the future, made the Ministry of Transport to appoint Mr Colin Buchanan- an expert on urban planning and transportation- to study the effects motorization would have on the urban environment. His report, which was published in 1963, was emphasizing that "new urban designs were required to accommodate and minimize the worst effects of mass motorcar use." (Clapson, M. 2005: 23)

In the late 60's the time was ripe for planning a town from scratch: Milton Keynes- England's largest new town in Buckinghamshire. It was the outcome of a time of "dynamic new thinking about the nature of urban life," (Clapson, M. 2005: 19) but also to express anew Ebenezer Howard's proposals for garden cities.

Legally the new town planning was supported by the force of the new towns program that first began in 1946 and was revived during the mid-1960s." (Clapson, M. 2005: 25)

1.3.1 BACKGROUND OF PLANNING MILTON KEYNES

For the implementation and construction of Milton Keynes Master Plan, the Milton Keynes Development Corporation (MKDC) was in charge.

On behalf of the MKDC, Richard Llewelyn-Davies, a Professor of Architecture and Planning at University College, London, drew up the Master Plan of Milton Keynes.

The Master Plan was heavily influenced by the network of professionals compromising elite architects, planners and social scientist based in the heart of London (Clapson, M. 2005: 25).



22: Llewelyn Davies's Strategic Plan for Milton Keynes, published in 1970 [21]

37

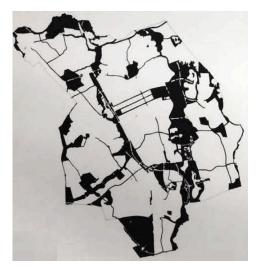
 $^{^{21}}$ Derek Walker: The Architecture and Planning of Milton Keynes, Architectural

The new town was planned on an area of \sim 9,000 hectares (ha) equal to 90 km2 that was largely farmland and undeveloped villages and was designated for a number of population amounting up to 250,000 in 1967.

It was deliberately distant from other major cities around (London, Leister, Birmingham, Oxford and Cambridge) was deliberately in order to make it a self-sustainable town or even city and to give it the opportunity of becoming a major regional center.

The main planning principles and overall framework were developed and worked out between 1967 and 1970 and its construction began in 1970 after which "people started to move in very soon after the first homes had been built." (Clapson, M. 2005: 1)

The plan was based on a gridiron principle, which was bound to grid pattern of ~1km, but that would follow the contours of the natural landscape- its valleys, flows and ebbs, rather than strictly neglecting the natural landscape.





23: Parks of Milton Keynes based on Existing Landscape Contours^[22]

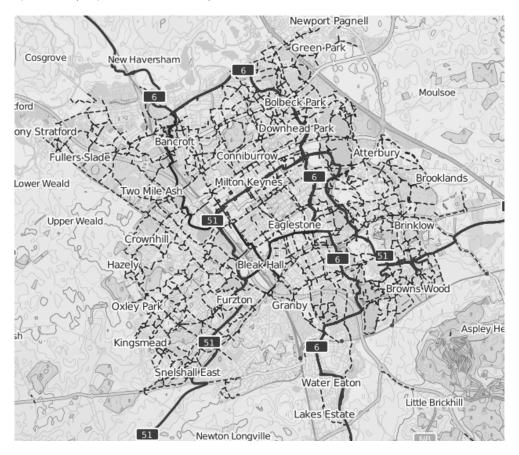
Press Ltd, London.1982, p. 2

²² Derek Walker: The Architecture and Planning of Milton Keynes, Architectural Press Ltd, London. 1982, p. 4

It was additionally inspired by the works of Californian urban theorist Melvin M. Webber (1921–2006) and the functional modernist designs of Le Corbusier's Radiant City, Antonio Sant'Elia's La Citta Nova and Tony Garnier's La Cité Industrielle (Taylor, N. 1998: 24).

All had in common that the city of the future was ordered into great blocks of single land uses, with fast motorways, connecting up the different districts.

Its appearance shall be of "a plain, geometrical "functional" buildings, standing at regular intervals in a sea of free-flowing space." (Taylor, N. 1998: 24)



24: The "Redways"- Cycling Tracks of Milton Keynes- The national cycle routes are highlighted in black $^{[23]}$

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²³ © OpenStreetMap.org

The chief architect was Derek Webber (1929-2015), between 1970-1976, who would explain the city as such:

"Milton Keynes is planned first of all for a larger population than the other New Towns, and secondly with an inner parkland like a preserved piece of nature which will be supplemented with a number of local sports fields and playgrounds evenly distributed over the residential areas." (Walker, D. 1982: 4)

Milton Keynes stands out from other new built towns as it is a non-hierarchical developed city plan which departed from the English New Towns tradition and envisaged a wide range of industry and diversity of housing styles and tenures across the city.



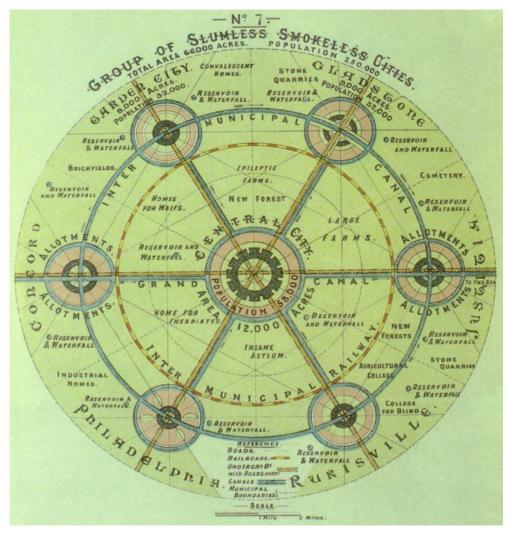
25: The Hub: MK, Manhattan House with 14 stories built between 2006 and 2008. [24]

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https://en.wikipedia.org/wiki/Milton_Keynes#/media/File:The_Hub_Milton_Keynes_towers.jpg

1.3.2 VISION AND CONCEPT OF MILTON KEYNES

As mentioned earlier, the design and concept of Milton Keynes was a combination of the Garden City Movements ideas of Sir Ebenezer Howard and the modern planners and architects of the beginning of the 20th century, like Le Corbusier.



26: The Garden City Diagram, Published by E. Howard in "Garden Cities of Tomorrow",1902 [25]

41

²⁵ http://io9.gizmodo.com/10-failed-utopian-cities-that influenced-the-future-1511695279

Sir Ebenezer Howard was the founder of the Garden City Movement of the late 19th century.

By publishing his book "To-morrow: a Peaceful Path to Real Reform" in 1898, he became the pioneer of the Garden City.

He gained his inspiration for his book through his life experiences of the 19th century city developments and miseries of the United States, mainly Chicago, where he used to work and live for some times.

Additionally from his own home town London, to which he was eternally turning back in 1876, but also by his spiritual mentor Cora Richmond, as well as through utopian books, such as the utopian novel Looking Backward and Henry George's work Progress and Poverty,

Though Howard was the main founder of the Garden City, it was supported by a "visionary communitarian tradition" (Buder, S. 1990: 4), dated back to the republican fervor of the 18th century and the Enlightenment Movements.

Howard's foundation of the Garden City Association, today's Town and Country Planning Association, in 1899, generated movements that spawned garden cities and garden suburbs all over the world since then. In its homeland- England, it led to the construction of nearly thirty government-financed new towns after World War II, including Milton Keynes (MK).

The main urban concept of the Garden City was to plan self-contained communities, surrounded by "greenbelts", containing proportionate areas of residences, industries and agriculture.

This theoretical approach was to be realized in the planning of Milton Keynes almost 70 years later.

This was possible because the main actors of the planning were Labor Party members- socially orientated intellectuals, such as the Center of Environmental Studies (CES) "establishment", where the Master Planer of MK, Lord Llewelyn-Davies and Richard Crossman, the Minister for Housing and London Government, were proactive in its formation.

Between 1967 and 1970 members of the CES, and visiting academics and researchers, worked on the Plan for Milton Keynes. David Donnison was a long-standing advocate of the importance of informing planning and housing policies through social investigation and responsive decision-making.

In this Donnison was part of an Anglo-American network of sociologists, including R.E. Pahl in Britain, and Herbert J.Gans and Melvin Webber from the USA. Each of these men also had an interest in the formation of new communities.

Each of these sociologists was involved in the CES in some way. Gans, for example, had given a conference paper at the Centre in 1968 entitled 'Planning for people, not buildings'. But of particular note was the invitation to Melvin Webber of the University of California, Berkeley, a visiting academic at the CES, to delineate for the Milton Keynes planning team the nature of 'the urban society of the future'." (Clapson, M. 2005: 28/29)

Though Milton Keynes was based also on the "Social City" concept according to E. Howard to be public services orientated, it was changed into a "self-financed, property investment machine designed to suit the commercial disciplines" of the 1980's of the Mrs Thatcher government (Howard, E. 2003: 55).

"Thus, ironically, at one stroke they resolved the perennial problem of how to fund the new towns, but also destroyed the essence of Howard's plan, which was to fund the creation of self-governing local welfare states. 'Top-down planning' triumphed over bottomup; Britain would have the shell of Howard's garden-city vision without the substance", Peter Hall was commenting (Howard, E. 2003: 45).

The other concept that was visionary and very much adopted by the "utopian comprehensiveness" and the modernist ideas, was to overlay a grid structure upon the existing landscape.

1.3.3 MILTON KEYNES - A "SMART CITY"?

According to the statistics of the MK council, the population of Milton Keynes in 2013 was 255,700 and had a growth rate of 20,2% since 2001.

Up to 2026, there are plans of building 28,000 new homes for and creating 40,000 new jobs.

By google-ing 'smart cities' on the Global Web, Milton Keynes appears as a cited 'Smart City'.

Before claiming the notion 'Smart City' for Milton Keynes, it is of importance to understand where the term "S.M.A.R.T" came from and what its real meaning at least in the management field stands for:

In 1981, a paper was issued by George T. Doran called "There's a S.M.A.R.T. way to write management's goals and objectives" in the Management Review. The fast adapted management idea for managers also had an influence on urban issues and planning methods as it became more and more important to have "ideal" management principles that would be S.M.A.R.T:

- "Specific target a specific area for improvement.
- Measurable quantify or at least suggest an indicator of progress.
- Assignable specify who will do it.
- Realistic state what results can realistically be achieved, given available resources.
- Time-related specify when the result(s) can be achieved." (https://en.wikipedia.org/wiki/SMART_criteria)

In other words: intelligent, manageable, focused, realistic and time bound.

As a fast growing city, Milton Keynes has at least the commitment of becoming a "smart" city through its initiative called MK:Smart. A collaboration of local government, business, academia and 3rd part sector organizations, who are focusing on energy use, water use and transportation to become more sustainable whilst promoting economic growth.

To realize a sustainable future a MK Data Hub which shall support the management of a huge data collection that is relevant to the city system, such as energy, water consumption, transport and data acquired through satellite technology, social and economic data sets and crowed-sourced data from social media or specific applications on smart phones, was built.

"The MK:Smart initiative has two aspects which extend our understanding of how Smart Cities should operate. The first, Our MK, is a scheme for promoting citizen-led sustainability issues in the city. The scheme provides funding and support to engage with citizens and help turn their ideas around sustainability into a reality. The second aspect is in providing citizens with the skills to operate effectively in a Smart City. The Urban Data school is an online platform to teach school students about data skills, while the project has also produced a MOOC to inform citizens about what a Smart City is (https://en.wikipedia.org/wiki/Milton_Keynes).

One can assume that its because of its modern approach of planning a city based on socially orientated, self-sufficient and grid-orientated planning principles or just because it's a town planned on "untouched" soil of farm lands, so as always dreamt by the modernist, a start from scratch?

Already in its beginnings, Milton Keynes was keen on looking ahead and open to innovative and new ideas. The first solar house of United Kingdom for instance was built in Milton Keynes in 1972 as part of MK's Energy World exhibition (Urban Design Groupe 2007: 44).



27: The First Solar House in MK, MKDC-Architects
Department,1972, Photo taken in 1977 [26]

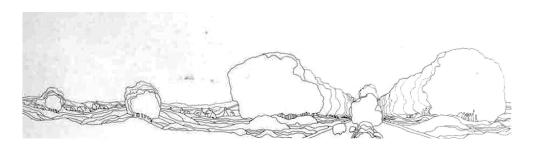
²⁶https://www.architecture.com/image-library/RIBApix/image-information/poster/solar-house-bradville-milton-keynes-buckinghamshire/posterid/RIBA63968.html

It could be of logical consequence to simply assume that Milton Keynes city plan, which is based on a grid system makes the city smart. That is because empirically it is easier to follow grid systems than a labyrinth old city plan.

Also for infrastructural and construction purposes one could guess that it is easier and more effective to build or plan upon a grid.

Thus, the road grid of MK was very much concerned and focused on how the inhabitant of MK would experience its city from the car, as the growing enthusiasm for motorization since its invention has made people to be flexible and mobile.

Apparently no other city of England has such an "extensive and dominant road system. Alongside the roads on this grid, moreover, but buried in the earth, a cabling system was laid, to enable Milton Keynes to become, and here is another American term, a 'wired city', a computerized new town within the global village. Instant contact with people, near and far, was also essential to the vision of the planners." (Clapson, M. 2005: 2)



28: Road Grid Planting Policy of Milton Keynes [27]

The attractiveness of Milton Keynes from the perspective of the 21st century, is to be mobile as a single person at any time and its vision for being a 'wired city'. This 'wired city', which is connected with the world through its extensive networking- could be a true desirable post-modern city, assuming I have all the everyday facilities within a walk-abele distance of 1-2 km, rather than through its road grids that enables you to be mobile, any time you want to, as a single person.

It has to be awaited if the high density development strategy that is contained in the message of Milton Keynes Partnership's (MKP) key document 'A Strategy for Growth to 2031', which is of place-making opportunities, will become in the future a smart reality (Urban Design Groupe 2007: 36).

²⁷ Derek Walker: The Architecture and Planning of Milton Keynes, Architectural Press Ltd, London. 1982, p.7

Its aim is to enhance the density within the existing city structures. That means logically, the raise of infrastructural facilities and city services.

Now the question is whether it is by chance to choose a city like Milton Keynes as a Smart City notion because it is based on principles and concepts physically and theoretically of modern urban planning and design principles, or is it by political purpose to create the regional "Hub" yet on the way to become a Smart City through its digitalization process in the administrative and scientific fields?

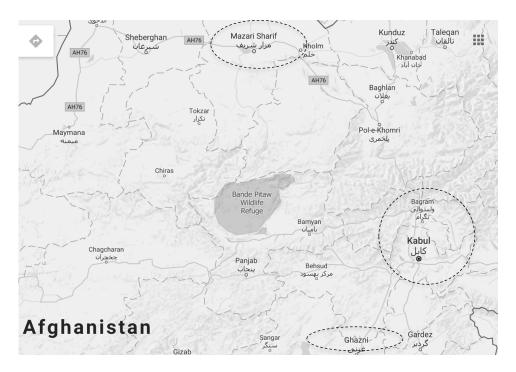
In the following chapters Kabul New City, a visionary master planning for the new part of existing Kabul city as the capital of Afghanistan, will be explained and analyzed according its historical, political and traditional context and why this vision could not be realized in that scale and within its political and geographical as well as social context.

2 KABUL OLD CITY - THE BEGINNINGS

Old Kabul City was and still is a typical trade city since centuries, though it is situated in an mountainous and deserted country: Afghanistan.

Only few areas of Afghanistan are fruitful and thus livable and have potentials for growing as urban areas.

Urban cities were and are: Kabul, Heart, Mazar-e-Sharif, Kandahar and Jalalabad (Habib, N. 1987: 68).



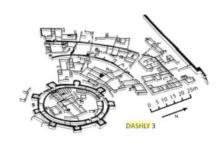
29: Kabul City and areas in the North including the approximate area of Dashli City – From Mazari Sharif further up to the North-West and Ghazni to the South [28]

The "urban" cradles of Afghanistan dates back to about 7500 BC, the first "organized" city as visible in the pictures below, which shows the formation of a city, called Dashli, may could be dated back between 1700 to 2500 BC, archaeological findings have proven.

It is also believed that farming communities in the area were among the earliest in the world.

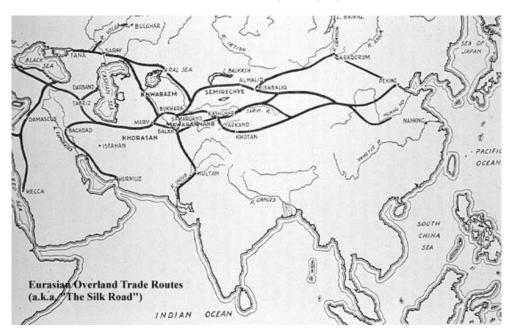
²⁸ http://www.everyculture.com/A-Bo/Afghanistan.html





30: Ancient Cities in the Northern Part of Afghanistan [29]

Those "urban" cradles and cities, which could continuously survive through centuries of political changes and war periods, were those cities that are by their geographical and natural climate conditions livable and thus favored by the population.



31: The Silk Road^[30]

²⁹ Taken from power point presentation of Mr Frank Dondt, Urban Planner at UN-Habitat, Kabul

³⁰ http://faculty.washington.edu/dwaugh/hist225/05hist225syl.html

Other cities such as Balkh, one major city along the Silk Road within modern-day Afghanistan, which is not so far from Dashly, basically disappeared from the map since its destruction by Genghis Khan in the 13th century A.D. Balkh has not been flourishing ever since (Habib, N. 1987: 22).

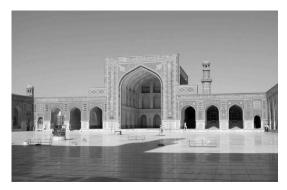
During the times of Ghaznavid, Ghurid, and Timurid eras, the region produced many fine Islamic architectural monuments, such as the outstanding mosques, like the Heart mosque with its fine ceramic facades and arched openings.

Also numerous scientific and literary works were produced during those times by Jalal-ud-Din Muhammad Rumi and Ibn-Sina (Avicenna).

Afghanistan was one of the main Muslim centers during the so called the "Golden Age of Islam".

Unfortunately, Ghazni City, from the Ghaznavids Dynasty of the 11th and 12th century A.D., has declined similarly to Balkh to a provincial city and could not gain back his former prosperity till todays time.

32: Mosque of Heart, Afghanistan



It turned out through centuries that Kabul would become a favored and growing city - the most dense and attractive urban center of Afghanistan till today and not only loved by Babur.

The reason for its attractiveness may be the strategic location along the Silk Road, which connected it to the cultures of the Middle East and other parts of Asia. A "strategic corridor" for trade between East and West.

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³¹ http://www.afghanclick.com/afghanistan/

Other reason may lay in his landscape beauty: mountains, a river and marshlands on height of 1,791m from sea level.

Or maybe its culture to be an "open city" with a touch of cosmopolitan sphere, where people at least still try to be tolerant and live side by side.

It also could be the climate: Kabul has a semi-arid climate with precipitation concentrated in the winter (almost exclusively falling as snow) and spring months.

Temperatures are relatively cool compared to the much of Southwest Asia, mainly due to the high elevation of the city. Summer has very low humidity, providing relief from the heat. Autumn features warm afternoons and sharply cooler evenings. Winters are cold, with a January daily average of -2.3 °C. Spring is the wettest time of the year, though temperatures are generally amiable. Sunny conditions dominate year-round. The annual mean temperature is 12.1 °C.

Because of its amiable climate and its mountainous landscape, people would say it could have had become the "Swiss of Asia".

2.1 HISTORY OF KABUL OLD CITY

Kabul's existence of today dates back to Older Kabul, which is over 3,500 years old. It is believed that the "Kuban River" mentioned in the Rig-Veda refers to the Kabul River. The name "Kubha" or "Kohba" derives from meaning "full of water". This name was given apparently be the travelling tribes to the river (Bürkner, C. 1972: 61).

Ptolemy (Claudius Ptolemy; c. AD 100 – c. 170) was a Greco-Egyptian writer of Alexandria and known as a mathematician, astronomer, geographer, astrologer, and poet of a single epigram in the Greek Anthology. He speaks of Kabura as the city in the 2nd century A.D., the capital city and of its inhabitants the "Kabolitae" on the "Kophen River", which refers to the Kabul river (Habib, N. 1987: 77).

Many empires, such as Alexander the Great, have controlled the city because of its strategic location along the trade routes of South and Central Asia.

The Islamization took first place in about 642 AD, at a time when Kabul was independent but failed. In one of the expeditions to Islamize the region, Abdur Rahman bin Samana arrived to Kabul from Zaranj in the late 600's and managed to convert 12,000 local inhabitants to Islam before abandoning the city.

In 870 Ya'qub bin Laith known as -Saffar of Zaranj conquered Kabul and established the first Islamic dynasty in the region. It was reported that the rulers of Kabul were Muslims with non- Muslims living close by.

"Travelers unanimously pointed out the general atmosphere of religious tolerance "to a degree that was rarely seen in a Muslim country," as well as the civility in relations between different groups, with no prejudice and no sort of fanaticism." [32]

"Kábul has a castle celebrated for its strength, accessible only by one road. In it there are Musulmáns, and it has a town, in which are infidels from Hind." -Istahkrí, 921 AD [33]

Even Kabul is rather a landlocked city it got a well functioning trade tradition within its region and especially as the Silk Road was passing through the country centuries back.

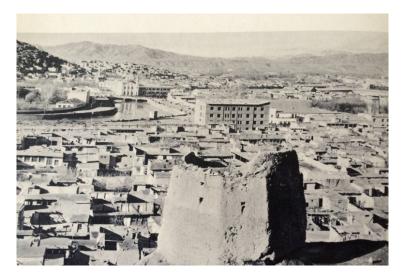
The trade brought a lot of novelties and exchanges in science and culture in that region. But also the invaders, such as Alexander the Great whose political ideology was rather integration than destroying, left a great mark within the countries history.

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³² http://www.iranicaonline.org/articles/kabul-ii-historical-geography

It is said that Kabul functioned as a commercially important area also through the medieval period. The Muslim geographer Ya'qubi was mentioning in his book Kitab al-Budan Kabul: "Already in the 9th century, Ya'qubi (Boldán, p. 291; tr. Wiet, p. 106) noted that it was frequented by merchants, who exported from there a regional specialty—myrobalan (ahlilaj), a kind of condiment made of fruits and dried grains, which was astringent and much used in Muslim medicine." [34]

In the 10th century, the description provided by the Muslim chronicler and geographer Abdul-Qasim Ibn Hawqal in his book Surat-al-Ard (Ibn Hawqal, tr. J.H. Kramers (2014): 435-36) presents it as a major center of caravan routes with busy markets and warehouses. Several communities coexisted and lived side by side: "Muslims, Jews, and Hindus lived in their separate quarters in the suburbs, while only Muslims lived in the city proper. The city was also the center of a textile industry producing cotton fabrics and expensive handkerchiefs and scarves that were exported to Sind and to Khorasan and as far as China. This rich, industrious city may have been part of the forty-four most important cities of the Muslim world (Miquel, IV, p. 204)." [35]

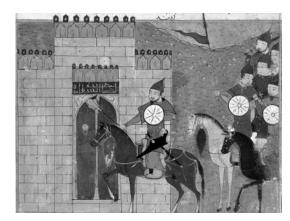


33: Kabul from the South, ~ 1956 ^[36]

³⁴ http://www.iranicaonline.org/articles/kabul-ii-historical-geography

³⁶ (Krause, W. 1957: 20)

In the 12th century the Mongol's invaded Afghanistan and they passed in hordes through the entire land as well as Kabul and massively destroyed the areas and cities.



34: Genghis Khan and His Army-Miniature, Courtesy of Beijing [37]

Many natives of Afghanistan fled to India because of the Mongol's and Tartar's brutality, where some of them established dynasties in Delhi.

Mongol rule continued with the Ilkhanate in the northwest while the Khilji dynasty administered the Afghan tribal areas south of the Hindukush until the invasion of Timur, who established the Timurid dynasty in 1370.



Genghis Khan [38]



Sultan A.Q. Khilidji ^[39]



S.M. Timur Shah [40]

³⁷ https://www.google.com/search

³⁹ (ibid)

^{40 (}ibid)

Following the era of the Khilji dynasty in 1333, the famous Moroccan scholar Ibn Battuta was visiting Kabul and wrote:

"We travelled on to Kabul, formerly a vast town, the site of which is now occupied by a village inhabited by a tribe of Persians called Afghans. They hold mountains and defiles and possess considerable strength, and are mostly highwaymen. Their principal mountain is called Kuh Sulayman." (Ibn Battuta, 1304–1369 AD) [41]

In the 14th century, Kabul became a major trading center under the kingdom of Timur, who created the Timurid dynasty in 1370.



35: Bagh-e Babur, Kabul, 2009. Courtesy: Aga Khan Trust for Culture. Image: Christian Richters $^{[42]}$

Kabul gained his major beauty and respect during Babur Shah's times, after the city fell to him in 1504. He declared it as his headquarters, which became one of the principal cities of his later Mughal Empire. In 1525, Babur described Kabulistan (in the meaning of the province, including Kabul city) in his memoirs by writing the following:

42 http://dl3.documenta.de/#/venues/venues/kabul-bamiyan/

⁴¹ https://en.wikipedia.org/wiki/Kabul?oldid=680831661

"In the country of Kabul there are many and various tribes. Turks, Aimaks, and Arabs inhabit its valleys and plains. In the city and the greater part of the villages, the population consists of Tajiks (called "Sarts "by Babur). Pashais, Parachis, Tajiks, Berekis, and Afghans occupy many others of the villages and districts. In the hill country to the west, reside the Hazāras and Nukderis.

Among the Hazara and Nukderi tribes there are some who speak the Moghul language. In the hill-country to the northeast lies Kaferistan, such as Kattor and Gebrek. To the south is Afghanistan ... There are many different languages spoken in Kabul: Arabic, Persian, Turki, Moghuli, Hindi, Afghani, Pashai, Parachi, Geberi, Bereki, and Lamghani...." (Baburnama 1525). [43]

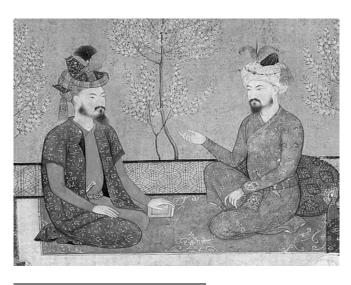
Mirza Muhammad Haidar Dughlat, a poet from Hindustan who visited at that time Kabul, wrote: "Dine and drink in Kabul: it is mountain, desert, city, river and all else."

It was from here that Babur began his 1526 conquest of Hindustan, which was ruled by the Afghan Lodi dynasty and began east of the Indus River in what is present-day Pakistan. Babur loved Kabul due to the fact that he lived in it for 20 years and the people were loyal to him, including its weather, which he appreciated. His wish to be buried in Kabul was finally granted.

The inscription on his tomb contains the famous Persian couplet, which states:

"اگرفردوس روی زمین است همین است ,و همین است همینو است!"

(If there is a paradise on earth, it is this, it is this, it is this!) [44]



36: Humayun with his father Babur, emperors of the Mughal Empire 14th century ^[45]

⁴³ https://en.wikipedia.org/wiki/Kabul?oldid=680831661

⁴⁴ https://en.wikipedia.org/wiki/Kabul?oldid=680831661

⁴⁵ Ibid



37: Murad Khana- Reconstruction of an old Part in Kabul 2015, supported and realized by an Canadian-British cooperation $^{[46]}$



38: Bala Hesar Citadel in the South of Kabul (Photo possible from 1879 before the British put it down into ruins) $^{[47]}$

⁴⁶ Image by the Author

⁴⁷ http://de.mobilytrip.com/guide/afghanistan/kabul

2.2 CITY STRUCTURE OF KABUL OLD CITY

The structure of Kabul old City is similar to many other fortified city structures of medieval European cities, such as London or Munich. As London had its Tower of London, Kabul had its Bala Hesar (meaning: "high place"). Ptolemy speaks of Kabura as the capital city of the "Kabolitae", the inhabitants of Kabul and "Ortospana" as the urban region or township.

The first mentioning in the pre-Christian and old Indian language Sanskrit, are referring to Kabul as Urddhasthana, which means "high city" and the first Chinese geographers were naming Kabul as "Purtaspana (Purta means high in Pashto) as its first indications for the fortification of Bala Hesar (Balah-e-Sar in Dari meaning: 'over the head') (Habib, N. 1987: 77).

The walls of this fortification were covering an area of $\sim 5 \text{km}2$ and were as long as ~ 3.5 km, built along the mountain chains of Kuh-Asmai in the West down to the Kabul river and up to the Kuh-e-Sher-Darwaza towards the East to Balah-e-Sar. The wall was in average 6m high and 3m wide and having towers on each strategically important corners and being built out of rammed clay (Habib, N. 1987: 77/78).



39: The south-east corner of the lower Balah-e-Sar in 1879,[Bengal Sappers & Miners; Institution of RE] $^{[48]}$

⁴⁸ Brigadier CW Woodburn: The Bala Hissar of Kabul Revealing a fortress-palace in Afghanistan, The Institution of Royal Engineers, Professional Paper Nr 1. 2009, p. 25

Similar to many medieval cities it also had several city gates, namely:

Darwaz-e Lahori, (also called Shah Shaid)- the 'Gate of Lahore', Darwaza Naqqara Khana, (also called 'City Gate') Darwaza Kashi

These gates were mainly doors leading to the core of the Balah-e-Sar. From these gates the city started to expand into the four cardinal directions, which were later taken over for the extensions of the major commercial roads and other accesses.

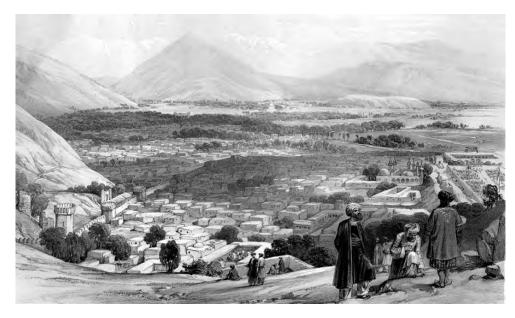
The city has still four so-called doors to the different connected main cities, such as Kandahar, Herat and Mazar-e Sharif and Jalalabad via a circular road that stretches across todays Afghanistan (the AH76 highway).

The city of Old Kabul also had several quarters (Gozar) of different handcrafts and trades (Bazar) such as:

Shorbazar, one of the eldest Bazars and living quarters,
Gozar-e-Kharabad- the Musicians quarter (destroyed during the
Taliban time (Wllemsen, R. 2006: 41)
Gozar-e-Kulali- the Pottery quarter,
Gozar-e-Chendawal- the Chendawal quarter.

There were also some production quarters. These were:

Gozar-e Ahangari- the Steel quarter,
Bazar-e-Saraji- the Leather quarter,
Bazar-e- Mezgaran- the Cupper quarter,
Gozar-e-Tandursazi- the Oven quarter, the
Gozar-e-Shanasazi- the Come Makers quarter,
Gozar-e-Sangtarashi- the Stonemason quarter,
Gozar-e-Telha- the Oil Makers quarter,
Gozar-e Kafshduzi- the Shoemakers quarter (this handcraft is totally forgotten and destroyed after the 2nd WW and because of industrialization), and
Gozar-e- Shamsazi- the Candle Makers quarter.



40: Balah-e-Sar and City of Kabul from the Upper Part of the Citadel. Plate 20 of Atkinson's Afghanistan,[Institution of RE] [49]



41:"City of Kabul and Asmai Hill from Upper Balah-e-Sar" (F.B. Longe, 1880). [Institution of RE] $^{[50]}$

⁴⁹ Atkinson, J.A., Skeches in Afghanistan, Lithographed by Louis and Charles Haghe, London, (1840s). Rattray, James, Afghaunistan: Scenery, Inhabitants & Costumes, from drawings made on the spot, London, 1847.

⁵⁰ Brigadier CW Woodburn: The Bala Hissar of Kabul Revealing a fortress-palace in Afghanistan, The Institution of Royal Engineers, Professional Paper Nr 1. 2009, p. 41



42: Part of the Lower Balah-e-Sar and the City of Kabul from the Upper Bala Hissar in 1879. [Bengal Sappers & Miners; Institution of RE] ^[51]

Kabul is said to have had plenty other quarters being dwelt, which can unfortunately not be proven up to date. [52]

Since 1776, Kabul was declared as the Capital by city King Timur Shah of the Durani Shah dynasty who transferred it from Kandahar.

"As the new capital, Kabul continued to develop throughout the last two decades of the 18th century under the reign of Timur Shah and especially his son Shah Zaman (1793-1800). The city then remained more or less unchanged for most of the 19th century under the first of the Mohammadzay rulers. The population grew considerably and was estimated at 60,000 in the 1830s (Masson, II, p. 55) and 140,700 in 1876 (Gazetteer, p. 230)." [53]

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 $^{^{51}}$ Brigadier CW Woodburn: The Bala Hissar of Kabul Revealing a fortress-palace in Afghanistan, The Institution of Royal Engineers, Professional Paper Nr 1. 2009, p. 24

⁵² Njibullah Habib, Stadtplanung, Architektur und Baupolitik in Afghansitan, Studienverlag Dr. N. Brockmeyer, Bochum, 1987, p. 80

⁵³ http://www.iranicaonline.org/articles/kabul-iii-history

Since the 19th century, onwards many city plannings, reforms and damages were being done by different rulers and political powers.

The greater urbanization of Kabul in modern times commenced at the Old Town in District 1 in the range of 400ha in 1916.



43: Second Anglo-Afghan War, 1878-1880 ^[54]

During these modern times of Afghanistan, the country itself and Kabul remained a battlefield between different political powers. Foremost during the buffer state in the "Great Game" between British India and the Russian Empire, Afghanistan was politically, culturally and socially isolated.

In 1879 the fortification of Balh-e-Sar was destroyed by the British. When Abdorrahman Khan was placed as the ruler over Afghanistan by the British in 1880, Kabul became more a political power center.

The British financed during this period many city extensions of Kabul and introduced modern taxation systems.

For instance, the first government district was built during Abdorrahman Khan's ruling, which also included the construction of the 'Arg'- the Kings Palace in 1888. The building design and construction were in Victorian Style and built by the British (Habib, N. 1987: 93).

Many other buildings in a Victorian Style or mixed with Oriental and European Style architecture and forms were built at that time.

⁵⁴ https://www.google.com/search?q=King+amanullah



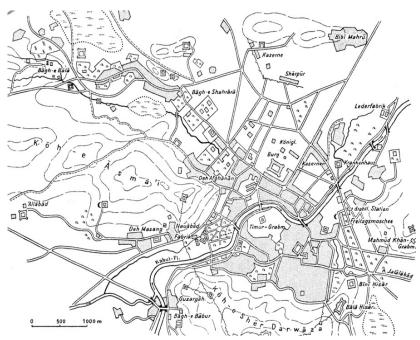
44: City of Kabul with its 30 Quarters at the Beginning of the 20th Centaury ^[55]



45: City of Kabul divided into 10 District at the Beginning of the 70th [56]

⁵⁵ Habib, N. 1987: 92

⁵⁶ Ibid.



46: Kabul, 1916. After Niedermayer; repr. Hahn, 1964, p. 24. Courtesy of the Author. Courtesy of Butler Library, Columbia Library in the City of New York. [57]



47: Arg, the Kings Palace and the Residence of Todays President of Afghanistan in 2016, Image taken by Author $^{[58]}$

⁵⁷ http://www.iranicaonline.org/articles/kabul-ii-historical-geography

⁵⁸ Image by Author

The intensive British influence was not only in the building styles but also politically: Afghanistan's foreign policy was ruled by the British and continued until its independency, when after the Third Anglo-Afghan War and the signing of the Treaty of Rawalpindi in 1919, King Amanullah Khan declared Afghanistan a sovereign and fully independent state (Habib, N. 1987: 27).



48: King Aamanullah of Afghanistan in England, 1927(?) ^[59]

He moved to end his country's traditional isolation by establishing diplomatic relations with the international community and, following a 1927–28 tours of Europe and Turkey, introduced several reforms intended to modernize his nation.

King Amanullah Khan's fatherly love for his country led him to modernize Afghanistan and of course the capital Kabul in a very Western manner: political, economical and cultural reforms were reinforced.

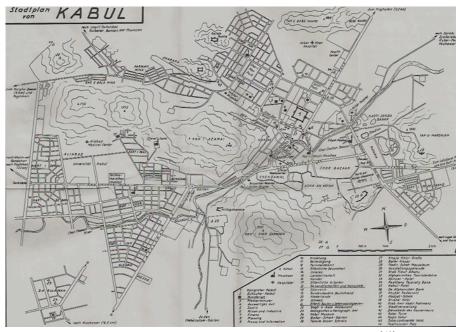
One of his city planning reforms, was the extension of Kabul towards the South-West, around 11km from the old city center. This new axis ended with a new King's palace, which would symbolize the power and the reform attempts, designed and constructed by a French-German cooperation on the late 20th of the 20th century.

⁵⁹ https://www.google.com/search?q=King+amanullah



49: Palace of King Aamanullah of Afghanistan in 1920 $^{\rm th}$, Image possibly from 70 $^{\rm th}$ -Today under Reconstruction by Female Engineers and Architects $^{[60]}$

⁶⁰ http://www.tripmondo.com/afghanistan/kabul/afshar-e-darulaman/



50: City Map of Kabul with the Axis towards South-West, 1970-72 $^{\rm [61]}$



51: Kabul Master Plan as it was approved in 1978 [62]

⁶¹ Carola Bürkner, Mai's Weltführer Nr. 13- Afghanistan, "Volk und Heimat" Verlag, Buchenhain/München. 1972

In the years of 1940 to 1962, the urbanization has been accelerated and the built-up area was extended to 68km². To manage the shape of urbanization of the Kabul city, three master plans were formulated in the past.

The First Master Plan was prepared in 1962 by Afghan experts with the support of advisors from USSR, the former Soviet Union. The plan expected 800,000 inhabitants in the area of 23,780 ha within the time frame of 25 years, though there were no accurate census made in regard to the size of population.

The Second Master Plan was prepared in 1970 with the assistance of Soviet experts and United Nations Educational, Scientific and Cultural Organization (UNESCO). The plan covered 29,900ha to accommodate 1.416 million residents.

In 1972 the population was mentioned to be 480,000 according to a travelers guidebook. (Bürkner, C. 1972: 61)

In the late $70^{\text{th}}\,$ the population could be estimated up to ~500,000. [63]

Preparation of the Third Master Plan started in 1976, and was approved in 1978.

The plan covered 32,330ha for the population of two million towards 2002.



52: Visual Impression of Kabul Building Styles from1970's [64]

⁶² (Kabul Municipality Source): Draft Kabul City Master Plan -Product of Technical Cooperation Project for Promotion of Kabul Metropolitan Area Development -Sub Project for Revise the Kabul City Master Plan-, 2011, p. 17 ⁶³ https://en.wikipedia.org/wiki/Kabul

⁶⁴ Picture Taken by Author at Kabul Municipality in 2016

The urbanization considerably proceeded in the Mujahedin period of 1992~1999. The built-up area was expanded to 25,000ha in 1999 by informal settlements and not according any prior mentioned master plans.

In 1999, a special decree was issued on the implementation of the Kabul Master Plan, which included changes to the Third Master Plan. These changes were proposed by the Head of the Municipality, endorsed by the Council of Ministers and approved by the Head of the State.

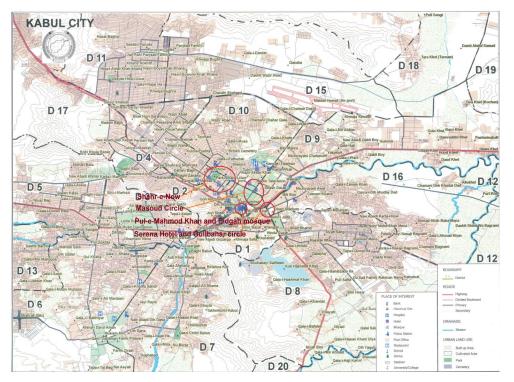
As there was a fluctuation of population and because of the civil war between 1992-1999, no proper census could be done in regard to the population of Kabul.

Eventually, a decision was taken to suspend the modified Third Master Plan and to look for a more responsive and implementable plan for Kabul City. This Third Master Plan was the base for the upcoming master plans for Kabul Metropolitan Area.

2.3 TODAY'S STATE OF KABUL OLD CITY

As already mentioned, Kabul is growing rapidly: the population growth and the expansion of the territory of Kabul is even more unstoppable since 2001, when the Taliban regime was defeated.

A census taken in 1986, the results of which were published in the *Kabul New Times* of 8 February 1987 (Grötzbach 1990 :199), provided the figure of 1,286,000 inhabitants. [65]



53: Map of Kabul in 2016, RMO- Area Restrictions due to Possible Threat 2017 ^[66]

⁶⁵ http://www.iranicaonline.org/articles/kabul-ii-historical-geography

⁶⁶ RMO- Risk Management Office – Afghanistan, 2016

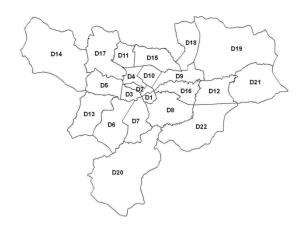


54: Map of Todays Kabul, 2010

The population of Kabul City was 2,268,300 in 2005 as estimated by the Central Statistics Office of Afghanistan (CSO) for the older city area consisting of 14 districts.

This represents an average annual population growth at 4.0% during 1999-2005. The jurisdiction of the Kabul Municipality area was expanded in January 2005 by the agreement between the Ministry of Interior, the Kabul Province and the Kabul Municipality.

By doing this, the population increased to approx. 2,721,000 within 22 districts.



55: 22 Districts of Existing Kabul, 2011 [67]

⁶⁷ JICA, Promotion of Kabul Metropolitan Area Development, Kabul City Current Status Report for Urban Development, 2011, p. 59

In 2013 the CSO estimated the population of Kabul City to be 3,414,000, representing the annual average increase at nearly ~10%, which is partly caused by the expansion of the territory. The municipality area has expanded over this period by 4.1 times to 1.022.7km².

Other sources even talk about a population size of around 6 million, of which assumingly 70% are living in informal settlements.

The increase of the population in Kabul does not make it easy to either understand nor to control the city structures and expansions till today.



56: Informal Settlements on the Kabul Mountains (~70%). Photograph: Daniel Berehulak/Getty Images, ~2014 ^[69]

The old city is still very much frequented by the population for weekly or monthly shopping's, but also because the goods are cheaper than in the modern built shopping malls, which have arisen out of nothing in the different quarters of the city.

⁶⁸ https://www.theguardian.com/cities/2014/dec/11/kabul-afghanistan-fifth-fastest-growing-city-world-rapid-urbanisation

⁶⁹ https://www.theguardian.com/cities/2014/dec/11/kabul-afghanistan-fifth-fastest-growing-city-world-rapid-urbanisation

Some of these quarter exists since the 30th of the 20th century, like Shar-e-Naw (new city), which was planned in 1935. This part of the city was based on the "modern" and more "European" rasterized city planning concept and was following the building norms and principles of European Bungalow Building Styles of that time. Most of these houses were not planned by locals but were designed by foreigners. Most of the inhabitants of theses buildings were bourgeois and elite Afghans or foreigners (Habib, N. 1987:

Between 1942 and 1970, many other residential living quarters were planned and built in European style, such as Kart-e-Char in 1942, Kart-e-Seh in 1963 and Wazir-Akbar-Khan in 1970.

Predominantly inhabited by the wealthier and higher class people (Habib, N. 1987: 123-127).

The urbanization as well as modernization of Kabul since the 30th and 40th till the late 70th of the 20st century, which carried out the construction of public areas, such as parks, cinemas, and theaters as well as ministries, banks, and embassies are still visible and in parts functioning today-though the conditions are poor.

On the other hand, hotels, like the Hotel Inter-Continental or Kabul Serena Hotel, first built in 1945 renovated/reopened in 2005, does function on international standards and are frequented by foreigners.





57: Hotels Intercontinental (~1977) and Serena Hotel's Garden on the right in 2015

During the above mentioned modernization processes, the traditional building materials such as stone, wood, clay and brick as well as reed were pushed back and replaced by concrete and cement, which are less resistant to the harsh climate of Kabul.

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⁷⁰ Image by Author

Unfortunately the todays urbanization and attempts of rebuilding the old existing structure of Kabul and modernize them is not only dominated by the use of concrete and cement but also bursting out in the size, vertically and horizontally:

Mega-structure and small town areas, like "Sharak-e-Telia (Little Golden Town), Sahrak-e-Aria (Town of Aria), Sharak-e-Omidsabz (Town of Green Hope) are rising from the ground like mushrooms without following any city planning rules nor regulations due to existing corruption, frauds and bribing, which results in a an unstructured, chaotic slum city.









58: Kabul, First Street Impressions-Old and New Building Structures, 2011^[71]

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⁷¹ Images by Author

Problems of the city of Kabul today are multilevel and very complex. To name them and categorize them, it could be personally observed as follow:

Category A: Political divergences and power play

Category B: Lack of security measures

Category C: Lack of appropriate infrastructures

Category D: Lack of education and trained labor

Category F: Existing ethnical and traditional pressures

Category G: Existing Informal Settlements

Category H: Extreme high level of corruption and bribery

For planners, the most challenging, crucial and major problems remain the adequate handling of infrastructural deficits: These are the foremost and threatening aspects for the urban conditions of Kabul City besides other political and social discrepancies.

Kabul is still lacking of extensive central water supply: households and even estates as well as other public areas, such as schools and ministries are relying on wells, drilled into the proximity of the existing building structures.

Already in 1923 a water conduit was positioned to serve the entire governmental area including the Arg- the Kings Palace-, parts of north Kabul including the Ministry of Defense, the traditional building areas in south of Kabul (below the Shah-e-do-Shamshira Mosque) and parts of todays Shar-e-Now area. These conduits were fed by the channeled water that was carried to a water tower in the vicinity of Koh-e-Asmai from the Paghman mountains, ~ 30km away from Kabul. But maintenance of these conduits lacks ever since and the political turmoil since the last 40 decades have deteriorated the supply of especially clean water (Habib, N. 1987: 246).

Sources are assuming that 80% of the people is lacking access to safe drinking water in Kabul, and 95% is lacking access to improved sanitation facilities. [72]

There is no central canalization system laid out on the entire city structure, in order to keep the ground and the ground water out of toxic and contaminated drain.

Despite the fact that Afghanistan has since the early 20th, electrical power plants (the first power station was built in 1917 with the support of the American in Jabul Saraj, others followed till the 60th- the Mahipar and Naghlu dams), electricity and electrical supply to households are also unprogressive (Habib, N. 1987: 240).

⁷² https://www.hydratelife.org/afghanistans-water-crisis/

A 500 kV transmission line from Turkmenistan to Kabul is due to be built till 2018, faced ethnical turbulences in 2016 as the route was changed from the Bamyan province to Salang Pass. [73]

In winter months, the capital is facing constantly shortage of electrical supply to all households. 24 hours of electrical supply is not guaranteed as the population and thus the consumption is steadily rising, also due to more and more use of electrical devices, such as computers, mobile phones as well as other household equipment's.

Because of insufficient electricity, most of building structures of Kabul have no central heating systems and are either locally heated through existing masonry heaters without proper and controlled chimneys by sweepers, or electrical and gas heaters.

Even public buildings, such as schools or other important public services must rely on gas heaters in the winter months or use generators, which are costly and not environmental friendly.

Waste Management is in parts disastrous and leads to smelly and ugly areas within the city.

The traffic is a catastrophe. As mentioned earlier Kabul is connected to other main cities, such as Kandahar, Herat and Mazar-e Sharif and Jalalabad via the circular AH76 that stretches across Afghanistan (see image 29+75).

People coming form other provinces or going to other provinces are forced to criss-cross the city center from different areas in order to reach their directions, as there are no circulating road connectivity's yet.

Polluted air and smog specially during winter times are a daily struggle and a consequence of the badly managed traffic network.

Additionally as many Afghans also use these days the airport to fly within the territory of Afghanistan as the land roads are still insecure due to the fact of terrorism, criminals kidnapping people or robbing of buses and private cars.

Thus, arriving in Kabul by airplane, many Afghans disperse either to the different quarters of Kabul or to the different ministries, as the governments administration and system are still centralized.

Though the system is centralized, the administrative buildings of the different ministries are not built within a compact area, but are widely distributed in entire Kabul.

⁷³ http://www.aljazeera.com/news/2016/07/afghan-hazara-minority-protest-kabul-power-line-160723064233800.html

This incompactness basically is the cause of a dynamic everyday moving and bustling between different quarters and areas, which is predominant in todays Kabul city and foremost occurring during rush hours. Long waiting hours in packed cars and streets are nothing unusual.



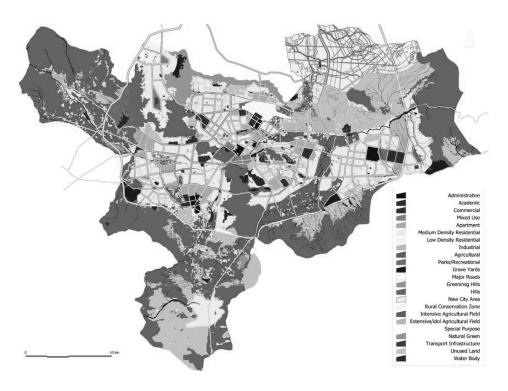
59: Every day's Life Situation in Kabul, 2014: Congestion in Kabul, whose population has increased fourfold since 2001. Photograph: \$ Sabawoon/EPA [74]

There are plans to have circular inner city roads, which would ease the connection to the main east-west/north-south axis and relief the heavy traffic on existing city roads and consequently eliminate the traffic chaos.

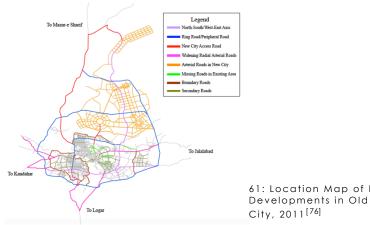
But realization of these plans has seemed to be a failed ambition so far.

⁷⁴ https://www.theguardian.com/cities/2014/dec/11/kabul-afghanistan-fifth-fastest-growing-city-world-rapid-urbanisation

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60: Master Plan of Existing Kabul, prepared and proposed by JICA 2012-2025 [75]



61: Location Map of Proposed Road Developments in Old and New Kabul

 $^{^{75}}$ JICA, The Study for the Development of the Master Plan for the Kabul Metropolitan Area in the Islamic Republic of Afghanistan, Final Report, Executive Summary, 2009, p. 18

⁷⁶ JICA, The Study for the Development of the Master Plan for the Kabul Metropolitan Area in the Islamic Republic of Afghanistan, Final Report, Executive Summary, 2009, p. 20

The Kabul International Airport is located about ~ 10 kilometers from the old center of the city, next to the Wazir Akbar Khan neighborhood. It is the only international airport in entire Afghanistan so far.

It was built by the Soviet engineers in the late 1960th, when Afghanistan started again to become a modernized nation. Since that times, Afghanistan was connected to the rest of the world via air and was not anymore landlocked. Many interested nations came during the 70th and visited Afghanistan and of course Kabul.

Today the airport has daily international flights to reach directly to Europe and via connecting flights to other parts of the world.

At least this air-connectivity made it easier for the commerce and cultural exchange between Afghans and other nations.

In the following chapters the already above mentioned attempts of somehow using existing structures of Kabul city and combining them with latest's urban planning methodologies and proposing possible extensions of Kabul city, will be described.

These attempts were of political interest at first place and a visionary idea of creating a contemporary city in a post war conflicted country, which seems to be difficult to control.



62: Kabul, Hamid Karzai International Airport, 2011^[77]

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⁷⁷ Image by Author

3 THE KABUL NEW CITY PROJECT

After the devastating destruction of almost 30 years of war the Karzai Interim-Regime took over the ruling power with the heavy support of the Western Alliance, the NATO and the United States of America.

Consequently because of this chance for peace, Afghan population became enthusiastic within the country but also the Diaspora of Afghans, living in different parts of the world, which got the chance of freely being able to go back to their country of Birth and build it up and make businesses.

For any Afghan, whose origin through their birth[place is mentioned on their "foreign" passports, it was and is made possible to enter Afghanistan without a Visa and they were all most welcomed.

It was visible that the capital Kabul became more and more attractive to many Afghans from all around the world. Many returnees having settled down in the neighboring countries, such as Iran and Pakistan, besides pliantly other Afghans, would return and simply grab land and start from scratch a new "Afghan" life.

Thus the attraction turned to an uncontrollable dynamic, which has never been experienced in such a way before. Also numerous of people from different parts of the more rural areas and even some foreigners and the Afghan Diaspora tried their fortune back in the capital with a lot of hope and enthusiasm.

This fact caused an enormous urban challenge and a rapid population explosion to which the interim government, of which Hamid Karzai was the Head, had to react to.

3.1 BACKGROUND OF KABUL NEW CITY

In 2004, Hamid Karzai became President of the Islamic Republic of Afghanistan and manifested during his governance the Afghanistan National Development Strategy- called the "ANDS".

As one part of many efforts to deal with specific urban problems in existing Kabul, the development of a new city in Dehsabz were contemplated in the interim ANDS from 2002-2008, which was established by the Government of Afghanistan for the coming years as part of its efforts to secure continued understanding and support from the international society for sustainable development.

The ANDS was tasked with three main pillars of security, governance and socio-economic development and sub structured with eight sub-pillars:

- 1) Infrastructure and natural resources,
- 2) Agriculture and rural development,
- 3) Human capital and gender equity,
- 4) Social protection,
- 5) Economic governance and private sector development,
- 6) International and regional cooperation,
- 7) Good governance and rule of law, and
- 8) Security

Based of the ANDS and under the lead of President Hamid Karzai, the Government of Afghanistan requested the Japanese Government for technical cooperation back in 2006 to prepare a master plan for the Kabul city with the new city as an important means to guide the future urbanization in the Kabul Metropolitan Area (KMA).

In response, the Japan International Cooperation Agency (JICA) of the Japanese Government became the official agency responsible for the implementation of the technical cooperation program.

JICA decided to conduct a study to examine the strategy and directions for urban development of Kabul and to prepare a master plan for urban development of the Kabul Metropolitan Area.

The urban development in Kabul had to deal among others with damaged and degrading urban infrastructures, the above mentioned rapid population increase due to the return of refugees and rural-to-urban migration, proliferation of informal and illegal settlements as a result of the lack of effective master plans, and awkward urban environment and sanitation.

These problems were most serious in the capital city of Kabul as it

was destroyed to 90% and true urbanization has never taken place, not even before the 30 years of war.

Moreover, the urban functions of Kabul needed to be much enhanced to support the self-reliant development of the Afghan economy in the globalizing economy through active transactions cooperation with neighboring countries.

The urban development of Kabul, therefore, needed to be planned to support the socio-economic development of Afghanistan under the ANDS to ensure the continued support from the international society.

To cover up the urban development points of the ANDS in 2006, the President of Afghanistan established an Independent Board for the development of the Kabul New City (KNC).

The Board consisted at that time of Senior Economic Advisor of the President, Minister of Urban Development, Minister of Agriculture, Irrigation and Livestock, Kabul Mayor, leading private sector representatives, urban planning specialists and an urban economist.

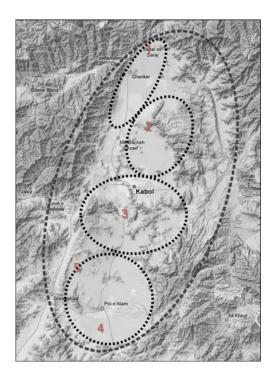
As a national priority, the Board formed the Dehsabz City Development Authority (DCDA) in late 2006 as its management, financial and authoritative executive body.

DCDA was tasked to pave the way, through mostly private sector-led activities, for the administration, design, documentation, marketing, implementation and maintenance of this exciting new desired economic hub of Afghanistan and the region.

3.2 THE PLANNING OF KABUL NEW CITY

The extensive studies and researches of JICA led to a population projection in different parts of the national capital region of Kabul (NCRK), in which Kabul New City together with existing Kabul city would be able to inhabit a population of ~ 6,5 million by 2025.

The new city alone would be developed to inhabit a population of 1.5 million in 2025 and ultimately 3.0 million in 2050.



- Northern region:
 0 million 2.0
 million
- 2. New city: 0.1 million 1.5 million
- 3. Kabul city: 4.0 million 5.0 million
- 4. Southern region: 0.3 million 0.5 million
- 5. NCRK: 5.2 million 9.0 million

63: Population Projection in National Capital Region of Kabul [78]

The idea behind their planning was to accommodate a greater part of the population in the KNC by gradually let the exiting population to move in the more pleasant, up-to-date and comfortable new city areas. In the means of complement the old city structure and eventually modernize it piece by piece as well.

⁷⁸ JICA, The Study for the Development of the Master Plan for the Kabul Metropolitan Area in the Islamic Republic of Afghanistan, Final Report, Executive Summary, 2009, p. 6

The Study for the Development of the Master Plan for the Kabul Metropolitan Area (KMA) was carried out since March 2008 under the technical cooperation of JICA. The Study was undertaken by close collaboration of the counterpart agencies of the Afghan Government represented by the Independent Board for DCDA and the Ministry of Urban Development (MUDH).

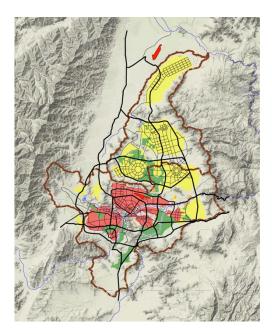
The Interim Report of the Study was prepared and formally submitted to the Afghan side at the end of January 2009. The Report contained a draft master plan for the KMA covering both the existing Kabul city and the new city in Dehsabz and Barikab. DCDA continued to work on the draft master plan for the New City, supported by the JICA Study Team, and prepared the master plan for the Kabul New City development, which was formally approved in principle by the Afghan Cabinet on March 26, 2009." [79]

The endorsed master plan for KNC, consisting of 740 km 2 land area was divided into 4 zones and 3 phases. Each phase would have had a completion time period of \sim 5-10 years.

The development scenario for the KNC phase planning was as such:

Phase 1 to be implemented and further developed up to 2015, phase 2 for 2016-20, and phase 3 for 2021-25.

64: Envisioned Urban Fabric of Old and New Kabul City (KMA) $^{[80]}$

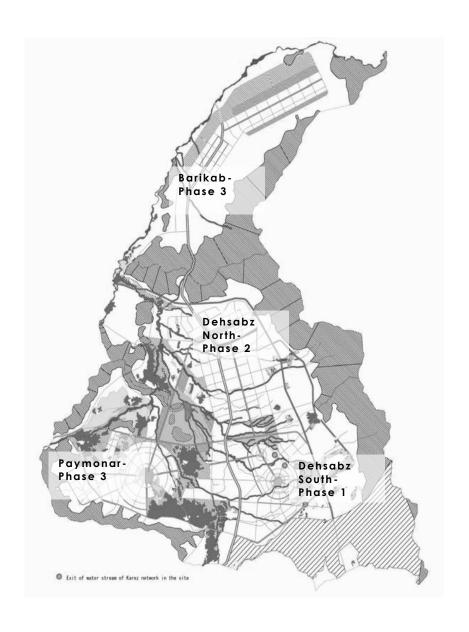


 ⁷⁹ JICA, The Study for the Development of the Master Plan for the Kabul Metropolitan Area in the Islamic Republic of Afghanistan, 2009, p. 13 (1)
 ⁸⁰ Ibid, p. 7



65: Dehsabz Looking towards the North, May $2012^{\left[81\right]}$

⁸¹ Imgae by Auther during contractual time at DCDA, 2012



66: Conceptual Development Areas of KNC with Greenbelts [82]

⁸² JICA, The Study for the Development of the Master Plan for the Kabul Metropolitan Area in the Islamic Republic of Afghanistan, Final Report, Main Report, 2009, p. 47 (59)

The broad zones where namely Dehsabz South, Dehsabz North, Paymonar and Barikab up in the north that would serve as the agricultural and economic zone.

The implementation should have been in different phases, starting with phase 1 in Dehsabz South as being closest to existing Kabul.

Phase 1 was supposed to be built within the next 5-10 years and within it an area of 20ha should have been finalized in 2016 serving as a pilot project, to show what would be possible.

In September 2011, the structure plan of phase 1 was finalized by JICA and it was prepared in close cooperation with the DCDA team. The scale was 1: 5000, comprising an area of 5,000 hectares.

This area would have had covered a population of about 400,000 people, with all the land uses necessary for a functioning city, such as:

- ~56% residential areas,
- ~23% infrastructural areas (greenery: ~8%, parks: ~6%, roads: ~10%),
- ~11% commercial land,
- ~3 % light industrial areas, and
- ~5% reserve land.

Land Use Category-Phase II	Gross Estimate in ha	Gross Estimate in %	% of Road (R), Park (P), Greenery (G)and Facilities(F) within the landuse	POPULATION Estimation- ShortTerm	Housing Units (6 people/HU)
NBH-Residentail	2146	37%	R 15-20%, P 2%, G 1%, F 2%-7%	242498	40416
MIXED	687	12%	R 17%, P 2%, G 1%, F 2%-7%	168315	28053
cc	0	0%	R 5%, F 3%	0	
District Commercial	0	0%	R 5%, F 3%	0	0
Local Commercial	0	0%	R 5%, F 3%	0	0
Public Facilities	0	0%			
Light Industry	71	1%	R 5%, F 3%		
Reserve	0	0%			
R/Tourisme	0	0%			
Park	0	0%			
Recreatian Facilities	0				
Greenery/Buffer(Gully)	140	2%			
Gully/Riverside Green	84				
Peripheral Green (Concept for long					
term)	480				
Agricultural Field (Intensive)	227				
Agricultural Field (Extensive)	84				
Future Agriculture Extension	470				
Agricultural Villages					
Road/Transportation	136	2%			
River/Water Surface	24				
Total Free space	423				
Steep Slope	828				
TOTAL, 4933 hectar	5871	54%			
Total area of Initial stage of Phase					
I(Boundery)				410813	68469

67: Land Use of Phase 1 According the Structure Plan with Estimated Population

⁸³ Excel prepared by Auther during contractual time at DCDA, 2012



68: View from Baba Khusqar Shrine in Dehsabz (looking towards East- Phase 1 on the left south direction) $^{\rm [84]}$



69: 3D Modeling of Phase 1, Central Commercial Area and Surroundings $^{[85]}$

 ⁸⁴ Illustration by Author, May 2012
 85 Planning by Umar Munshi, van Dijk International, and Afghan Tarin Engineering

The JICA team was preparing additionally a development guideline, apart from the master plan, which was around 2000 pages including its documentation as well as the structure plan for phase 1.

This development guideline seamed necessary in order to encourage the private companies to invest and make their own development plans according their own visions and ideas but in a standardized way as suggested in the guidelines. At the same time it was meant to help DCDA technical staff members' to control and also guide the private sector during the planning processes. The CEO of DCDA approved this Development Guideline after almost 1 year. Unfortunately it was never approved by the Ministry of Urban Development and Housing.

Later, when it was feared that there would not be enough qualified private companies carrying out a good plan, DCDA decided to award a consultant to prepare the Development Plan (scale 1: 2500) for Phase 1 and it was on his way for final approval by DCDA and other governmental entities in 2013 and 2014.



70: 180 degree Illustration taken from Baba Khusgar Hill, looking North-West, taken by the Author in 2012, May ^[86]



71: 180 degree Illustration taken from Central Park, looking to East, taken by the Author in 2012, May $^{[87]}$

Services, September 2013

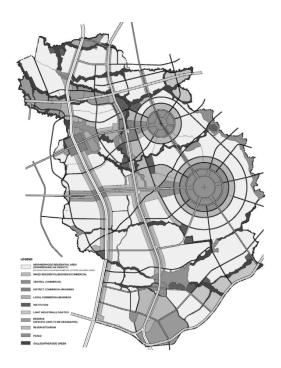
⁸⁶ Image by the Author, May 2012

⁸⁷ Image by the Author, May 2012

As Dehsabz North had a potential for development, the structure plan for phase 2 was awarded to a consultant firm, too, which was in its finalization stage in 2013. Paymonar and Barikab would have been the 3rd phase of development.

The expected performance of the socio-economic and spatial development of the entire KMA in each Phase were described by the JICA team in the Final Report handed over to DCDA in 2009. [88] But unfortunately neither the planned implementation date of 2012 for the initial pilot project nor the revised date of 2016 could be so far realized.

KNC stayed till today (2017) a visionary plan on masses of blueprints, papers and drawings, including a partial, physical 3D model of phase 1.



72: Land Use Plan Proposal for Dehsabz South in 2011^[89]

⁸⁸ JICA, The Study for the Development of the Master Plan for the Kabul Metropolitan Area in the Islamic Republic of Afghanistan, Final Report, Executive Summary, 2009, p. 7 (18)

⁸⁹ JICA/RECS International Inc.T. & Associates Yachiyo Engineering Co., Ltd.: Promotion of Kabul Metropolitan Area Development: Capacity Development Project Dehsabz South Area Structure Plan, 2011, p. 39

3.3 AIMS AND VISIONS OF KABUL NEW CITY

Afghanistan was always a trade and agricultural country. industrialization never really happened in the modern sense.

JICA's team realized this fact and presented their conceptual vision and argumentations based upon the existing traditional trading and agricultural skills.

For this conceptual vision, the most important step would have had been the enhancement and improvement of the road network of existing Kabul and Kabul New City.

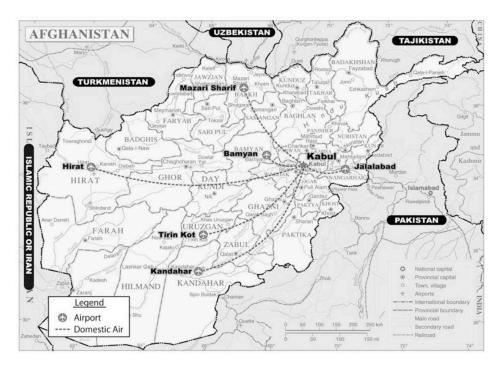
JICA argued the necessity of a New Kabul City with the great importance of the strategically location of existing Kabul: New major international trade routes would be needed to enhance the traditional effective trade of China in the East through the Central Asia to Europe in the West. They are collectively called TRACECA representing Transport – Corridor – Europe – Caucasus – Asia, which passes through parts of today's Kazakhstan, Kyrgyz, Uzbekistan and Turkmenistan.

This corridor, once established, would provide also Kabul and the area along the access roads alternative trade routes to the East and the West and revival old Caravan roads. The traditional trade and commerce would enhance it to a "Hub" that would be able to act nationally and internationally through the eventually linked and connected KNC with its neighboring countries and also to other remote areas of Afghanistan.

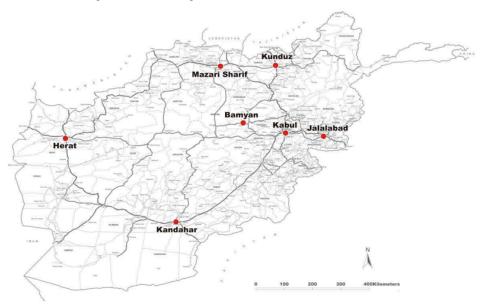
The links between the seven cities would be much strengthened with the completion of the city ring road in 2009 (still not completed today in the year of 2016), which would mean that Kabul would be more strongly linked through these cities to the neighboring countries and beyond. The existing Kabul City would not suffer by over-population and its historical character would stay untouched.

The national road network of Afghanistan comprises seven major cities: Kabul, Jalalabad, Mazar-e-Sharif, Kunduz, Bamyan, Kandahar and Heart.

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73: Domestic Flight Routes of Afghanistan as of 2012 [90]



74: National Road Network of Afghanistan as of 2012 [91]

⁹⁰ (Kabul Municipality Source): Draft Kabul City Master Plan -Product of Technical Cooperation Project for Promotion of Kabul Metropolitan Area Development -Sub Project for Revise the Kabul City Master Plan-, 2011, p. 2-3 ⁹¹ http://www.cda.gov.pk/about_islamabad/history/#ad-image-0

The road linkage to the neighboring countries are depended on these national road-network that connects also Kabul to other neighboring countries: Tajikistan, Uzbekistan, Kyrgyz, Turkmenistan, Pakistan (though the borderline between Pakistan and Afghanistan is still highly questioned by both governments as it was established by the British in 1893, so to say never recognized by any of the independent countries as by today), Iran and China.

In addition, the capital functions of Kabul through the planning of a new city would be enhanced to support the socio-economic development of Afghanistan linked with the global socio-economy by integrating the neighboring areas for broader resource base and more diversified society and economy.

The Kabul Metropolitan Area was envisioned to be planned in such a manner that it can realize this. A new city conceived to the north of the Kabul city was considered an important part of the KMA to strengthen the urban functions of the capital region.

Additionally the enhancement of Kabul city would take a better control of the rapid population growth observed since the defeat of the Taliban regime in 2001 and would strengthen the urban functions of the capital region.

The bigger vision behind the planning of KNC to revive the historical importance of Kabul, is in comparison to other city visions unique, even though too visionary and ambitious being aware of its political situation:

"In planning for urban or regional development, it is useful to establish planning concepts to be applied to the development and to share them among stakeholders." (JICA Study 2009: 7)

The planning concepts widely shared by stakeholders would provide guidelines and help to muster their efforts in planning and implementation, in order to realize more coherent and desirable development acceptable for all. Given the unique hydrogeological conditions discussed as well as the millennia long history and culture, the Kabul city should pursue a unique urbanization model of its own, and the New City development would be an important element of the model.

Thus three planning concepts were proposed to be applied to the New City:

- (1) Socio-economic diversity
- (2) Urban-rural complementarity
- (3) Recycle-oriented eco-city

As mentioned earlier, Afghanistan and its capital Kabul were a plural society. Many Ethnics have lived for centuries next to each other; also Christians and Jewish people were once part of the city's society. [92]

This was argued by JICA that this social diversity would be a special source of dynamism, which can contribute to diversity, particularly to urban societies. JICA had the idea to support this dynamism and the mixed culture and mixed ethnicity of people living in existing Kabul.

However, the civil war had undermined such characteristics, resulting in somewhat segregated habitation patterns in the city.

This should have had been rectified through planned development to restore the urban society of mixed culture of diverse people, especially in KNC.

Social diversity in urban development meant urban development with no segregated habitation by ethnic or any other social group. Specifically, it was to be promoted among others by the following:

- (1) Inclusion of social housing for low- income people in any sizeable housing development.
- (2) Provision of public facilities in central area of each enclave type of residents, including multi-functional and culture center, community complexes and mosques.
- (3) Provision of diverse economic opportunities and provision of sufficient employment opportunities would have been a key for a successful New City development.

The second idea of the JICA master plan was in pursuing a unique urbanization model, by taking advantage of the presence of rural and agricultural areas within the city boundaries and the existing villages in the New City areas.

This could have been realized by utilizing complementary aspects of its urban and rural areas in many ways:

JICA believed that preserving the agricultural land would be essential to ensure open space and greenery, which serves as infiltration area for urban drainage and some sewage.

The preservation of agricultural land would help to maintain shallow groundwater, which is critically important as sources of domestic water for the majority of the city residents and as a prerequisite to preserving and enhancing the greenery.

⁹² https://en.m.wikipedia.org/wiki/Sherpur_Cantonment

Thus as Kabul city encompasses large agricultural land, accounting for 14% of the total city area, damaging them by overbuilding them with high commercial or residential areas, would be disastrous by time for the shallow ground water.



75: View of Kabul from Wazir Akbar Khan Hill looking towards North (behind the mountains is Dehsabz and the Safi Mountains), taken in April 2016 by the Author [93]

The New City in Dehsabz should pursue urban-rural complementarity more consciously and deliberately.

The New City development would create most accessible urban market for agricultural products produced in the rural areas surrounding the new city. Conversely, the urban residents would be supplied with fresh vegetables and fruits from the suburban agriculture in the existing villages. Increased agricultural production due to improved water availability and soil conditions may expand the base for agro-processing and related industries in the peri-urban areas of the new city.

The third idea would be mainly a recycle-oriented eco-city that would introduce the on-site treatment of human wastes; also the sludge should be promoted and applied to agricultural land to improve soil conditions.

"Urban drainage and some sewage should be treated also on-site by ensuring sufficient area for infiltration in semi-rural residential areas. In the central urban areas, sewerage should be provided, and sewage treatment facilities established.

Treated sewage would be applied to irrigate agricultural land. Water availability will be improved as a prerequisite of the New City development, which would benefit the existing villages as well.

Better water management in the villages would mitigate flush floods due to snowmelt and gully erosion. Enhanced water retention capacity of land due to soil improvement would also have the mitigation effects.

Use of renewable energy would be another aspect of the recycleoriented eco-city. Power generation by solar, wind and mini-hydro

⁹³ Illustration by the Author, April 2016

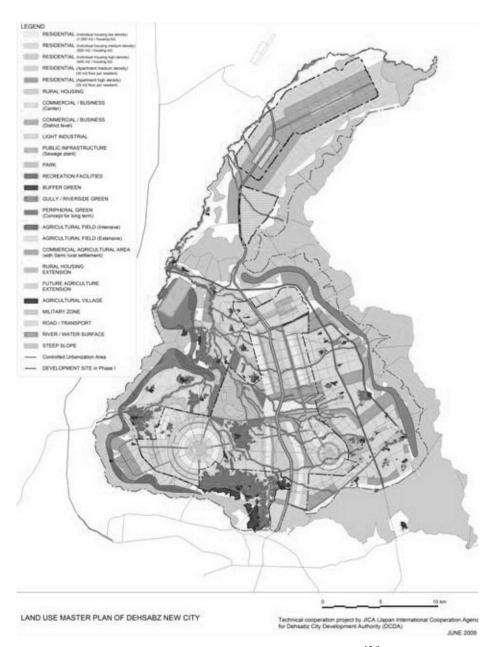
should be encouraged in the new city by applying the state-of-art technology. Rural electrification by mini-hydro should be part of the better water management in the existing villages around the new city site.

The concept of waste to energy may also be applied to treat the solid wastes. Organic wastes would be separated and used for biogas digestion, and remaining combustible wastes incinerated to generate electricity in both ways." (JICA Study 2009: 11)

Basically, JICA's team tried to implement in the KNC master plan most of the known principles of city planning that have been existing since the Garden City Movements of E. Howard. Their approach of rural-urban complementary and the socioeconomic diversity are adopted concepts of Howard, just translated into a more contemporary context.

Respecting the given landscape and nature in their planning approach and enhancement of existing green areas (like the natural gullies) into a well though through green network to be used by cyclist and pedestrian, were already thought in plans of Le Corbusier in Chandigarh as well as in the plans of Milton Keynes.

But what immensely differs is that no raster or grid system was applied. JICA tried very much to follow the given landscape structure and accomplish them to a functioning road or land use pattern.



76: Land Use Plan Proposal of Kabul New City by JICA, 2009 [94]

⁹⁴ JICA, The Study for the Development of the Master Plan for the Kabul Metropolitan Area in the Islamic Republic of Afghanistan, Final Report, Executive Summary, 2009, p. 16

3.4 WHY KABUL NEW CITY STAYED A VISION

Considering the urban developments and concepts of the early 20th century till the beginning of the early 21st century, it seamed of a logical consequence to plan Kabul New City the way it was proposed by JICA in 2006 for the Islamic Republic of Afghanistan.

As already mentioned, concepts of the Garden City Movement were taken over to the proposal, such as to be a social (and economical) city- a city with self functioning neighborhoods, in the sense that most of the daily needs would be facilitated and accessible within a walking distance; self-contained and self sustainable through the rural-urban complementary by keeping existing rural structures of Dehsabz, preserving the old watering systems (Karez-underground channels) and attaching a wider agricultural area in the vicinity (Barikab) to feed the new city with fresh vegetables and fruits.

The existing green areas were kept and enhanced as greenbelts along the mountain side, also the existing gully trails were followed and shaped into a functioning greenery network according the terrain slope, which is falling naturally from east to west.

The master plan of KNC is perfectly and minutely detailed and performed: the infrastructure of the road networks, the water systems, sewerage, electricity, telecommunication as well as social infrastructures, such as educational, religious, cultural, health and recreational facilities are precisely planned and described and how to be implement in the different stages, but ironically it was all for nothing.

Projected implementation times and budgeting could not be kept during the efforts to realize the mega project for which the Dehsabz City Development Authority was then in charge for by the personal decree of former President Hamid Karzai.

The question why the Kabul New City Project failed and thus will stay a vision or even better to say an illusion can be answered as follow:

"....Comprehensive planning (master planning) in the last decades has changed to one in which the making of the plan is a participatory plan-making process." (Levy, J.M. 1988: 104)

The master plan of KNC was not participatory at the beginning. Only when the entire master plan was ready, there were efforts of including the existing communities in Dehsabz and seeking their visions and ideas.

The bottom-up approach was incorporated instead of at the beginning only at the far end of planning stages, where the rigid planning could not be revised or changed at any means.

Planning a city means first of all understanding the people, knowing their history, cultural background, religious and traditional influences, their habits and preferences.

The Afghan culture has been around for over two millennia, tracing back to at least the time of the Achaemenid Empire in 500 BCE as mentioned already in the introduction part:

It is mostly a nomadic and tribal society, with different regions of the country having their own traditions, reflecting the multi-cultural and multi-lingual character of the nation. In the southern and eastern region the people live according to the Pashtun culture by following Pashtunwali, which is an ancient way of life that is still preserved. The remainder of the country is culturally Persian and Turkic. Some non-Pashtuns who live in proximity with Pashtuns have adopted Pashtunwali in a process called Pashtunization (or Afghanization). Millions of Afghans who have been living in Pakistan and Iran over the last 30 years have been influenced by the cultures of those neighboring nations.

Afghans display pride in their culture, nation, ancestry, and above all, their religion and independence. Like other highlanders, they are regarded with mingled apprehension and condescension, for their high regard for personal honor, for their tribe loyalty and for their readiness to use force to settle disputes.

Though urbanization took place more than already 3000 years ago in the northern parts of Afghanistan, the 'true' process of urbanizing and also modernizing through evolutionary development processes as it happened in the Western World, never happened.

Kabul had and has - effected by attempts of modernization as well as westernization - gained on popularity as an urban center caused by either political or commerce factors, which led to a mingling of the population, but it failed to become an urbanity as we understand it in the contemporary times: A clean, green, self sustainable, smart, creative and attractive city, where there is place for every one and any one, with sufficient public and administrative services as well as excellent public transportation or even a future-orientated healthcare and educational system.

'Afghans' pretty much stick to their tradition and ancestry habits since centuries. Attempts of modernization during King Amanuallah

or during King Zahir Shah, were either stopped by clerical influences or by political power caused possibly by foreign power strategies, neither were the different ethnical communities harmonized between each other to make Kabul a great genius loci again as it used to be once during the Babur Shah time in the 16th century.

Basically the vision of a great, modern city with all thinkable contemporary facilities, stayed an illusion and nothing more than a political decree because it was indoctrinated from high above. There was no single bottom-down approach: people were not consulted and involved.

The city finally was not meant for the people but it was a 'show off' of the political power of that time.

Despite the fact and efforts of the professionalism and perfection of the JICA team to propose technically a "perfect" plan, it missed many levels of social, cultural, traditional and political levels of understanding the complexity of the entire given circumstances:

There was and is a constant lack of following factors for implementing such a perfectly thought through and good will attitude:

- Lack of experienced local planners (only external consultants)
- Lack of the State political and economical power (land grabbing and power of mafia)
- Lack of clear strategies and concepts (could not keep the mega project long enough hidden, so it would not be popular till the very basic infrastructures and public facilities would have been financed and built)
- Lack of technical feasibilities (issues of water supply)
- Lack of security (foreign investors got discouraged to invest further or at all).
- Lack of state financial means

"..The two most powerful tools for carrying out the physical side of a plan are the capital investments as called for the capital budget and land-use controls. Capitol investment in roads, public facilities, and utilities create the basic condition that permit development, which land-use controls then shape and channel. Ideally, capital investment and land-use controls should be consistent with one another and with the comprehensive plan- the master plan" (Levy, J.M. 1988: 110).

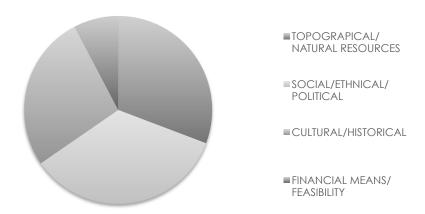
The government of Afghanistan and the municipality of Kabul had no own capitals to invest, especially in necessary public facilities and services, such as water and sewage-supply, electricity, roads and public facilities. It was too much relying on public-private partnerships as well as on simple private investments. These never happened due to the security situation as well as due to non-exiting necessary infrastructures, i.e. road connectivity's or even sufficient water supply, if investors wanted to invest in a school or university in KNC.

Unfortunately all involved parties in the process of the implementation to simply focus on a core building (like the tour Eiffel in Paris) or major structure, such as water supply, which would attract habitants or investors to gradually occupy the city for themselves.

The only occupiers till today are mostly land grabbers and mafia gangs.

The vision might have been better implemented, if the historical context would have been studied in depth, so that the lessons learned from earlier mistakes could have been avoided. The cultural and ethnical peculiarities, were to theoretical approached and a proper social analysis was missing. The financial means were absolutely not given for a mega project such as KNC and were just ignored. Politically, the top-down approach was according latest urban development outdated.

INTERDEPENDENCIES OF VISIONARY PLANNING VALUES



77: The Historical, Cultural and Ethnical Importance within Urban Planning Approaches and Visions $^{[95]}$

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⁹⁵ Graphic by the Author, April 2015

4 WHY CITY VISIONS FAIL OR SUCCEED

Chandigarh was a city planned on a drawing board - a blueprint city - (Reißbrett-Stadt), so was Brasilia, Milton Keynes as well as KNC.

None of these cities, such as Chandigarh, Brasilia, Milton Keynes or KNC, were evolved and created by habitants and self-organized communities in joint planning process.

They were all political visions imposed upon the population blindly believing in the systems because what has lacked and still does lack, is to make reasonable and sensible decisions based upon common sense, which includes an awareness of the identity, the self-experienced traditions, existing trade-habits and cultural practices, and not upon forced political power and strategies.

The failures of modernist planning in different countries, low income, middle-income or rich countries, made intellectual's movements think of a more collaborative and communicative approach of planning rather than imposed visions, where the people would say what they need or envision.

In a published critique of 1961, Jane Jacobs mentions the "fundamental problem of modernist urban planning, even when well- intentioned, was that it was used to 'put people in their place' without paying much heed to what people were doing and what they wanted." (Bell, J./Fox, S. 2009: 203)

The attempts and rudiments of participatory, community related "place-making" planning approaches as well as focus on decentralization including peripheral planning have only been started recently for Kabul region and the old city.

The success for that "felt-plan" through participatory creation of "place-making" and 'space-making' plans has to be awaited by the lessons learned out of failures.

4.1 COMPARISION OF KNC TO CHANDIGARH, BRASILIA AND MK

In contrary to the KNC project, Chandigarh, Brasilia and Milton Keynes succeeded as envisioned planned projects, even though being planned on the drawing board (a "blue print") first in order to become reality accordingly.

Chandigarh became in real a successful city, though it was also a political decision baring a high political meaning as in case of KNC also baring a high political meaning and being first planned on paper as a blueprint: it was meant, as mentioned, to reassure and give back a lost identity of the Punjab people and express the Indian Independency from a colonial State: the British.

In contrast to KNC, the planning vision and implementation approaches of Chandigarh were processed by great architects and planners of that time, like Le Corbusier.

His modernist vision was to improve the conditions of humanity in the motorized world.

Even though not familiar with the culture of India and the Punjab, nor with the existing climate, his vision to accommodate people in modern buildings and respect the landscape and existing beauty of nature as an eminent integrated part led to the desired success besides other planning factors.

Chandigarh has even become world-wide by its visionary planning a touristic attraction, despite the fact that people actually like to be there and contribute to the everyday happenings, wealth and growth of their "City Beautiful".

It was a lucky coincidence to gain such a visionary like Le Corbusier for the master planning of Chandigarh in the 50th of the last century.

KNC was not proposed by contemporary world-wide known and admired architects or planners, like maybe Rem Koolhaas or Herzog& De Meuron, MVRDV or Tadao Ando, Peter Zumthor, just to mention a few.

Brasilia had that fortune to have been exposed to a contest, where more than 5500 entries were submitted and only one won: Lúcio Costa. A famous local architect and planner. In addition, the well-known architect Oskar Niemeyer, was to be the core architect of all administrative buildings.

This "blue print utopia" as Holston is calling it, was a CIAM manifesto as both Cotsa and Niemeyer "have practiced its principles with renowned clarity. Its most significant manifesto, The Athens Charter, defines the objectives of city planning in terms of four functions": Housing, work, leisure and traffic, where the traffic brings usefully the other three into communication (Holston, J. 1989: 31).

Unluckily, such a worldwide consensus among architects and planners, as the CIAM was, does not exist any longer since the mid 50^{th} of the 20^{th} century, so that common platforms for better planning visions and ideas were and are not any longer given, which might have had led to a better visionary solution of KNC, as did the vision for Brasilia through constant consultation and knowledge exchange of professionals of that time.

Though in critics, Brasilia does not function well as a "social" city allegedly because of its "de-historicizing and decontextualizing premises" (Holston, J. 1989: 315), as the social forces somehow were being paralyzed by the architecture and the dimensions, so distant from the human scale and the inherited space perception and building constellations.

Milton Keynes was different in its approach of planning as it tried to rescale somehow back the "nature" and, still using principles of the modernist planning principles, it tried to have a sort of more environmental understanding of the modernist idea by keeping the grid structure, but following still the topography of the existing site.

This has become a harmonized melting of theoretical grid patterns and natural existing landscape. It was spacious and compared many times to Los Angeles with it suburban character on a smaller scale.

It was "hype" to be a part of a modern community, that was spread almost out of nothing into existence and becoming.

MK, Brasilia and Chandigarh became realities and were all implemented, its not about how well or poorly they were implemented, it is the fact that they do exist and function as cities and are, if not in the case of Brasilia, as much populated as originally planned, they are dwelt and even world-wide known.

Unfortunately, Kabul New City, was so miss-managed that it could not even make it to be advertised to a greater audience outside of Afghanistan's borders, for instance to the World Urban Forums (WUF) not to mention that from the beginning it would have had been better to keep it a silent project till the time a major achievement, i.e. the provision of water or the basic road networks had been built.

Involved parties and decision makers in the KNC project had that great dream and vision of finally proving the world how fantastic Afghanistan can be, how much potentials actually exist of professionals or semi-professional after 30 years of war.

During 30 years of war and fighting in the 20th and 21st century, Afghanistan's cities infrastructure and predominantly Kabul's infrastructure suffered due to destruction.

It was an illusion of all involved members to believe that 30 years of war damage, where the core intelligence had fled the country and only few left to keep the flag up, can be recovered within 10 years and the society would be able to built a "modern" city similar to what Western countries were able to do after war conflicts.

Afghanistan was different, it was brain drained from the beginning, when the Soviet invasion took place in 1979.

Many young talented students and youth as well as successful businessman vanished and never where found back.

Those who fled - mostly the wealthy and elite's of the society - could not contribute to a well functioning society of the city nor provide any support to the systems or assistance in maintaining public services: They left everything, from owned land to even close family members because of threats and fear of life.

So the question is, was it only the lack of competencies, the illusionary vision of making some thing big out of a basically deserted area in a post-war conflicted country, or were there other factors, that just did not paved the way for the success?

The question is obsolete: Recent and former political realities does not allow a country of such an important strategic location and with enormous amounts of incredibly natural resources, which are in high demand specially for today's modern technologies such as lithium, uranium and cupper, to become an admirable country. There are too many conflicts of interest, in terms of geopolitics as well as in terms of global-politics, which intervene and did so for centuries.

Despite the political struggles, other important factors for an efficient planning of KNC were missed, like the ethnical disturbances and the fact that existing centuries old structures were not being taken into consideration:

The vision for KNC to create through that technocratic planning a so-called social-economical diversity, but not giving planning spaces for the diversity, did not lead to a prospering city situation, because the core existing trade traditions and commerce habits as well as centuries old agricultural knowledge of the society were

not previously studied in-depth. Thus just the mentioning of a social-economical diversity was a well-meaning.

Cities in the modern sense are understood as organism- living organism.

A rigid technocrat city vision that has nothing in common with the social diversity and cultural peculiarity of Afghanistan, was from the very beginning condemned to failure.

After the fall of the Taliban regime in 2001, it was less lucky for the Afghan nation to be rolled over by planners and technocrats from Western and Developed countries, such as Japan, Germany, France, etc. rather than by visionaries.

Most importantly, the visionary was missing, a visionary with updated, sensitive and cultural related planning abilities.

Afghanistan was at that time believed to be a horrific place to live in: Underdeveloped, outdated, almost a "black hole" governed by fundamentalist of "dark minds".

It was no coincidence that most what was thought then, after the doors to Afghanistan were opened again, and an euphoric mood of freedom and development raised, was mainly planned by outsiders imagining a city on their cozy desktops and tables back in their hometowns, but they did not experienced in-depth the city and the peculiarities of the Afghan cultural.

Keep in mind that even today most of the development aid is performed inside compounds, guesthouses, locked and heavily protected territories, where only privileged and registered workers are allowed to enter, but an actual face to face work is rarely given and most important; to experience as a foreigner the daily life culture (Lebenskultur) of Afghans is almost impossible - unfortunately.

Thus, the master plan of KNC did not take into consideration the social context and the existing social dynamics. Efforts were not made to rather prioritize planning steps, such as insisting on a census during the consultation process, instead of misleading a just recovered nation from war conditions and offering a "perfect" technical master plan aimed rather for industrialized countries than for a country with predominantly agricultural and trading background.

Also the well-meant master plan was by than outdated in regard to latest approaches of city planning:

In the first half of the 20th century, planning was a highly centralized approach, by the middle of the 20th century a "decidedly modernist vision of city planning had spread across the globe. In the process many of the social concerns of urban

planning pioneers had given way to top-down, universalizing approaches that were overly rational and insensitive to social and cultural diversity." (Bell, J., Fox, S. 2009: 203)

The KNC vision failed: it failed because it was a stiff plan with no flexible and interactive planning approaches. Communities and citizens were neglected, plans were drawn and ideas were developed according to personal preferences of the planners, but not according to the needs and desires of the citizens.

An exact census of the existing population would have had helped a better and a more sensitive, feasible planning on a smaller scale. Determining areas of higher density in existing Kabul would have had maybe avoided the unnecessary expenditures that were done for KNC: All ended up in the archiving systems but a physical existence of a desired and needed city or city part had to be abandoned.

To cite Sigfried Gideon from his book Space, Time and Architecture: "...There must be a vital inter-relation between the vision and the reality developed...The planner just makes decisions on arrangements. The final appearance will be left to the synergy of given circumstances." (Giedeon, Sigfried 1976: 484)

That synergy never happened unfortunately for the KNC project, neither could the planning give solutions and case sensitive approaches for a successful implementation nor space for rethinking the vision.

The precondition of a culture was missing, which would have helped to understand a master plan of that dimension and perfectionism. To refer to Sigfried Giedeon's "cultural precondition" - "Voraussetzung einer Kultur": "Before we stipulate an entity of emotional, intellectual and political culture in a disorganized world, we have to recognize first how much the Emotion (Gefühlsmäßige) and the Intellect (das Intelektuelle) are related to each other and how much we have become closer to the preconditions of every culture: The affinity between the methods of intellect and those of the emotion.....Every human act is formed unconsciuosly by a certain emotional background......\$0 we come across this Paradoxan that in our times the feeling is more difficult than the thinking (free translation)." (Giedeon, Sigfried 1976: 510-511)

The master planing of KNC was based on lintellectual and regulative parameters of "Western" planning criterias, but the actual sense for what is necessary for a society such as the Afghan, was not felt, not to mention a social analysis which was not even performed.

The indoctrinated city vision would have had been more appropriate for an industrialized and advanced society, while the Afghan economical culture and history was and is to 90% on agriculture and trade. How could it be of reason to plan as it would have been an industrialized country? Specially after the war, that little industrialization that Kabul had experienced 40 years back, was gone forever.



78: Jangalak, Former Industrial Area in Kabul, Destroyed During the 30 Years of War Between 1989-2000, 2015 $^{[96]}$

As it is a very predominant fact in Kabul the majority of people create their own settlements informally and do not pay much attention to any centralized vision of planners or entities, and they service their settlements according to their own specific needs and preferences. (Bell, J./Fox, S. 2009: 204)

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[%] Image by the Author, April 2015



79: Baba Kushqar Village in Dehsabz, 2014 ^[97]

In this context it would have been maybe better to determine existing villages and areas of KNC, such as Paymonar as a zone in Dehsabz and the village Baba-Kushqar, which have potentials for growing as areas while keeping their rural appearance, and encouraging rather and convincing people to start improvements within their territories through mutual, communicative and cooperative discussion and solutions proposals:

Proposals of refurbishing and giving an ancient shrine in Paymonar a better access, better infrastructure and refurbishment ideas for the building structure and garden area, might have had a smoother start for real "development" rather than trying tense a "modernization".

⁹⁷ Image by Author, April 2014



80: Paymonar looking from the South and the Shrine of Paymonar, 2014 $^{[98]}$



81: Paymonar's semi rural area- a traditional family "fortress", 2014 ^[99]

⁹⁸ Image by Author, April 2014⁹⁹ Image by Author, April 2014

4.2 HOW CITY VISIONS CAN HELP

City visions can help when the major challenge is absolutely clear and the greater task totally understood on all levels that urban planning is coherence with:

- Territorial/region level (diverse climate)
- Land and property (state and private ownership relation)
- Social level (ethnical diversity)
- Cultural level (tradition, religious diversity and consciousness of identity)
- Political level (government interests)
- Management level (when, what, where and who)
- Implementation level (time, scale, area)
- Spiritual/metaphysical level (presence of mind and sense of atmosphere)
- Creative level (changing of mindsets, thinking out of boxes)

Visions can work by magically interplaying all the above mentioned levels of planning, keeping in mind the cultural, social and political context along with the specific time and space relation.

City planning processes are evolutionary and need a constant supervision as well as consistent feedback between participants and involved people and partners and they demand to make right decisions for the well-being of future generations.

Empirically it is of importance to keep in mind the bigger vision, but to act appropriately on time in reaction to given circumstances or changed situations.

"Good city building is not created by complex statistics, functional problem solving, or any particular decision-making process. Successful cities instead come from people advocating easily understood human values and principles that take into account the sensory, tactile, and sustainable qualities of environment and design in relation to what is the best of human endeavor" (Kriken, J. L. 2010: xi).

City visions can help when they are authentic and unique and not a repetition of technical formulas and masks of strategies, visions and methods performed elsewhere.

Visions have to have an identity and can not be taken over to other situations, regions, countries, places, cultures and households.

In the case of Kabul New City vision, attempts were made to understand the post-war conflicts on urban levels, such as the strain of lacking infrastructures and services, also the necessity of keeping the agricultural areas intact as a complementary in addition to the creation of a new city, but it lacked to transfer the well-meant ideas in an appropriate manner, to keep conformity with the "Afghan-Style" and scale. It was a theoretical approach not a "felt-right" one, nor a feasible implementable vision with regard to costs, time, scale and culture (Afghanistan nominal GDP currently amounts to ~19,654 Billion per year, the water resource for KNC would have cost according to JICA studies of 2008 ~810,6 billion!).

It would have been better to brainstorm to think out of the box together with the communities and villagers and invest in core infrastructural projects, or iconic buildings and religious or symbolically important buildings within the Metropolitan Area of Kabul, instead of providing land use -, transportation, infrastructural plans for an estimated 3 million people without consultation of them, a city, which could never be built anyways, as already research projects proved that most of the Afghan people settle down informally:

Already in 2005, a research paper's evaluation was: "....informal dwellings now constitute the bulk of Afghanistan's urban housing stock. In the face of inefficient and unresponsive government departments people seek solutions for themselves. When these relate to goods such as water supply and sanitation, a level of coordination is necessary for the good of the city at large, something that is usually absent when local "do-it-yourself" approaches prevail. Moreover, when people lose their trust in government and opt out of the responsibilities of citizenship, for example by not paying taxes, this can adversely affect revenue generation and ultimately official delivery capacity and potential." (Beall, J./Esser, D. 2005: 7)



82: Informal Settlement in Kabul Area, 2014 [100]

To sum it up: as nowadays approaches and experiences were being evaluated, participatory visions of a right scale can be easier implemented.

The today's dynamic demographic changes and global insecurities, suggest to plan and be focused on scales between 1:5,000-1:2,000.

Master planning in a scale of 1: 10,000 will lead to failures in the 21st century of globalization and demographical changes on a high scale, and as the technological speed of development is so advanced that visionary planning proposal meant for the next 20-30 years is irrelevant.

The following graphic demonstrates this scale of failure and success in regard to the scaling of urban planning and assumes:

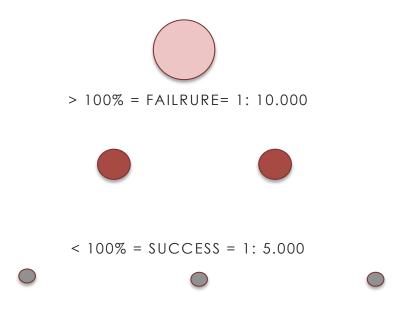
If the expansion for a city is more than 100%, the vision fails.

If the expansion is less than 100 %, the vision can be a success.

If the expansion is less than 50% the vision will be reality.

¹⁰⁰ Image by the Author, June 2014

Failure and Success Scale of Visions



< 50% = REALITY = 1: 2.000

83: Failure and Success Scale [101]

Visions are more tangible while performed in a scale, that is understood even by sensible common people. When visions burst out as the KNC project showed, they tend to become failures, specially when they are top-down visions for societies not being ripe for any "modernist" development, and not being equipped with the 'cultural pre-condition'.

The vision could have been only successful, if a small scaled and evolutionary approach had been advised based on the concept of an organism:

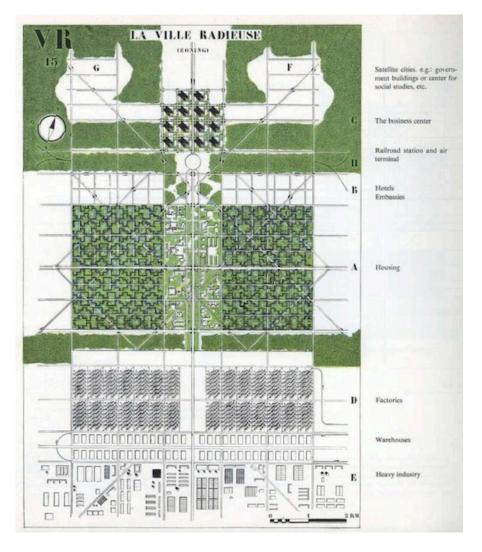
 $^{^{\}rm 101}$ Graphic by the Author, September 2016

Successful visions are comparable to human kind's desire to grow as well as to be immortalized: So they naturally envision a newborn child that guarantees the immortality in a broader sense. The idea and the making of a child might be easy, but to grow it and let it become self-sustaining and functional on his/ her own feet requires a minimum of 18 years. And still they need to be guided by permanent mental and advisory support. Most of the development support failed, as in case of KNC because no more help was offered, when it was most needed: After 10 years.

4.3 IF CITY VISIONS CAN NOT HELP

The question contained in the title implicates that not all visions, as seen in the case of Kabul New City, necessarily help to contribute to a proper development or urbanization processes, in particular not in post-war or fragile and conflicted territories.

Also during economical and political crises, some well-meant visions are predestinated to fail and thus different solutions or different ways of existing mind sets are needed.



84: Radiant City Hierarchy by Le Corbusier [102]

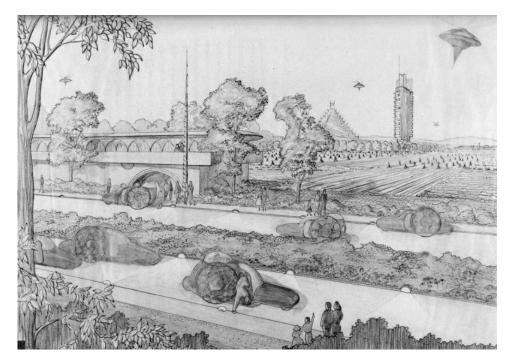
¹⁰² https://www.pinterest.com/pin/306385580872340315/

In 1930, Le Corbusier was introducing *Radiant City*, a city vision, that provoked a social reform, and where traditional social structure were abandoned for a more harmonic life order, in which man and women are a unite of partners sharing equal rights and where man and woman equally go to work and share facilities within a building complex. Everything is regulated, like the day care of the children, the household and other facilities for the daily needs. For the administration, Le Corbusier envisioned a "pyramid of natural hierarchies" created by a harmonized and controlled structure (Fishmann, R. 1977/1989:227).

Almost parallel to the time, when Le Corbusier was emphasizing that a created plan is necessary because the *Machine Age* requires conscious control, Frank Lord Wright thought of a different vision of cities around 1929:

He was more concerned about the dangers urban life opposes to the mental health as does the urban economics to the physical well-being, as cities have made the Man a piece of cheap speculative property by paying high rents for the dwelling and proposed the Usonian City as a solution for his Broadacre City vision (Fishmann, R. 1977/1989: 125).

Real democracy in the sense of Wright's Broadacre City lays on the distribution of land to society – that is how society would become independent and a nation of independent farmers and proprietaries would be born. They would create their own communities and provide, presuming by own means, services and areas for creative work, leisure, entertainment and administration. A decentralization of social practices and a more family-oriented city vision was introduced.



85: Usonian City by Frank Lloyd Wright [103]

Broadcare City vision failed completely, in contrary, the city visions of Le Corbusier became as a modernist style popular around the world and was surprisingly "chic" till the early 21st century- almost 100 years later.

Visions, no matter what kind of visions, visions for a social or political reform for change of systems or visions for a better city plan can fail, if they don't have the fruitful ground.

That fruitful ground can be found or not be found on many levels:

It can be the intellectual level, that without high-tech or advanced knowledge, feels fundamental necessities and can judge right from wrong by nature or it can be the educational level transferred through a wealthy and healthy society and commerce.

Last but not least, there can be the political level as a fruitful ground for the realization of a great vision.

In case of some of the above mentioned levels are not existent for the majority of areas, a single transmitter could possibly hold the great idea and vision for an entire nation.

¹⁰³ http://paleofuture.gizmodo.com/broadacre-city-frank-lloyd-wrights-unbuilt-suburban-ut-1509433082

A transmitter equipped with a great character and leadership, who can conquer life situations, such as Alexander the Great did.

Especially in former tribal and nomadic cultures, great personalities are very much honored and their believe and knowledge are easily followed and adapted.

Such a transmitter or leader for the vision of Kabul New City was missing. The visionary for KNC had only one thing in mind: Self-praise.

But it was not the only misfortune: Afghanistan counts today as the second highest country for corruption and bribery- the government was and is assumingly involved: Mafia and land grabbers prevented the development of KNC massively.

As Beall and Esser stated in their research already in 2005: "The need for flexible approaches as well as cooperation and coordination between government departments and between government and residents is particularly acute in the context of land administration and housing, where local commanders, some allegedly with the backing of central government, have been involved in large land grabbing operations in the west and the north of the city (Kabul)." (Beall, J./Esser, D. 2005:12)

Originally the 740Km2 area of KNC was up to 70% state-owned land. In 2011, when the master plan and the first structure plan for phase 1, were already approved, only 20% of the land was still under the State property. The rest was given away through fake documentations and bribery of people in charge for land acquisition and land transfer of the specific entity or possibly through direct government support.

Though, the reasons for the failure of KNC projects can be summed up having two main causes; First the lack of strong backup by the government, and secondly by the misleading and inappropriate planning proposals of donors, better solutions had to be offered.

In case of Afghanistan, the Broadacre City vision of F.L. Wright could be taken as a possible alternative to an updated approach for city planning as the experience shows that in traditional societies the top-down and centralized planning becomes obsolete, as people try to govern themselves and are used to follow their transmitters, such as their elders and hero's. Not that this tradition shall be kept, but different approaches as to how to distribute land and allowance on use of land under strict national control, could be a possible solution for Afghanistan and its cities. This way it could be a culturally understood interference.

As a conclusion, it can be said that the almost 100 years old vision of a motorized, "machine-age" city is démodé.

As we live in a computerized, and globally connected world, where neither time nor space do play an imment role in the creation of places, city visions of sustainable indurance become rather important, as we gradullay lack of sweet water, gas and oil including other natural resources such as clean air and green environment.

Tendencies of latest urban planning has shown that it is rather of importance to act and build locally in the 21st century, while keeping globality and its effects on regions and places in mind. City planning has become more a "plac-making" act, which can be successfully achieved within a period of 3-5 yeras, while master planning took and will take 10-30 years.

In this context the below graphic shows that the architectural plan (as the local thinking) and the regional ('globally' thinking planning) might be a better future-orientated urban process.

Levels of Visions

Reginol Planning under State Control Master Plan Strategic Plan Detailed Plan Architectural Plan

86: Levels of Vision [104]

 $^{^{104}}$ Graphic by the Author, September 2016

4.4 THE NEED FOR BETTER VISIONS

As already concluded earlier, visions have to be locally implementable and globally bearable.

We live in a world of constant changes and instability: we often get confronted with changing the workplace and thus the living place, we get overwhelmed by all sorts of information through mass media and social networks, we seek for alternation in ordinary life, we consume different taste and we visit different places to see different faces, at the same time, each day while walking along city streets of high density, we rarely meet the neighbors. We live even our relationships in a far more distant way in the modern times, as technology allows us to meet virtually basically every minute through different social networks.

This scenario on the social fabric is comparable to what a citizen of developed country might experience in a big city.

In developing countries things are happening rather slowly, but the effects of modern technologies have shown the same behavior pattern in societies of the 21st century.

Developing countries citizens living in dense urban areas as well experience constant changes, flooded by mass information, but these mass information are not provided only by mass media, they are also through the family members, making up an average of 6-10 people per household.

One could imagine, that the chaotic character of an Asian city, such as Kabul is simply based on the "old-fashioned" way of family living jammed together in a 50-100m2 house/flat or in a 400-600m2 villa. Others are homeless people, or internally displaced people, getting up every morning in their tents or shelters to find a peon or to beg for some daily food.

In such jammed city areas there is little privacy and space for personal development let alone self-realization, as people of more developed countries in average often experience and do.

Nonetheless, in our global world these two images do coexist and we get through the social networking and media confronted with these discrepancies that both sides face: the people from the developed countries and the people from the developing countries.

The people from developed countries are better served with basic infrastructures, such as tab water, permanent power supply, central heating, public transportation, uncorrupted administrative processes and people following rules and

regulations. The opposite exists in developing countries, such as Afghanistan.

Globally seen, how can this discrepancy be balanced on a city scale?

It is the most challenging question one faces in our times.

Kirken suggests in a published book nine principles of how to manage the discrepancies of our globalized world through nine planning principles, namely (Kriken, J. L. 2010: 8):

One: Sustainability
Two: Accessibility
Three: Diversity
Four: Open space
Five: Compatibility
Six: Incentives
Sven: Adaptability
Eight: Density
Nine: Identity

He philosophies that "ultimately, sustainable, livable city design does not come from complex statistics, functional problem solving, or particular decision-making processes. Successful cities instead come from advocating easily understood human values about the sensory qualities of the environment and then designing to transform those qualities into sustainable realities. The nine principles can be applied globally, recognizing that they will vary by local climate, culture, and geography (Kriken, J. L. 2010: 241-246).

Research papers in the urban planning fields opposing different and more futuristic planning approaches, foremost in regard to modern use of technologies, called the *Smart City Concept* (Bawa, M/Caganova, D./Szilva,I./Spirkova, D.,2015: 607-611).

- Smart Government (Technologies provided that are speedy, transparent and associable, safety and security, participation to cooperation of citizens to Government)
- Smart Utilities (use of renewable energy and recycled products)
- Smart Economy (Public Private Partnership)
- Smart Mobility, Environment and Living (Urban Transportationuse of public transportation, homes with Internet of Things (IoT)

The "Nine Principles' as well as the future-oriented suggestions of creating a "Smart City" are from the perspectives of Western societies.

With regard to a better city development for Kabul City, it might be better to keep the chaotic flair as it is the most existing experience one can have in a an urban area. It is exiting

because as mentioned earlier, most of Kabul citizens and other urban areas in Afghanistan have been created by own rules and visions for their private space and also some public realms.

The basic understanding of neighborhood help and support are inherited and generally manifested in their believe and faith of most of the citizens through centuries.

While the visions of the developed countries are based on technocratic planning approaches, there are as the Kabul New City project showed useless for a country such as Afghanistan.

It is redundant to generalize a better vision for urbanity, that would exceed limits of imaginations, but for Afghanistan's situation in particular, the following are ideas, which could be implemented on small scales:

- Providing the framework and structures
- Being flexible but providing better/improved alternatives
- Encouraging use of alternative power supply (solar systems) and recycling methods (reuse of bottles and papers, avoiding plastic bags)
- Revitalizing old handcrafts, trades and skills and keeping he old bazar structures
- Facilitating rather than dictating, showing ways of possibilities
- Feeling the space and atmospheres of the environment/surrounding and underlining their characteristics and advocating them to the locals
- Avoiding segregation but keeping existing areas of traditional trade and ethnics as historical evidences and cultural heritage
- Reintroducing existing city patterns and services patterns (Saqauw- Water Delivery Service by a single person, that is carrying the spring water in a "leather bowl" or the improvement of onsite dump and sewage, which is still used in mostly informal settlements
- Refurbishment and awareness of traditional techniques for water distribution and supply (revival of Karez-systems) as well as use of the flat roofs (formally and still used for drying fruits, vegetables and salted meat)
- Empowering and (re-)integrating the female part of society in planning processes (Reintroduction of Park Management by woman as it used to be at Babur Shah times)

- Improvement and redesign of the Bazar characters
- Creation of 'Car-Free-Zones" within dense and recreational areas
- Reintroduction of Public Transportation

Small steps of a big vision, namely to keep the identity of the cultural heritage and to avoid superimposed principles of other societies with regard to their view and perception of city planning, still not loosing the common ground and principle of globalism, such as saving the environment, especially the water and rare resources.

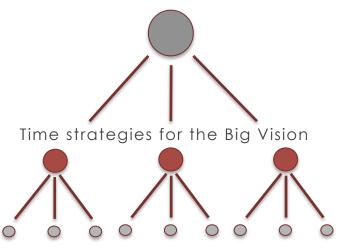
Introducing and explaining the steps of the bigger vision to people, might lead in future to a better situation of existing dilemmas in the urban field of Afghanistan and mainly Kabul city.

Simple but useful visions that are in the long term beneficiary to people and habitants and make sense, like improved centralized water systems, that need a bigger investment in the beginning but would at the end lead to a prosperous area/place and region.

Civilization in the region of Afghanistan has existed since thousands of years and as mentioned in the beginning, the Harappa civilization were highly urbanized. The cities were well planned with streets, public and private wells, drains, bathing platforms and reservoirs.

All that is possible to be revived instead of copy-pasting Dubai scenario or Manhattan skyline on Kabul city or outskirts. The vision of an authentic place of its own shall be promoted in the future for urban areas of Afghanistan.

The Big Vision



Successive Steps for the Big Vision

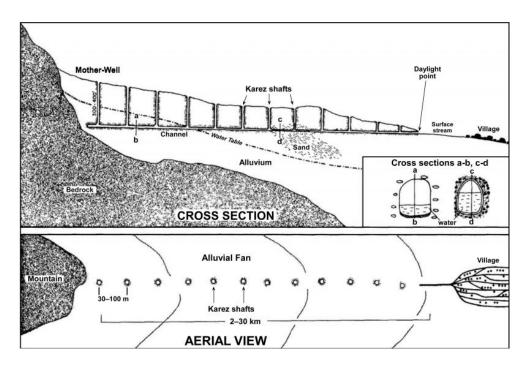
87: The Big Vision [105]



88: 'Saqaw' – Water Carrier Afghanistan -~1970 ^[106]

¹⁰⁵ Graphic by the Author, September 2016

¹⁰⁶ http://www.pashtunforums.com/hujra-/42173-regionalism.html



89: 'Karez' – Traditional Water Channeling System in Afghanistan [107]

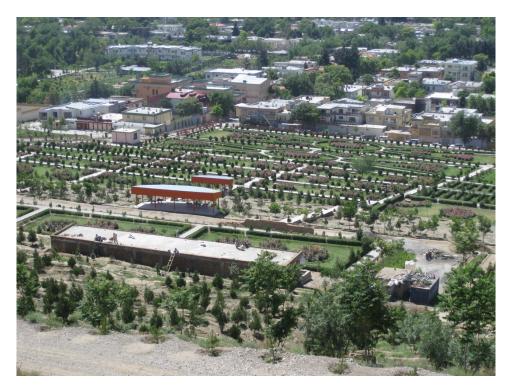
KNC should have become an authentic place of its own: 40 years back, Kabul was famous for its beautiful gardens and human scaled 2 to 3 story houses with some minor iconic high rise modern buildings.

At that time, Kabul had an identity, incomparable to any other cities, surrounded by the unique mountainous landscape and spatial strain and it used to be famous for its hospitality.

It is rather the vision of transferring modern technologies in a sensitive way, providing infrastructures that serve people and not obstruct them from the essence of life.

Centralized canalization, clean centralized water supply and constant power supply as guaranteed either through sustainable solar energy or through traditional means, which was existing (through Karezes).

¹⁰⁷ http://www.mei.edu/content/necessity-karez-water-systems-balochistan



90: Wazir Akbar Khan A Notion of the Kabul City's Diplomatic Area, 2010^[108]

The rest, I realized is pretty much bearable. Kabul's eclectic and terribly under-designed architectures, the masses of crowds, the daily smell and smoke of all the Kebab dealers, make up Kabul, without them it would loose its uniqueness and special atmosphere. A complete re-make by destroying existing city structure as it was done almost hundred years ago to many historical building souls and typical areas vanished into the eternity, than again city planning would fail in this unique context.

In a Colloquium organized by the Federal Institute of Technology Lausanne (Dr Kaj Noschis), in collaboration with the Aga Khan Trust for Culture and also with support from Swiss Agency for Development and Cooperation, as well as the Canton of Ticino in 2004 under the title "Urban history and development of Kabul: Reconstruction and planning issues today", Marcus Schadl from Aga Khan Trust expressed the importance of the historical and rich past of Kabul and that it is only lately that it has become the center of a real population explosion.

He than stressed out to keep a historical perspective in mind for all plan views on Kabul.

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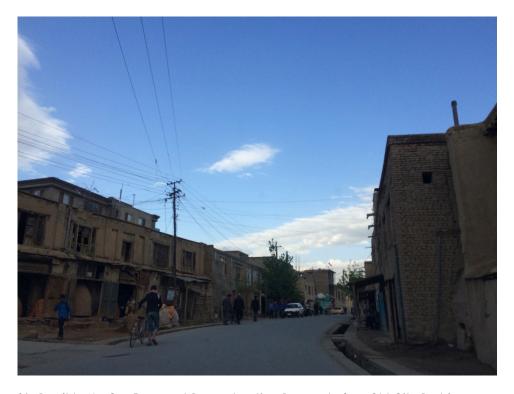
¹⁰⁸ https://bo.wikipedia.org/wiki/File:Bebi_Mahroo_Park_in_2010.jpg

Back to the roots as of to keep old existing structures in general for all urban areas of Afghanistan.

And last but not least, becoming a pioneer in being a top environmentally friendly society by creation of No-Car-Zones in different city parts or areas, or use of cars that are hybrid, even simply promoting the use of more bicycles and introduction of cyclist path could be a better vision.

Investing in sweet water delivery based on sustainability and environmental friendliness: These could be some major aspects for a better urban life vision.

Let the *Kabulis* make their city a 'Paradise City' by advocate them into the right and essential directions: even when the appearance is not yet as some would think of paradise, but the feeling should be- as it is for me.



91: Possible No-Car-Zone and Reconstruction-Proposal of an Old City Part in Kabul-Sharara 2015, 109

¹⁰⁹ Image by Author

THESIS/ TÉZISEK

- 1. Without cultural identity urban planning visions fail mostly.
- 2. If the scale of planning exceeds a timeline of more than 5 years, visions stay visions as they are not feasible according to social-economic dynamics.
- 3. In extreme social-economic dynamics, the scale for urban planning shall not exceed a scale of bigger than 1: 2500.
- 4. Urban planning visions are most successful, if the cultural and historical context have been understood by the planner as facilitator, and if community participation has taken place by own ideas and engagements.
- 5. To refer to the term "Topos" of Aristotle the "place-space": Space for the region and its context to design places in form of quality architecture not only functional architecture but architecture of cultural identity to avoid generic cities and create again "genius-loci"- the inimitable place and space.
- Introduced is the "better vision-concept" of planning approach, which is contextual in space-place-making, socially orientated in terms of history, heritage and culture.
- 7. Urban plans in a scale of 1:10000 are destined to failure in the dynamic, constantly fast changing and permanently interacting globalized world.
- 8. Regulations for regional planning in a world being endangered to run out of natural resources that are existential, such as water have to be nationally reinforced and internationally recognized and protected.
- Characteristic of traditional building styles, type, techniques and materials have to be reintroduced to planning visions, especially in fragile and developing countries.
- 10. Thinking globally, acting locally for better place-space-making should be more emphasised.

(Free Hungarian Translation of Thesis)

- 1. A kulturális identitás nélküli várostervezési víziók többnyire sikertelenek.
- Ha a tervezés léptéke meghaladja időben az öt évet, akkor a víziók csak víziók marad, megvalósíthatatlanok mert nem tudják követni a társadalmi és gazdasági változásokat.
- 3. Rendkívüli a társadalmi és gazdasági változások esetében a várostervezés léptéke nem kellene hogy meghaladja az 1:2500 léptéket.
- 4. Várostervezési elképzelések akkor a legsikeresebbek, amikor a kulturális-történelmi összefüggést megértette a tervező, mint folyamatvezető és a közösség részvételén keresztül, annak saját ötletivel és kötelezettségeivel.
- 5. Felelevenítve Arisztotelész "Toposz" kifejezését a "helytér". A tervezet "hely" magas színvonalú építészet formájában kell hogy illeszkedjen a "tér"-hez, annak régiójához és ahhoz lévő kapcsolatához. Az építészet nemcsak funkcionális, hanem az építészet kulturális identitását használva kell elkerüljük az átlagos városokat és újrateremtenünk a "Genius-Loci"-t, vagyis az utánozhatatlan helyet és teret.
- "Jobb vízió koncepció" tervezési szemlélet bemutatása, amelyben összefüggés van a hely-tér-képzés és történelem, örökség valamint a kultúra felé orientált társadalom között
- 7. Várostervezés 1:10000 léptékben előre elrendelt sikertelenségre van ítélve a dinamikusan és folyamatosan gyorsan változózó és állandó kölcsönhatásban lévő globalizált világban.
- 8. Nemzetileg megerősített és nemzetközileg elismert rendeletek kellenek a regionális tervezéshez egy olyan világban ami veszélyeztetve van hogy kimerülnek alapvető természeti kincsei, mint például a víz.
- 9. Tradicionális épületstílusok, típusok, technikák és anyagok jellemzőit kell bevezetni a tervezési víziókba, kifejezetten a törékeny és fejlődő országokban.
- 10. Globális gondolkozásnak, helyi cselekvésnek a jobb helytér-képzés érdekében nagyobb hangsúlyt kellene kapnia.

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ABBREVIATION

ANDS Afghanistan National Development Strategy
BCE Before Christ (Before the Common Era)

CEO Chief Executive Officer

CES Centre for Environmental Studies
CIA Central Intellegence Agency

CIAM International Congresses of Modern Architecture

DCDA Dehsaby Citz Development Authority
EAI Enterprise application integration

GTB Grupo de trabalho de Brasília (task force of

Brasilia)

ha hectares

IIU International Ilsamic University

JICA Japanese International Cooperation Agency

KMA Kabul Metropolitan Area

KNC Kabul New City MK Milton Keynes

MKDC Milton Keynes Development Corporation

MOME Moholy Nagy Müvészeti Egyetem MOOC Massive Open Online Course

NOVACAP Urbanization Company of New Capital of Brazil

RMO Risk Management Office

UNESCO United Nations Educational, Scientific and Cultural

Organization

WUF World Urban Forum 3D 3 Dimensional

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DECLARATION OF ORIGINALITY

I hereby declare that to my best knowledge this dissertation and my thesis do not contain any copy of works published by other authors, unless remarked and metioned in the text. The dissertation or any materials of this content have not been previously presented for a degree at Moholy Nagy University of Arts and Design in Budapest or any other universities in the world.

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92: Revival of Window Ingravements of Murad Khani- 2010- A handcraft skill that is still known ^[110]

¹¹⁰ Image by Author