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## **MASTERARBEIT**

*one step away*

**ausgeführt zum Zwecke der Erlangung des akademischen Grades  
eines Diplom-Ingenieurs /Diplom-Ingenieurin  
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*This work is dedicated to our families, as a thank for neverending understanding and support.*

*One afternoon, while walking over the Red Square's pavement, passing by the golden onion shaped domes, red bricked walls and facades, we stopped just beside the beautiful cathedral with its domes colored with a "touch of rainbow". We looked on the right side. There we saw a part of Kremlin, above the red bricked wall. Down below was the Moskva river. Then we made a decision to walk further, to see them all from there. It was just...*

## **One Step away**

*sanja grujicic & jovana vukovic*

2011



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Overlooking Kremlin to the west, Saint Basil's Cathedral and Zaradye to the north, and the Moscow River to the south, this project is a vital part of the heart of Moscow. It visually connects the most significant historical monuments. In addition to improving the cultural hotspot, it also places emphasis upon providing abundant green space, paved public space and pedestrian routes. However, heavy traffic around Kremlin is a serious problem for the pedestrians. Not only does this problem represent the weakest point in this famous tourist destination, but also makes Moscow River totally inaccessible.

The new master plan creates a new quarter, a new tourist location and a place with important qualities for the city. It keeps in mind that, besides creating a continuation of cultural hotspot, there should also be a generosity of green areas, diverse public space and pedestrian paths.

The goal of this project is to modernize Moscow city centre while maintaining a warm green city feeling. This will preserve the colorful Moscow culture and history and make it a part of new modern, but yet human city.

# intro



Fig. 01 - Painting "Winter Scene in Little Russia", Aivazovsky, Ivan





Fig. 02 - Russian Federation

For a long time the world did not know what to make of the land that was hidden behind the Iron Curtain for decades. In the words of the renowned 19th century poet Fyodor Tyutchev, “You can't understand Russia by your mind”<sup>1</sup>.

“The country has been reported variously as a land of unbelievable riches and indescribable poverty, cruel tyrants and great minds, generous hospitality and meddlesome bureaucracy, beautiful ballets and industrial monstrosities, pious faith and unbridled hedonism. These eternal Russian truths coexist in equally diverse landscapes of icy tundra and sun-kissed beaches, dense silver birch and fir forests and deep and mysterious lakes, snow-capped mountains and swaying grasslands – those famous steppes. Factor in ancient fortresses, luxurious palaces, swirly spired churches and lost-in-time wooden villages and you'll begin to see why Russia is simply amazing.”<sup>2</sup>

Connecting nine time zones, Russia is the largest country in the world by landmass with just one part of it, namely the Russian Far East, being as big as Europe. Nevertheless, Russia is not the most populated country (it is on the sixth place in terms of population)<sup>3</sup>, because of huge areas in the north and east being inha-

bitable. Russia is, because of its size, a country of big cultural variety. Therefore, one cannot simply analyse Russia in the way you can analyse other countries. It is “a collection of countries, each one deserving exploration”<sup>4</sup>. The important border that separates not only two continents- Europe and Asia, but also two significantly different cultures of one country- eastern and western, is Urals. The cultural and architectural highlights can be found in the west of Urals in an area known as the European Russia.

Religion is traditionally an inseparable part of the Russia. It is important to mention that most Russians are orthodox. Nevertheless, we have to bear in mind that for more than seventy years, this country used to proclaim atheism as the official state religion. Therefore, it is not a wonder that they often say that most of them cannot be called true believers. However, even though they do not follow the Christian moral values, they do respect them. In essence, religion does not play a big role in how they live their lives.

Education and culture were always very important to Russians and Russian culture is famous for its rich history. Russians have a long tradition in many aspects of arts and their literature, philosophy, painting,

architecture, classical music and ballet have influenced cultures in many parts of the world. Widely spread and accessible education and cultural facilities have made Russia the land with the highest education level in the world. More than 40 percent of Russian population has college or university degree, which is why Russia has the reputation of being a highly educated and cultural nation with very high level of general knowledge.

It is very difficult to succeed in Russia as an individual, as the common Russian saying ‘one is not a soldier on the battlefield’ points out. It is all about achieving your goals by knowing the right people. And they take care of each other. This is why maintaining friendship is very important to them. In addition, their family ties are much stronger than in other cultures and are shaped by dependence. It is widely known that Russians are very attached to their family.

They are also known for their patriotism. Belonging to the largest country in the world that is also known by its strong cultural heritage, Russians are proud of their country which can be seen in their statements such as “We are Russians!”

The country was strongly influenced by the Western European culture. Ivan the Great erected the

<sup>1</sup> “You cannot understand Russia with your mind. You can't measure it with universal dimensions. Russia has something special. In Russia you must simply believe.”

Moscow city. Source:

<http://members.virtualtourist.com/m/81690/90a60/#ixzz1OTxEpEca>; Retrieved on 14.09.2011

<sup>2</sup> “Russia travel guide”, Lonely planet Travel guide; Edition: 5th Edition, Mar 2009, Authors: Simon Richmond, Mark Elliott, Leonid Ragozin, Michael Kohn, Robert Reid, Marc Di Duca, Mara Vorhees, Marc Bennetts, Greg Bloom

<sup>3</sup> The Washington Post, Country Guides “Russia”; Source:

<http://www.washingtonpost.com/wp-srv/world/countries/russia.html>; Retrieved on 14.09.2011

<sup>4</sup> “Russia travel guide”, Lonely planet Travel guide; Edition: 5th Edition, Mar 2009, Authors: Simon Richmond, Mark Elliott, Leonid Ragozin, Michael Kohn, Robert Reid, Marc Di Duca, Mara Vorhees, Marc Bennetts, Greg Bloom

Kremlin fortress making use of the Italian workforce. Peter the Great built Saint Petersburg using European capital cities as a benchmark for his building projects. And now high-class western shops and streets overcrowded with European luxury cars show that West still has a strong influence on their culture. But still, the key difference between these two cultures is their lifestyle and way of thinking. Some would say that Westerners live to enjoy, whereas Russians live to work hard.

However, Russia became part of modern globalization rather late. Before the Soviet Union collapsed in 1991, Russia was the most powerful communist country in the world and was known for the cold war with America and the capitalist west. state owned all the companies and it was also the owner of the 95% of the farmland. With the proclamation of the Russian federation in 1991, companies that were not employing more than 10,000 workers and were not suppliers of gas, oil, or pharmaceuticals were able to become private<sup>5</sup> entities. Russia today is part of the BRIC (Brazil, Russia, India and China) countries, also known as the fastest growing economies. It is its key natural resources in oil and gas that make Russia so

powerful. Through these resources, Russia was able to extract high earnings that facilitated its recovery from the economic collapse in 1998. Russia has come a long way from being a communist country to being a key energy supplier that has opened to the world. “It is not the Soviet Union, nor the land of the czars. In the short term, most Russians cannot hope for much, especially from their leaders. But with its political reforms, 98 percent privatized economy, and educated, urban population, Russia has a great deal going for it-maybe more than China.”<sup>6</sup>

Russians made the transition from being completely controlled by the Soviet to not being controlled at all and be left to the uncertainty of their future. Due to this sudden transition from sternly controlled system to the system left to the market’s mercy the situation in Russia was chaotic. Whereas some Russians became suddenly extremely rich, most of the population found themselves in the economic misery.

However, in spite of economic and political chaos, Russia succeeded to become a formidable political, cultural and economic world power. After all, Russians are survivors!

<sup>5</sup> The Washington Post, Country Guides “Russia”; Source: <http://www.washingtonpost.com/wp-srv/world/countries/russia.html>; Retrieved on 14.09.2011

<sup>6</sup> “Can Russia change?” by David Remnick; January/February 1997; Source: <http://www.foreignaffairs.com/articles/52642/david-remnick/can-russia-change> Retrieved on 14.09.2011



Fig. 03 - Russian Orthodox Service, Moscow

The dynasty that established Rus and later Russia were the Rurikids. They are known as one of Europe's oldest royal and ruling dynasty of Kievan Rus after the Year 862. They put the foundation for the Tsardom of Russia.

The Vladimir-Suzdal Principality was one of the most important countries which succeeded Kievan Rus in the end of 12th century. It was under the rule of Mongolian Golden Horde for a long time. It is considered to be a cradle of the Russian language and nationality.

The Tsardom of Russia was a centralized Russian state founded in 1547 with Ivan IV's postulation of the title of Tsar that lasted until 1721 until Peter the Great's establishment of the Russian Empire. This period is marked by political upheavals and change from the Rurik to the Romanov Dynasty, military clashes and the Russian conquest of Siberia.

The Russian Soviet Federative Socialist Republic was founded on 25 October 1917 (7 November 1917 in Gregorian calendar), after an armed rebellion in Petersburg-Petrograd, which was also known as "The Great October Revolution". In March 1918 the capital was again transferred from Petersburg to Moscow.

Russian Federation was established on March 1, 2008 and consists of 83 federal subjects.

It is, currently, the world's largest country.

**RURIK DYNASTY**

**VLADIMIR-SUZDAL RUS'**

**TSARDOM OF RUSSIA**

**RUSSIAN SOVIET FEDERATIVE SOCIALIST REPUBLIC**

**RUSSIAN FEDERATION**

**862**

**1169**

**1547**

**1917**

**1991**



Fig. 05 - The Vladimir-Suzdal Principality



Fig. 07 - Territory of Russia in 1500, 1600 and 1700.



Fig. 09 - Emblem of The Russian Soviet Federative Socialist Republic



Fig. 11 - Presidential Flag of the Russian Federation

**HISTORY TIMELINE**



Fig. 04 - Kievan Rus

**882**

**KIEVAN RUS'**

Kievan Rus' was a medieval state in Eastern Europe, prospering from the late 9th century. It lasted until mid 13th century, when it collapsed followed by the Mongol invasion of 1237–1240.



Fig. 06 "Court of a Feudal Russian Prince"

**1283**

**GRAND DUCHY OF MOSCOW**

The Grand Duchy of Moscow was a late medieval Russian state with a centre in Moscow. This polity was under the rule of Mongolian Golden Horde until Ivan III finally set it free in 1480, unifying all of Russian lands, thereby tripling its territory. Since then, Moscow started to develop rapidly and became the center of Russia.



Fig. 08 - Peter I of Russia.

**1721**

**RUSSIAN EMPIRE**

In the year 1721, Peter I, the Great (1672–1725), officially declared the "Tsardom of Russia" as the "Russian Empire" and became first Russian emperor. Russian empire was one of the leading empires in the world, stretching in 1866 on three continents. Peter I moved the capital from Moscow to Saint Petersburg (Petrograd) in 1712.



Fig. 10 - Lenin and Stalin

**1922**

**UNION OF SOVIET SOCIALIST REPUBLICS**

The Soviet Union ("СССР") was a union of 15 Soviet republics (1956) centered in Moscow. It was one-party political system controlled by the Communist Party. Following the death of Vladimir Lenin in 1924, Joseph Stalin took over the political leadership of the country.

Capital (and largest city)	Moscow
Official language(s)	Russian official throughout the country; 27 others co-official in various regions
Ethnic groups	Russians 79.8%, Tatars 3.8%, Ukrainians 2%, Bashkirs 1.2%, Chuvashes 1.1%, Chechens 0.9%, Armenians 0.8%, other 10.4%[1]
President	Dmitry Medvedev
Legislature	Federal Assembly
Upper House	Federation Council
Lower House	State Duma
Area	Total 17,075,400 km <sup>2</sup> (1st) 6,592,800 sq mi
Density	8.3/km <sup>2</sup> (217th) 21.5/sq mi
Currency	Ruble (RUB) =100 kopecks
Main exports:	Oil and oil products, natural gas, wood and wood products, metals, chemicals, weapons and military equipment
Time zone	(UTC+2 to +11 (exc. +4))
Drives on the	right
Calling code	+7

On the right:

Fig. 12 - Matryoshkas displayed in shop window on Arbat Street.

Fig. 13 - Overhead of traffic during evening rush hour, Garden Ring.,  
Moscow

Fig. 14 - Russian President Dmitry Medvedev

Fig. 15 - Brass band of the Central Museum of Armed Forces.

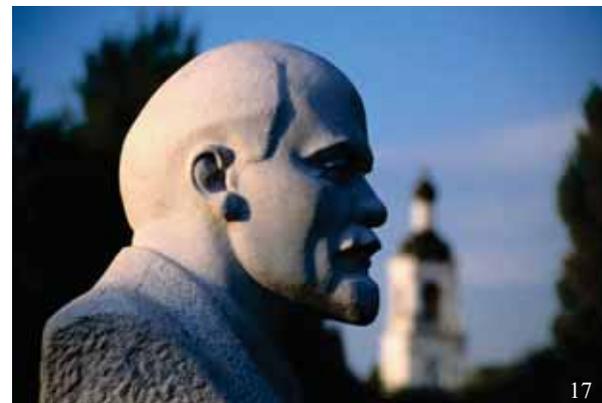
Fig. 16 - St Basil's Cathedral, Moscow

Fig. 17 - Bust of Lenin at Sculptures Park, near Gorky Park.

Fig. 18 - Helmet domes on church in the Kremlin., Moscow

Fig. 19 - Moscow's Russian Winter Festival

Fig. 20 - Vysoko-Petrovsky (Upper St Peter's) Monastery



# moscow history

2

Fig. 21 - Prince and peasant passing over the cobbles of the famous Red Square in Matoushka Moscow



2

Moscow, named after Moscow River, is one of the biggest cities in Europe and the capital of the biggest country in the world, with a relatively short 850 year history. During this period, Moscow has been a target of many aggressors, from Mongols to Napoleon to Hitler. In order to counteract the Mongols, Prince Yury Dolgoruky, who is regarded as a founder of Moscow, erected wooden walls around Moscow.

The first time that Moscow was mentioned was in 1147 when Yuri Dolgorukiy invited the prince of the Novgorod-Severski with words “come to me, brother, to Moscow.”<sup>7</sup> At the beginning of the 12th century, Moscow was only a small town built of wood, where Kremlin buildings stand today. In spite of being under the control of Tatars, Moscow grew into a numerous city with big manufacturing and trade population.

In the year 1480, after two hundred years of Mongol control, Ivan III, also known as Ivan the Great, finally overpowered the notorious Golden Horde and set Moscow free from Tatar control. Since then Moscow started to develop rapidly and became the center of Russia. It was Ivan III who unified all of Russian lands, thereby tripling its territory and made Moscow the capital. By making use of the skilled

Italian workforce, Ivan III built the Kremlin fortress, also known as Moscow’s most prominent landmark. Ivan’s successor, Ivan IV (Ivan the Terrible), kept up the tradition of constructing and expanding the city by building many gold-domed Orthodox churches, thereby altering its skyline. Moscow slowly became more and more influential and by the end of the 17th century, it counted more than 200,000 residents becoming the biggest city in the world. Although, with establishment of Russian Empire in 1712, Peter the Great relocated the capital to Saint Petersburg, Moscow remained a significant political, governmental and economic centre. The importance of Moscow in that period can be seen in Napoleon plans concerning the Russian capital during the French invasion where he states that “If I capture Kiev, I’ll sieze Russia by its feet; if I capture St. Petersburg, I’ll seize her by its head; if I capture Moscow, I’ll strike Russia in the heart”.<sup>8</sup>

Moscow also became the cultural center of Russia with arts and science developing strongly in Moscow. In 1755, Moscow University was inaugurated. Moscow is a native place for many prominent artists, writers, politicians and scientists; writers like Pushkin, Gogol', Tolstoy, Chekhov and

many others were Muscovites, contributed with their work to the glory of Russia.

Famous Russian architects like V.I.Bazhenov and M.F.Kazakov with architecture like Pashkov's house and Senate building respectively made the city one of the most famous capitals in the world. The nineteenth century is also known as the golden age, since in that period Moscow experienced the high point of the arts and science development. Furthermore, the Moscow centre today has the appearance that was formed at the beginning of the nineteenth century. The famous structures, among others, are Alexander Garden, Theatre Square, which boasts the Bolshoi and Maly theatres. Further examples include the buildings of Manezh and the First city hospital. After its rebuilding, Moscow’s way of living changed. Moscow turned from an aristocratic town to a bourgeois one. It became an industrial center with rapidly developing railway communication. However, development was not progressing at the same pace as the growing Russia's needs. The industrial revolution caused the concentration of big masses of unsatisfied workers into polluted and extremely insanitary factory ghettos in the biggest Russian cities, such as St. Petersburg and

7 Comins-Richmond, Walter. “The History of Moscow”. Occidental College; Source: [http://faculty.oxy.edu/richmond/csp8/history\\_of\\_moscow.htm](http://faculty.oxy.edu/richmond/csp8/history_of_moscow.htm); Retrieved on 14.09.2011

8 The steadfast tin soldier. “The patriotic war of 1812”. Retrieved on 29.08.2011 from <http://steadfast.tin.soldier.hotbox.ru/s2/1en.html>



Moscow. Shortages, unemployment and inflation led to growing dissatisfaction with the political system in Russia, which was made worse by the extreme incompetence of the government. According to Alexander Rabinowitch, the author of “Encyclopedia of Russian History” (2004), “it is no surprise that the Russian government was suddenly faced with a growing, increasingly ambitious and assertive professional middle class, waves of peasant rebellions, and burgeoning labor unrest.” Workers all over Russia expected more freedom and respecting of human rights from their employers and government. Moreover, it became clear to the people that Tsar Nicholas failed to pay serious attention to the Duma, an advisory organ which stood-up for civil liberties, and refused to grant their demands.

Furthermore, people were highly unsatisfied with the Russia’s involvement and its role in World War I, which was very unpopular in Russia. The war had brought with itself enormous human collateral damage, no real victories and low morale among the soldiers. People could not understand what the reason was for fighting this war, since Russia was not directly involved in the conflict. Especially people with few or

none political knowledge were more concerned with finding a job and providing food for their families than with fighting the war with no cause. Therefore, something had to change.

Vladimir Lenin and the Bolshevik party members played the key role in transforming the future of Russia. They stirred up social disturbances using them for political reforms. The Bolsheviks were a revolutionary party born out of Russia's Social Democrat Party. They followed the ideas of Karl Marx and believed in liberation of working class from the economic and political manipulation of the ruling



Fig. 22 - Lenin speaking in the open air in the revolutionary year of 1917

classes. Their aim was to achieve a truly socialist society based on equality and were convinced that this transformation will eventually have to happen. “The Great October Revolution”, also known as the “Great October Socialist Revolution” took place on 25 October 1917 (7 November 1917- Gregorian Calendar) with an armed rebellion in Petersburg-Petrograd. It was headed by Bolsheviks, and the new Soviet government formed after this rebellion was headed by Vladimir Lenin. Moscow was declared the capital of Russian Soviet Federative Socialist Republic on 12 March 1918, right after the Russian Revolution of 1917. The USSR (The Union of Soviet Socialist Republics) was founded in 1922 with Moscow remaining the capital. Moscow played an important role in World War II after the invasion of Germany. It was the headquarters of the central organs of national power and military force, the Soviet State Defense Committee and the General Staff of the Red Army. Vladimir Lenin’s death enabled Stalin to gradually concentrate more and more power in his hands thereby weakening the strength of the opposition. By the end of the 1920s, he established the totalitarian rule. During Stalin’s era, the look of Moscow had changed drastically.

## 2.1 Stalin Moscow

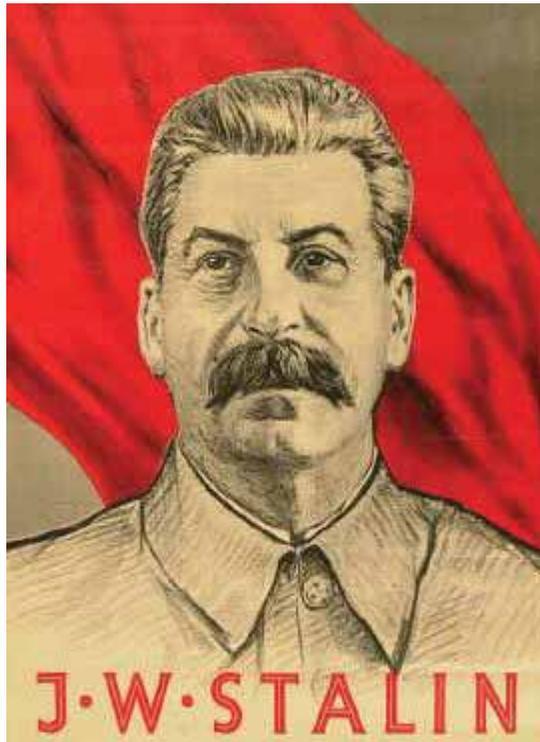


Fig. 23 - Joseph Vissarionovich Stalin (18.12.1878 – 5.3.1953)

In its initial stage, Stalinist architecture was marked by stand-alone buildings and at best, single-block development projects. As a consequence of Stalin's strong effort to modernize the city, Moscow's skyline was altered considerably. His rationalization policy shaped the building of all cities, including Moscow, according to the general development plan, which saw cities being divided into districts. These districts would be assigned with designed projects. This concept would visibly change the city's architectural style. The city, that was for a long time marked by numerous Orthodox churches, became the city of high-rise buildings, widespread boulevards and roadways. Unfortunately, in his intention to line the major streets, Stalin also destroyed many historically significant architectural works like the Sukharev Tower and a considerable number of mansions and stores. The new communist leaders were especially against the religious architecture. During Stalin's rule many churches were destroyed, such as the Kazan Cathedral and the Cathedral of Christ the Savior. Others were made into "Palaces of Culture", clubs and stores for vegetables or for building materials.

During the Soviet regime, the social structure of

Moscow inhabitants began to change. In the years between 1926 and 1955, the urban population of the Soviet Union was growing at fast pace, increasing from 26.3 million to 86.3 million<sup>9</sup>. Vast numbers of peasants started abandoning their villages and moving to the city pursuing a "better life". The city of Moscow became crowded with the poor, without any qualification, being hired in factories and in construction. The percentage of the workers living within the central region soared from 5% to 45%<sup>10</sup> in this first decade of the twentieth century. This led to the urgent investment in more housing and better infrastructure.

Therefore, planning was now given a much bigger importance and was seen as a vital and advanced



Fig. 24 - Stalinist Urbanism

<sup>9</sup> 1.23.2010 Stalinist urbanism; Source: <http://www.thepolisblog.org/2010/01/urbanism-under-stalin.html>; Retrieved on 14.09.2011

<sup>10</sup> A journey to Moscow . "History". Occidental College; Source: <http://www.moscowladies.com/hotels/russia/moscow/info/>; Retrieved on 14.09.2011

alternative to disorderly and random capitalist development. There was a growing need to build new apartments for the rising population since the number of blocks populated by workers increased considerably. The sixties were marked with extensive construction of residential buildings, which were built in the form of living blocks. Consequently, many families that were sharing overcrowded apartments with other families, were now given smaller but individual apartments, as a simple solution to meet the urgent needs.

Also, these new public buildings were constructed in neoclassical style. One of them is the Palace of the Soviets, which consists of an administrative center and a congress hall. This project was designed in Stalin's Empire style. It is worthwhile mentioning that the site which was chosen for its building is the same one where Cathedral of Christ the Savior was built in 1812, before it got demolished in 1931. The goal was to discourage and shut down religion and to show that Soviet Union is a secular state. However, within a decade, the construction process of the tallest construction of its time, which started in 1937, got interrupted and terminated by the German invasion in 1941.

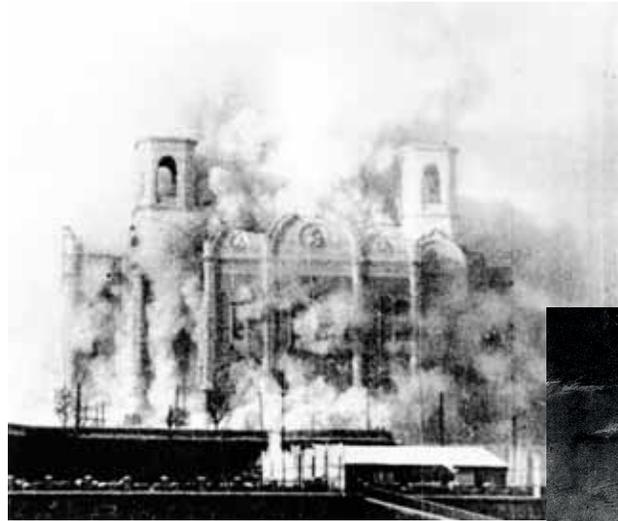


Fig. 25 - Demolition of the Cathedral of Christ the Savior, 1931.

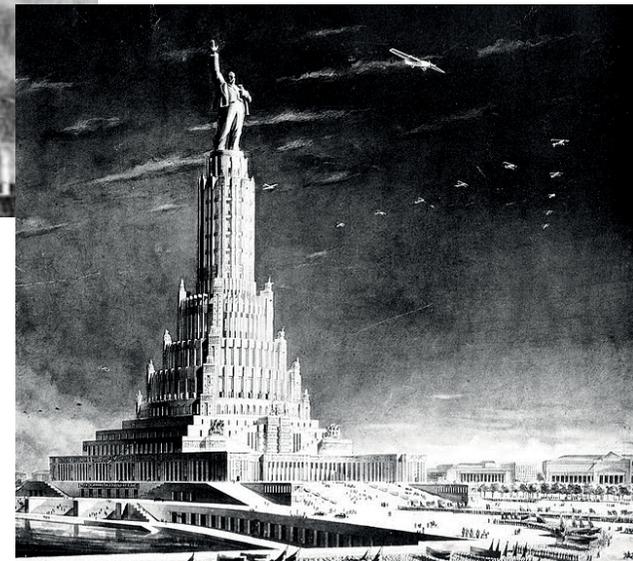


Fig. 26 - Palace of the Soviets with giant plaza and parades, 1934.



Fig. 27 - Moscow Zaryadye Red Square Stalinist tower



## 2.2 Moscow Master Plan (1935)

“The “Master Plan for the Reconstruction of the City of Moscow” was intended as an offensive against the old Moscow” that would utterly transform the city. Four years in the making, the plan called for the expansion of the city's area from 285 to 600 square kilometers that would take in mostly farmland to the south and west beyond the Lenin (a.k.a. Sparrow) Hills. It involved sixteen major highway projects, the construction of “several monumental buildings of state-wide significance,” and fifteen million square meters of new housing to accommodate a total population of approximately five million. Surrounding the city would be a green belt up to a width of ten kilometers.”<sup>11</sup>

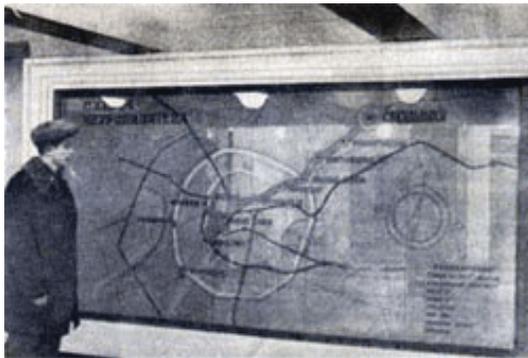


Fig. 29 - Moscow metro, 1975

11 Seventeen Moments in Soviet History “1936: Rebuilding of Moscow”; Subject essay: Lewis Siegelbaum; Source: <http://www.soviethistory.org/index.php?page=subject&SubjectID=1936moscow&Year=1936&Theme=436974696573&navi=byTheme>; Retrieved on 14.09.2011

Stand- alone with inconsistent styles and sizes had adversely affected the appearance of the city, which resulted in the State issuing a decree on the Moscow master Plan which was supposed to clearly communicate Stalin's urban development plan. This comprehensive master plan had the objective to promote industry, transportation, housing, and public green space while restraining the fast expansion of the city. A summary of its main points:

“Master plan projected a clear message of Stalin's urban development ideas:

- New development must proceed by whole ensembles, not by stand-alone buildings.
- City block size should increase from the current 1.5-2 to 9–15 ha.
- New development must be limited in density to 400 persons per 1 ha.
- Buildings should be at least 6 stories high; 7-10-14 story on first-rate streets.
- Embankments are first-rate streets, only zoned for first-rate housing and offices.”<sup>12</sup>

Imposing of these rules was effective in preventing not only the mass construction of low-cost structures in the city and “first-rate” streets, but also of

12 “Moscow Master Plan (1935)”; Source:[http://www.thefullwiki.org/Stalinist\\_architecture#Moscow\\_Master\\_Plan\\_281935.29](http://www.thefullwiki.org/Stalinist_architecture#Moscow_Master_Plan_281935.29) (Russian: Постановление СНК СССР и ЦК ВКП(б) от 10 июля 1935 г. N 1435 “О генеральном плане реконструкции города Москвы”); Retrieved on 14.09.2011

single-family homebuilding. Although low-cost development continued in outlying areas, most funds were rechanneled to new and more costly projects. Many streets and main roads were in process of being widened, straightened and lined with government buildings in Stalin's Empire style and elite housing. For example, the width of Tverskaya street, formerly known as Gorky street, was expanded from 17.5 to 60 meters.

Radial-ring structure shaped the Moscow City Plan that was developed in 1935. The road system of the city was centered around the Kremlin, which was the heart of the city. From that focus point the roads radiate outwards and are connected with a continuity of circular roads. The new master plan of Moscow followed the historical roads that date from the late middle age. The first ring, called Boulevard Ring, was built in 16th century, on the place where the city walls surrounded the city of Moscow, which was then named White Town (Bely Gorod). This Boulevard Ring is technically not a ring, but can rather be seen as a “horseshoe like shape” that extends from the Cathedral of Christ the Savior to the Yauza River. The second primary ring, the Garden Ring (Sadovoye Koltso) is



situated outside the Boulevard Ring and like the Boulevard Ring, it also is located on the grounds of a 16th century wall that used to surround part of the city. not a ring, but can rather be seen as a “horseshoe like shape” that extends from the Cathedral of Christ the Savior to the Yauza River. The second primary ring, the Garden Ring (Sadovoye Koltso) is situated outside the Boulevard Ring and like the Boulevard Ring, it also is located on the grounds of a 16th century wall that used to surround part of the city.

What is today the busiest metro system (Moscow Metro) in the world, at the beginning, had just two lines. Lying 84 meters below the ground it is one also one of the world’s deepest subway systems and it is used as a means of transportation for more than nine million people daily. Decorated with different art, murals, mosaics and ornate chandeliers, Moscow Metro is considered to be one of the most beautiful metro systems in the world. Due to the war, the urban development was put on the hold. The war demanded additional investments in such massive proportions that even the steel from the Palace of the Soviets was removed and used for war purposes. Only construction of the metro system was not interrupted since it was



Fig. 30 - Moscow metro

built with the objective of civil defense in the first place. Even though thoroughly destroyed, the Soviet Union emerged from the war as the winner and Stalin celebrated the nation’s heroism through imperial style reconstruction projects. Therefore, postwar development was marked by new monumental architecture, plazas, dramatic statues and seven famous

high-rise buildings called Visotka, built between 1947 and 1953. Surrounded by the botanical garden and the park along the river, Lomonosov Moscow State University is certainly one of the largest and most extravagant Visotka. High-rise projects needed new materials and technologies, which pushed forward the housing and infrastructure development. However, this

slowed down regular construction, which in a period when the country was in ruins, was not seen in positive light. Whereas the housing solution for working class people was still not found, elites enjoyed the luxury of their stunning houses in the center and countryside. That made the social that would dramatically worsen after the collapse of the Soviet Union.

Stalinist urbanism developed from a number of ideas which were promoted in the 1920s for the concept of the socialist city. The most important, among others, are the modernization of infrastructure, communal housing, working close to home and the integration of green spaces.

After Stalin's death in 1953, the social and political changes significantly affected the country. The construction priorities changed and so did the architecture. In order to satisfy the urgent need for housing, mass-productive technologies were developed, thereby taking away any decorative element from the buildings. This marked the gradual end to the Stalinist Architecture. Nevertheless, Stalinist architecture shaped the look of many post-war cities and its influence is evident today be seen in many central avenues and public buildings.



Fig. 31 - Mass meeting held at a factory in Leningrad after Stalin's death, March, 1953.

3

Fig. 32 - Moscow's skyline



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3

Not only is Moscow the capital of Russia, but also with more than 10 million inhabitants, the most populous city of Europe. Furthermore, on top of being Russia's political, economic, cultural, scientific, religious and educational centre, it has also acquired worldwide recognition in these fields. It is one of the few cities with numerous World Heritage Sites, such as the Moscow Kremlin. Kremlin is also the place where the Government of Russia and its President reside. In addition, Moscow is the residence for around one third of all academic workers in Russia and more than one million Russian students.



Fig. 33 - St Basil's Cathedral, Moscow

Russia, having opened their door to the West and with a significantly changed political situation, is subject to many changes in the Russians' way of life, especially in terms of what they think about ecology and nature and their cultural traditions. After several years of living under censorship and hardship, Moscow is now blossoming once again and is going through a highly creative phase in almost every sphere of modern-day culture. In Moscow, one can see edgy art galleries, street art and interesting underground clubs located in the old factories and warehouses. Furthermore, outstanding venues are growing and



Fig. 34 - Ivan the Great Bell Tower, between Kremlin cathedrals.



Fig. 35 - All Russian Exhibition Centre, Moscow

becoming more innovative; one example of which is the Pushkin Fine Arts Museum that has been becoming more and more extensive in recent years. New and original ways are found by Moscow theatres to represent most famous Russian compositions. There, today's composers, choreographers and playwrights present the works of Tchaikovsky and Chekhov in a fresh and unique way. In Moscow, one can find everything, from exclusive wine bars to bohemian art cafes and mystic underground clubs. Moscow's individuality and its specific character attract more than four million tourists every year<sup>13</sup>; in a hope that they will explore all its beauties.

<sup>13</sup> "Moscow". Source: <http://visit-plus.com/moscow/>; Retrieved on 14.09.2011

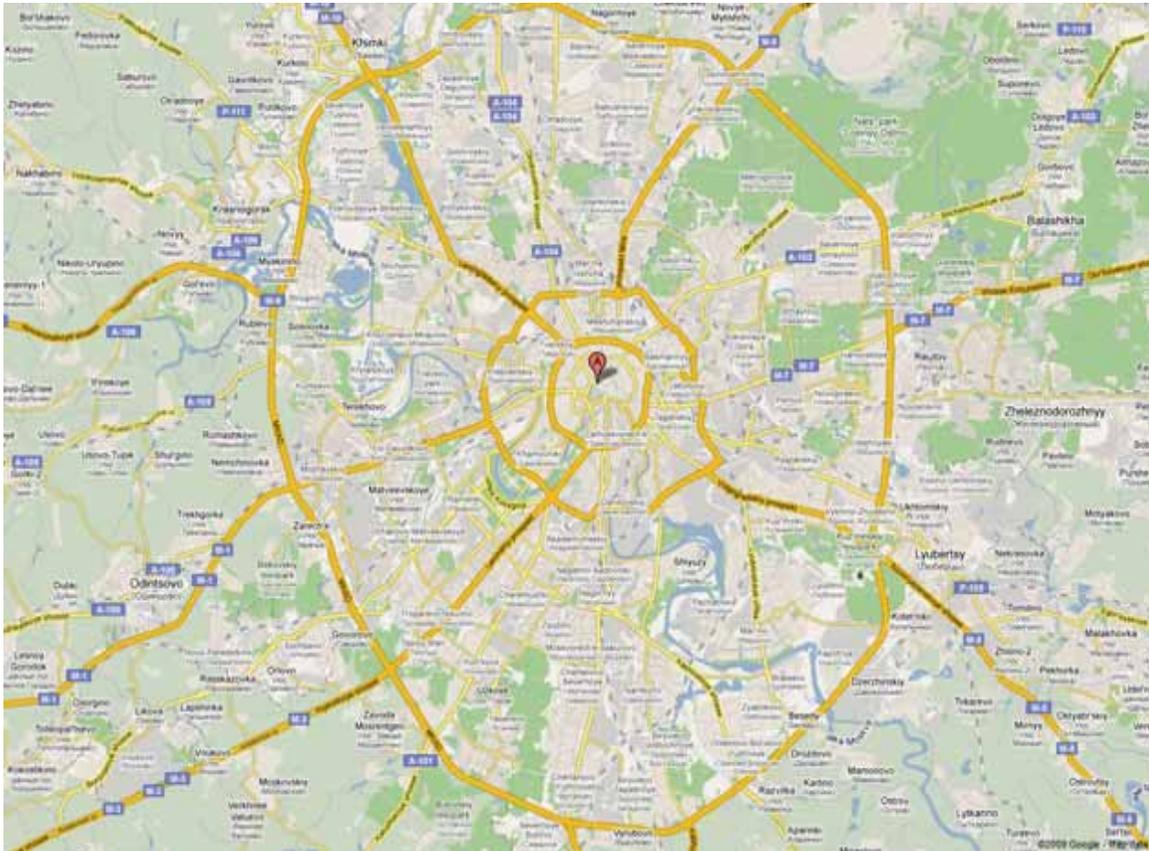


Fig. 36 - Moscow city plan

### 3.1. City pattern

Moscow has maintained the radial road structure from the 1930s with the Kremlin lying at the centre of the concentric “rings” and appears as the focus point of outwardly radiating roads. Even today, first Moscow ring (Garden Ring) road marks the city’s center and city’s downtown is defined by the smaller Boulevard Ring. In 2003, the third ring was built and it serves as a high-speed freeway. In order to reduce high traffic congestion in the city, the Fourth Transport Ring is currently being built. The Moscow Automobile Ring Road is the remotest ring within Moscow and it represents the rough boundary of the city. Even in the periphery, the roads that surround the city also follow the radial pattern.

Even though Moscow is the one of largest cities in the world with countless buildings and avenues, one can still easily recognize the general layout which is marked by a sequence of concentric circles and radial lines encompassing its center, the Kremlin. The number of vehicles has significantly increased over the last decade, which has resulted in heavy traffic jams and an acute shortage of parking spaces.

### 3.2 Climate

Being geographically positioned in the center of continent, Moscow has continental climate, characterized by its hot and humid summers and long cold winters. Variation in temperature between winter and summer months can be quite extreme with the temperature differential reaching 70 °C in some cases. The climate in Moscow is humid, summers are warm and humid and winters are cold and long. The average temperatures in June, July and August are approximately 23 °C, although in the period between May and September, characterized by heat waves they more than seldom top 30 °C. The warmest day on record in Moscow was the 29th July 2010 with temperatures exceeding 39.0 °C (102.2 °F). In the winter, on the other hand, normal temperature is around -10 °C. In January 1940, the temperature in Moscow reached the incredible -42.2 °C, which was the lowest temperature ever recorded. There is snowfall in Moscow typically 3 to 5 months in a year, usually between the end of November and the middle of March. The rainfall level in Moscow is relatively unchanged throughout the year even though it is usually expected

<sup>14</sup> "Air temperatures in Moscow beat all records"; Source: <http://english.ruvr.ru/2010/07/24/13327739.html>; Retrieved on 14.09.2011

to be higher in summer than in winter.<sup>14</sup>

Moscow is one of the places in Russia that is affected the most by the consequences of the global warming. The hustling and bustling development of the city comes at the cost of growing temperatures. Compared to the average temperature in the period between 1879 and 1908, the average temperature in the period between 1981 and 2010 has increased by more than on 2 degrees of Celsius.<sup>15</sup> Due to global climate change, Russia is expected to experience even more extreme temperatures in the following decades and the average temperatures are anticipated to keep rising in the future.



Fig. 37 - Moscow's Winter

<sup>15</sup> Familypedia "Moscow"; Source: <http://familypedia.wikia.com/wiki/Moscow>; Retrieved on 14.09.2011

### 3.3 Religion

During communist (Soviet Union) rule religion was prohibited in Russia. The ideological aim of Soviets was the abolition of religion together with its substitution with atheism. This led to the seizure of all the property that belonged to churches with consequent prosecution or even killing of many Orthodox bishops and priests.

Although Russia was a communist country for a long time, Christianity has been the principal religion in Moscow, with Russian Orthodox Church being the most widespread. In fact, Moscow is considered to be the main centre of the State's religion which is one of the nation's "historical heritages".

However, seventy years of Communism left its trace, in the way that even now, there is a large number of people that do not consider religion to be a real part of their life.

Other religions registered in Moscow are Islam, Protestants, Old-believers, Single-believers and Judaism, as well as a small proportion of other religions such as Buddhism and Hinduism.<sup>16</sup>

<sup>16</sup> "Moscow Today"; Source: [http://www.shitoryu.org/events/Moscow\\_2003/moscow.htm](http://www.shitoryu.org/events/Moscow_2003/moscow.htm); Retrieved on 14.09.2011





Fig. 38 - Singer in traditional costume at Vernisazh Market, Moscow

### 3.4 Culture

Moscow is the city that has inspired people for hundreds of years and continues to do so. It has always been a center for arts and culture and home to many Russian writers. “Tolstoy was born here, Pushkin enjoyed his most productive years here, Dostoyevsky's characters murdered and went mad here, and Mikhail Bulgakov wrote his masterpiece of Soviet satire here, under the threat of arrest (and worse) from Stalin's police.”<sup>17</sup>

This is the city where culture is very important; it is historically the part of their lifestyle. Everywhere you look in Moscow you will find some cultural hotspots, whether is it the great Bolshoi Theater, Pushkin State Museum State Tretyakov gallery or the Museum of modern arts. Telling a Muscovite that he does not have culture, or in other words, that he is not educated in terms of art and culture, is received as the biggest insult. Just the fact that there are ninety-three theatres, a hundred and thirty-two cinemas and twenty-four concert-halls in Moscow<sup>18</sup> says a lot about how important art and culture is. When it comes to rich cultural understanding, Moscow has always

been not only Russia's premiere city, but the centre of the world. In addition to various galleries, museums and even circuses, it is home to well known theatres including the Bolshoi theatre which has the world's famous ballet!

“There are few cities worldwide that resonate with history and culture the way Moscow does. Whether you find yourself admiring St Basil's Cathedral and the ancient walls of the Kremlin in Red Square, staring up in awe at one of Stalin's seven ugly sisters, heading out to the Bolshoi for a night of magic and bedazzlement, or even hanging out at the Patriarch's ponds on the off-chance of running into the Devil... Wherever you go and whatever you do in this town, you are bound to feel an almost palpable aura of drama, intrigue, passion, politics and downright skullduggery pervading every breath of frosty air.”<sup>19</sup>

However, Moscow's Cultural Legacy has been threatened. During Soviet rule, numerous old churches and historical landmark building were destroyed. Even nowadays, with the development of a new capitalistic society, there is little protection for cultural heritage, especially architecture. Many landmark building have been destroyed, and replaced with new luxury structures.

<sup>17</sup> “Culture in Moscow”; Source: <http://www.moscow-life.com/culture/culture.php>; Retrieved on 14.09.2011

<sup>18</sup> “Moscow at a glance”; Source: <http://www.gubernior.ru/eng/moscow>; Retrieved on 14.09.2011

<sup>19</sup> “Culture in Moscow”; Source: <http://www.moscow-life.com/culture/culture.php>; Retrieved on 14.09.2011

### 3.5 Architecture

“Home to many iconic buildings from Russia's extremely colorful past, Moscow is deservedly the Russian capital and is a true centre for both politics and economy. Embodying everything Russian, Moscow is filled with sights so big, bright and colorful that they are hard to imagine.”<sup>20</sup>

The Moscow that we see nowadays presents a complex portrait of the city's past. This is the where medieval churches and fortifications meet Stalinist imperial style design, with Krushchev-era public

housing standing next to the futuristic buildings of modern architecture. No other city in Russia can better present both the Russia of yesterday and the Russia of today.

Nowadays, Moscow is developing very fast. The city is engaged in the leading investment and construction projects in Europe. The building boom has drastically changed the look of the city over the past years. New high-rise buildings designed by most famous world architects are emerging as a symbol of power, with an ever modernizing Moscow skyline. It is now one of the cities with the most expensive real

estate in the world.

The Moscow that we see nowadays presents a complex portrait of the city's past. This is the where medieval churches and fortifications meet Stalinist imperial style design, with Krushchev-era public housing standing next to the futuristic buildings of modern architecture. No other city in Russia can better present both the Russia of yesterday and the Russia of today.

However, massive destruction of almost one third of Moscow's historical buildings over the past years, has been a huge discussion point. Some



Fig. 39 - Panorama of Moscow at night

<sup>20</sup> “Moscow Tourist Information and Moscow Tourism”; Source; <http://m.world-guides.com/moscow/>; Retrieved on 14.09.2011

landmark buildings such as 1930 Moscow hotel and the 1913 department store Voyentorg, lost its historical value due to unprofessional reconstruction. Destroying of cultural heritage in order “to make space for luxury apartments and hotels”,<sup>21</sup> as well as unprofessional reconstruction led to heavy criticizing of the city administration for not applying the conservation and preservation regulations. “In the last 12 years more than 50 buildings with monument status were torn down, several of those dating back to the 17th century”<sup>22</sup>. However, thanks to organizations like Moscow Architecture Preservation Society and Save Europe's Heritage, that are constantly fighting for threatened Moscow's architectural heritage, the general public is becoming more and more aware of this issue.



Fig. 40 - World's Biggest Building Coming to Moscow: The Crystal Tower, Foster + Partners

21 “Dr. Sergey Zagraevsky. Photogallery of the most serious violations of historical environment of Moscow in the last decade”.

Source:[http://www.zagraevsky.com/moscow\\_engl.htm](http://www.zagraevsky.com/moscow_engl.htm); Retrieved on 14.09.2011

22 “Art of Russia>>The third bulletin of the Moscow Architectural Preservation Society (MAPS)”.

Source:<http://www.gif.ru/eng/news/maps-third/>; Retrieved on 14.09.2011



Fig. 41 - Moscow' skyline

3



3.6 Moscow now and then...

Fig. 42 - Kalinisky prospekt



Fig. 43 - The Cathedral of Christ the Saviour



Fig. 44 - Tsentralnii akademicheskii Teatr Rossiyskoy Armii

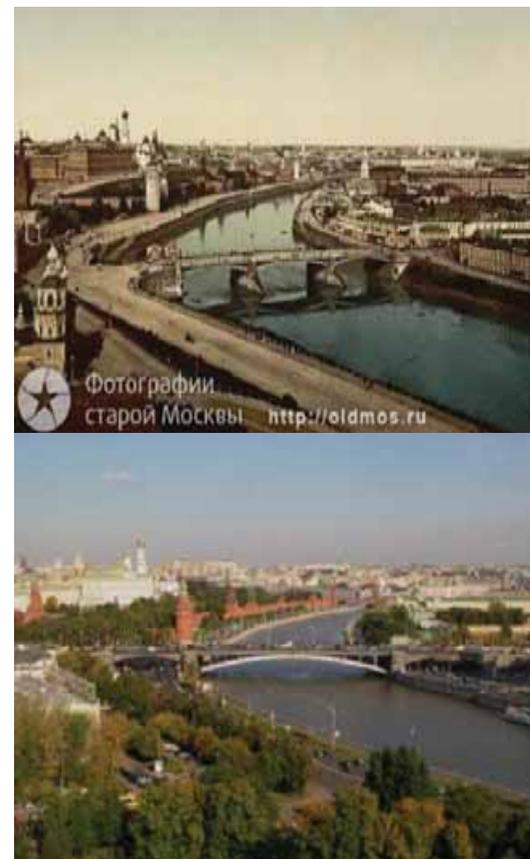


Fig. 45 - Moscow Kremlin

# mentality

4

Fig. 46 - Moscow shopping precinct



4

# 4

#### 4.1 Moscow affected by communism

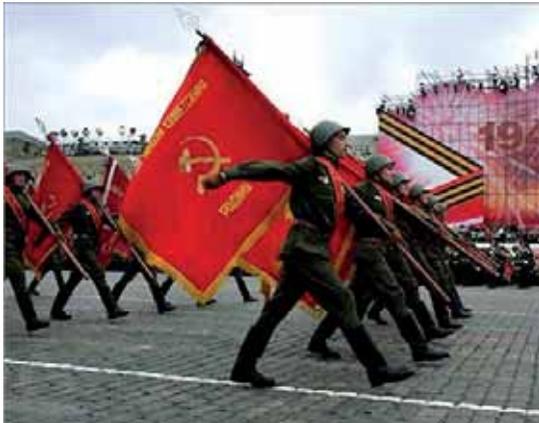


Fig. 47 - "The "Red Army" name refers to the traditional colour of the workers' movement.

Moscow is red. And if we say it in Russian "krasnaya", Muscovite could understand it in two ways: it's either red colored or it's beautiful<sup>23</sup>. We would say it is both. Red are the walls and towers which encircle Kremlin, important historic fortified complex of Russia located in the heart of the city. Many facades of the other important buildings which surround the Red Square<sup>24</sup> are also the same color, like St. Basils Cathedral and Moscow State Historical Museum.

23 The word "krasnaya" russ. красная means red (but also beautiful - old russian)

24 Russ. Красная площадь is considered a main square not only of Moscow, but of whole Russia. It is 695 metres long and 130 metres wide. Since 20th century, it is known as a site of official military parades demonstrating to the world the might of the Soviet armed forces

There is also another meaning of „Red Moscow“, which represents the communism era of Soviet Union. In 1917 Russians took path of the Revolution and from then on the state transforms from a monarchy to a socialist republic.

“Communism worked well for the industry if not for the people - the divide in production and the five year development plans designed a framework for steady development. Since people were not influenced by the capitalism theories, they all worked for the state in a country where the government was the ultimate owner, judge and executor of orders. Private ownership was forbidden and the equality of people led to rapid development. The results were the first man in the space sent by Russia, the technological advance in aircraft and weaponry production as well as electrical engineering and heavy industry machinery.”<sup>25</sup>

During this period, life of the Russians was limited in many ways. Citizens were controlled by the state system through the powerful paperwork: it was impossible to move without signed form or to sneeze without permission. Under the statement “Russian regulations do not allow this!” lots of restrictions have been set, without further questioning and equality in social position is undisturbed.

25 Communism in Russia, Source: <http://www.histmap.net/2010/09/01/communism-in-russia/> , Retrieved on 1.9.2010.

26 Russian mentality, Source <http://www.buzzle.com/articles/russian-mentality.html>, posted by Ieuan Dolby, Retrieved on 2.4.2011.

The communism creates in population some kind of self-preservation, which expresses in “those who would do anything and everything to make sure that they (and their closest) would benefit even to the detriments of others around them.”<sup>26</sup>

On December 26th 1991 the Soviet Block, once inhabited one sixth of our planet, which broke down into fifteen new states, so to say overnight, was suppressed and replaced with democracy and Russia. Due to transformation of state’s system Moscow has changed its character from one of the duller to one of the most lethargic. “Bare-shelved state-owned stores have been replaced by glittering malls and boutiques filled with merchandise from all over the world. Placards and political slogans have all come down from billboards and other public spaces, their places taken by brightly-colored advertisements.”<sup>27</sup>

These changes have strongly affected people's conscious and their mentality. Though Russian spiritual identity and Orthodox Church have been reborn with the breakup of Soviet Union, it brought many changes that came at high human cost. In addition, Moscow’s social milieu is more than ever affected by street crime, kidnapping, murder, and even terrorism.

27 Source: Anders Aslund, Marthe Brill Olcott “Russia after communism”, Introduction, p.xv, Washington D.C. 1999.

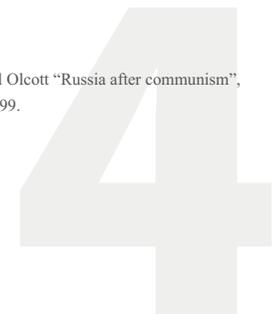




Fig. 48 - Muscovites

### 3.5 Moscow and Muscovites

Big cities are often identified with various statements, where some of those are true, some not. Moscow, as a multimillion city, whose culture and identity was built over many centuries and under different political circumstances has a character of a contradict city. For that reason it is hardly possible to define the mentality of its citizens from only one point of view. In order to better understand the mentality of a population, here are some reviews which show what Russians think about Moscow, and the mentality of Muscovites and how they get along with them.

In 2007 The Public Opinion Fund had a review done about Moscow and Muscovites, where 69% of the Russian citizens see Moscow as “just a big city and nothing else”. On the other side, 22% of Russian population states that Moscow is the embodiment of all the best that Russia has. “36% of respondents feel positively about Moscow, almost as many (35%) answer that they do not feel any emotions. 20% of respondents have negative feeling about Moscow.”<sup>28</sup>

<sup>28</sup> “10 facts and myths about Moscow and Muscovites”, Source <http://www.i-love-moscow.com/muscovites.html> , Retrieved on 29.05.11.

What does a Russian really think about the mentality of a Muscovite?

According to the survey based on the question whether they like or dislike Muscovites, the results seemed a bit contradictory though most of the respondents thought negative. “9% of respondents described their arrogance and snobbishness (the third most popular response after the success and dedication). 6% of respondents consider Muscovites rude and aggressive, 3% of Russians believe that Muscovites are unwelcoming and inhospitable, nervous and restless, selfish..Of the positive moral qualities of Muscovites were mentioned intelligent and cultured (3%), as well as the friendliness and sociability (2%).”<sup>29</sup> Potential difference in mentality of Muscovites and other Russians could also come from the geographic aspect, since Muscovites often underline that they are more East European than Asian.

Moscow is really the most expensive city in Russia.

It is a place where social levels between very low and very high almost don't exist. It is known that

<sup>29</sup> “10 facts and myths about Moscow and Muscovites”, Source <http://www.i-love-moscow.com/muscovites.html> , Retrieved on 29.05.11.

living in Moscow is expensive even for millionaires.

“The prestigious Forbes magazine has estimated last fall that the "gentlemen's set of" banker's luxurious life total cost is more expensive in the First Throne (Moscow nick-name). For example, hotel accommodation in the capital of Russia is 40% more expensive than in the same kind in London. The only place you can buy Louis Vuiton handbag more expensive than in Moscow is Dubai.”<sup>30</sup>

A research was initiated by the Swiss bank UBS appointing Moscow as the 56th most expensive city in the world and also 41st by the highest average salary in the world.



Fig. 49 - GUM, one of the most expensive shopping centres in Moscow

<sup>30</sup> “10 facts and myths about Moscow and Muscovites”, Source <http://www.i-love-moscow.com/muscovites.html> , Retrieved on 29.05.11.

It is true that Moscow has enormous traffic jams.

Ordinary traffic jam lasts for 1 hour 26 minutes in the capital. (Examples for comparison: in St. Petersburg is 54 minutes, in Yekaterinburg - 46 minutes, in Kiev - 45 minutes). Muscovite could expect daily up to 800 traffic jams, and in each of them there are about 1400 thousand cars.

Astonishing information is that average Muscovites spend in traffic jams more than 12 hours per month, which means 12 light-days or 6 full days a year!<sup>31</sup>



Fig. 50 - Moscow traffic, Garden Ring

<sup>31</sup> “10 facts and myths about Moscow and Muscovites”, Source <http://www.i-love-moscow.com/muscovites.html> , Retrieved on 29.05.11.

# site analysis

5

Fig. 51 - The Photo of the site



5

5



Fig. 52 - Map of the site

- |                          |  |
|--------------------------|--|
| 1. Kremlin               | 5. Zaryadye                            |
| 2. Red Square            | 6. Visotka- Stalinist Scyscraper       |
| 3. Gostiny Dvor          | 7. Bolshoi Theater                     |
| 4. St. Basil's Cathedral | 8. Tne Cathedral of Christ The Saviour |

Located right next to Kremlin, it is considered as a very prominent city block within the Boulevard Ring. It is few steps away from the Red Square and St. Basil's Cathedral, which are the most poseceni tourist attraction in Moscow.

### 5.1 Moscow Kremlin



Fig. 53 - View of the Old Zaryadye and Kremlin walls - 17th century

The Kremlin (Russian Московский Кремль) represents a most significant historic enclosed complex of Russia. Its historical development is very closely connected to the history of Zaryadye, which was the oldest trading settlement located outside of the Kremlin walls.

The Kremlin is located in the very center of Moscow, looking out over the Moskva River on the southern part, Saint Basil's Cathedral and the Red Square on the eastern side and the Alexander Garden on west. In the complex of Kremlin are included four cathedrals, four palaces, and the surrounding Kremlin walls with its towers. It is today in function of the official residence of the President of Russian Federation.

The name “Kremlin” was first registered in 1331 and its etymology was debated. Nowadays is often used in allusion to the Russian government. There is also an expression of “Kremlinology” which is referred to the study of Soviet and Russian policies.

#### 5.1.2. Historical overview

The territory of Kremlin has been populated since the 2nd century BC and was known as Vyatch<sup>32</sup> fortified structure on Kremlin Hill. It was originally named Borovitsky Hill, and this was one of the seven hills of old Moscow. In 11th century, south-western part of the Hill was inhabited by Slavs and verified by a metropolitan seal from the 1090s. In 1156 it was

enlarged by Prince Yuri Dolgorukiy, but one century after in 1237 was destructed by Mongols and in 1339 again reconstructed in oak.

In 14th century (late 1320s and early 1330s) on the territory of the Kremlin arose the first structures of stone, since the new capital under Peter - Metropolitan of Rus needed permanent churches. During the polity of Dmitry Donskoy<sup>33</sup> oaken walls were changed with a fortified citadel of white limestone in 1366–1368, and his son, Vasily I continued to construct churches and cloisters in the Kremlin. The Annunciation Cathedral or Blagoveschensky sobor (Russ. Благовещенский собор) was created 1484-1489 by architects from Pskov in a traditional style and its interior is still richly decorated with icons of the 14th-17th century. Many of those icons were done by Andrei Rublev, who was a famous medieval Russian painter of Orthodox churches.

Big reconstruction of Kremlin happened during the reign of Grand Prince Ivan 13th in 15th century. New Kremlin walls which stand there in present days have been constructed between 1485 and 1495, designed by Petrus Antonius Solarius, as well as its towers, and new palace for the prince, which is planned

<sup>32</sup> Russ. вятичи were a tribe of East Slavs Вятичи. Source: <http://www.vene.ru/viatich.html>; Retrieved on 21.09.2011.

<sup>33</sup> Dimitriy I (1350-1389) was the son of Ivan II Krasniy. The nickname Donskoy originates from the 1380's Battle on Kulikovo, that happened on the river Don where he humiliated the Tatars  
Source: Asimov, Isaac. *Asimov's Chronology of the World*. New York: HarperCollins, 1989; p. 186.; Retrieved on 21.09.2011.

by Marcus Ruffus.

Also, in the period of Ivan's reign were constructed three existing cathedrals of the Kremlin, the Deposition Church and the Palace of Facets. Church Ivan the Great Bell Tower<sup>34</sup> was the highest building of the city and Muscovite Russia. Its height added up to 81 meters.

Between the Kremlin and merchant town of walled Kitay-Gorod<sup>35</sup> was a 30-metre-wide moat, over which was built the Intercession Cathedral on the Moat, known as Saint Basil's Cathedral. This is one of the most famous architectural works in Moscow.<sup>36</sup>



Fig. 54 - Moscow - Kremlin, 1890s

34 Russ. Колокольня Ивана Великого, 1505-1508.

35 Kitay Gorod (Russ. Китай-город) is a business district in Moscow's centre, surrounded by mostly-reconstructed medieval walls. Its name comes from old Russian "kita" which means wall, but also from "Kitok" which is the name of square. ). Nowadays its name is

The cathedral was constructed in 1555–1561 during the reign of Ivan the Terrible. „It is like no other Russian building. Nothing similar can be found in the entire millennium of Byzantine tradition from the fifth to fifteenth century... a strangeness that astonishes by its unexpectedness, complexity and dazzling interleaving of the manifold details of its design.”

In 17th century, under the govern of Mikhail Romanov<sup>37</sup> were built the eleven-domed Upper Saviour Cathedral, Terem Palace, Armorial Gate, Amusement Palace and the palace of Patriarch Nikon.

During the Imperial period, late XVIII century, Catherine the great requested from Vasili Blazhenov to build her a new residence in Kremlin. This led to the destruction of some churches and palaces. One part of the Kremlin wall was also destroyed.

In 1812 under the order of Napoleon, the Kremlin Arsenal, few parts of the Kremlin Wall and few wall towers were destroyed by explosions. Until the Russian Revolution in 1917, structures of Kremlin didn't change a lot – some of the features were added

ipopularly translated as China Town.

36 Russ. Собор Василия Блаженного, “Where journeys to Russia begin.” Source: <http://www.travelallrussia.com/st-basil-moscow/>; Retrieved on 21.09.2011.

(including Monument to Alexander II), but later on, in 1918 these were destructed by Bolsheviks. In this period the Kremlin was a bit neglected.

During the Soviet period, Lenin chose Kremlin Senate for his residence. Stalin also had his personal rooms in the Kremlin. In the 1930s, The Chudov Monastery and Ascension Convent, with their impressive cathedrals which date from XVI century, were destructed to make room for the military school and Palace of Congresses. The Little Nicholas Palace and the old Savior Cathedral were destroyed as well. With the demolition of the oldest church – the Church of the Savior on Bor, which was founded in 1330, by Prince Ivan Kalita, occurred one of the greatest loss to the Kremlin.

In the 1990s appeared changes to the Kremlin. “For the first time, the aim was not only to preserve the existing cultural and historical monuments in the Kremlin, but to restore what had been lost over the past decades. At the same time, work was going on to turn the Kremlin into a presidential residence fit to be a place of work for the head of state and a venue for the most important state events.”<sup>38</sup>

37 Russ. Михаил Фёдорович Романов (1596 – 1645) was the first Russian Tsar of the house of Romanov.

38The Kremlin history, “Discovering the Kremlin”, Source: [http://archive.kremlin.ru/eng/articles/history\\_12.shtml](http://archive.kremlin.ru/eng/articles/history_12.shtml); Retrieved on 21.09.2011.



Fig. 55 - Kremlin today

## 5.2 Zaryadye

Zaryadye ( Russian Зарядье) is considered one of the oldest historical areas of Moscow. It is founded in 12-13th centuries in the district of Kitay Gorod. Since its inception to the present days, the district has undergone many changes and was demolished in three rounds (1930s, late 1940s and 1960s). In present days, spared are only structures that were classified as historic monuments. In the Soviet times, here was the largest hotel in Europe until its demolition in 2007 - Hotel “Rossiya” (Russian Россия) . Today, the area of the old trade rows awaits its grand reconstruction.

Zaryadye is known as a quarter of Kitay Gorod, nearest to a Moskva River. The whole part was developing as a trading area and Kitay Gorod is also known as the most reputable business district of Moscow. Varvarka, Ilyinka, and Nikolskaya are the names of three most important streets of this area, and they are recognizable to lines of banks, shops, and storehouses. St. Nicholas at Nikitinki (1653) and St. Nicholas the Great Cross (founded in 1689, destroyed in 1933) once prevailed the Kitay Gorod's skyline and were considered as two of the most beautiful churches

in Moscow.

In the Nikolskaya Street are notable Moscow's first university and the Slavic Greek Latin Academy, which is housed in Zaikonospassky monastery. In this street is also the main church of Epiphany Monastery which dates from 1690s. This is a representative monastery cathedral situated in the middle of Kitay-Gorod – in the eponymic Bogoyavlensky Lane. Gostiny Dvor – Guest Merchant's Court (Russ. Старый гостинный двор, 1590s ) took a significant portion of Kitay-Gorod and at one time it accommodated both warehouses and shops. In 1789, Giacomo Quarenghi, the famous architect of Catherine the Great, replaced those medieval buildings with a new shopping mall designed in a pure Neoclassical style with unnumbered



Fig. 56 - Gostiny Dvor

39 Gostiny Dvor (Гостинный двор) Source: А. Л. Нарочницкий, Энциклопедия “Москва”, 1980. — p.688

Corinthian columns and arcades.<sup>39</sup>

In the XIX century, the picture of the Red Square was drawn with neoclassical domed structure of Upper Trade Rows, which were designed by Joseph Bove. But in 1890s this building was destructed and changed with the new, eclectic object of Upper Trading Rows (designed by Alexander Pomerantsev and Vladimir Shukhov) and the similar Middle Trade Rows (designed by Roman Klein). Large part of Kitay-Gorod was densely filled with offices, warehouses and hotels, so the real estate developers had to put the limit by building streets like the Tretyakovsky Proyezd (project by Pavel Treyakov and Alexander Kaminsky). At the end of XIX century, developers unified sizeable land lots on the perimeter of Kitay-Gorod. Until the early 1990s, lots of the historical buildings of Kitay-Gorod have been destructed or their facades were rebuilt by methods, which propose pulling down everything beyond the street facade. Recently razed, apart from the Gostiny Dvor are the buildings of Tyoplye Trade Rows.<sup>40</sup>

It is still not possible to measure the degree of destruction of Kitay-Gorod, because many properties are under control of the federal government and they are not open to the general public.

40 (Russ. Теплые ряды, demolished 1996-1997)

### 5.3 History of Zaryadye

The area of Zaryadye is restricted to the north by the Varvarka street, while eastern walls of Kremlin and Moskva River represent the western boarder and the medieval Kitay-Gorod walls border it to the east. The name Зарядье originally comes from Russian word “за рядами” which means „the place behind the rows“ related to the market rows next to the Red Square. Varvarka street has a rich history and is considered one of the most interesting streets in Moscow.

The district of Zaryadye was first registered in 1365, when it was demolished in a fire, which occurred



Fig. 57 - Old Varvarka street

again in 1390, 1468, 1493 and in 1547. Tatar invaders set the fire in 1451. Zaryadye's main street (Russian Великая улица) was the very first street in Moscow, extended along the river which connected the Kremlin and the marina - Mokrinsky lane (Russ. Мокринский переулок).<sup>41</sup>

With the construction of the stone wall of Kitay Gorod (1536-1539), in the XVI century, Zaryadye obtained its final form. It was now separated from the Moscow River. The river was accessible only through the south-west and south-east gates. The walls were built by an Italian architect Peter Maly Fryazin, and their total length is 2.6 km. At first there were thirteen towers and six gates. These walls were in average six meters in both high and width. They fell only once, when the army of Pozharsky dug behind the Poles. In 1930s, the last of the towers were destroyed, but some segments of the wall are still standing in present days.

Peter I gave priority to the houses made of stone in Zaryadye. Monuments which still shape the historical picture of Zaryadye are Cathedral of the Sign (1679–84), the Church of All Saints (1680s), St. George's Church on Pskov Hill (1657), St. Maksim's Church (1698), St. Anna's Church at the Corner

41 Source: П.В.Сытин, “Из истории московских улиц” (P.V.Syтин "History of Moscow Streets"), 1958, p.32-34, Retrived on 30.08.2011.



Fig. 58 - Old Kitay Gorod, 16th century

(1510s), St. Barbara's Church (1796–1804), the Old English Embassy (1550s), and the Romanov boyar residence, which dates from the 16th century.

“Zaryadye, charming old “island” in the main tourist location of the city. It literally is in contrast to the cities scenery, one would wish to return in the evening when the candles blaze through the windows like butterflies, or at dawn while there still isn’t any traffic, and the mellow sound of the church bells float through the bathed streets.”<sup>42</sup>

In the western part of Zaryadye is the Church of St. Barbara, on whose behalf, the street Varvarka got its name. Originally this church was built in 1514. In the

42 Варвара – Невеста Христова прекрасная ,Source: <http://www.pravmir.ru/varvara-%E2%80%93-nevesta-xris/> , Retrieved on 26.9.2011.

XVI century, it was a large royal prison, and since then there was a saying: “Go to the Barbara for the punishment!” In 1730s this church was destroyed in a fire. The new church in the classical style is a project of the architect Rodion Kazakov and this is the church as we know it today. It survived as an architectural monument and as a specific architectural dominant of the street.

In the middle of the XVI century the British established the first trade and political connections with Russia, that was at that time under the rule of Ivan the Terrible, therefore getting a square in Zaryadye - Old English Court (Russian “Старый Английский двор”),



Fig. 59 - St. Barbara church

which has been built by Italian architect Aleviz. For its importance and artistic quality, the English court is just a little inferior to the Kremlin Palace of Facets. Yet in the middle of XVII century on the insistence of Russian merchants, who feared competition, the British were expelled from Russia and the Chamber had been sold to a relative of the king for 500 rubles.

The House of Romanov dates from XVI-XVII centuries. At one time it belonged to the grandfather of Tsar Mikhail Romanov, who was born here - according to legend. The house has been transformed into a museum back in 1859. It is a house, with two floors – the ground level, where the men spend their time, and a



Fig. 60 - Old court

second floor, where the women did weaving and needlework. Church of Conception of Anne is also one of the oldest stone buildings in Moscow outside the Kremlin. It was built in the late 15th century.

Zaryadye was reformed twice by Peter I. First, when the court relocated to Saint Petersburg, this area lost the tenants and many businesses were suspended. Second, the barricade which was erected between Kitay-gorod wall and the river, blocked all the sewage moats, trapping all the waste inside Zaryadye. Therefore the whole area became an unhealthy and unsafe social bottom of Moscow, and so it stayed that way for a whole century.

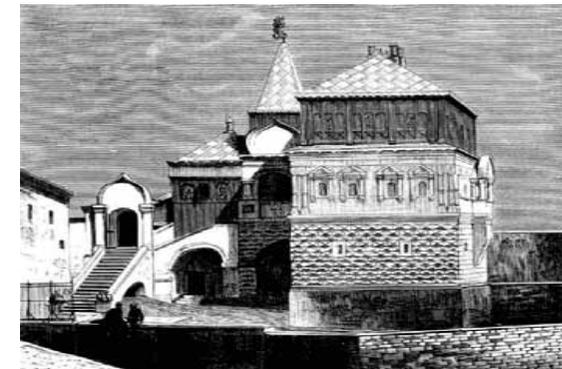


Fig. 61 - Romanov Boyars

After 1812, when the last fire occurred, situation with Zaryadye was getting better. It was forbidden by the state to construct in wood, because they were afraid of potential fires in the future. “Poorer landlords of Zaryadye could not afford stone buildings and sold their properties. They were purchased by real estate developers, who quickly converted Zaryadye in an area of cheap rental housing, usually two or three storey high. For nearly a century, Zaryadye was the garment district of Moscow, a back yard of the wealthy Kitai-gorod.” Until 1891, Moscow sheltered around 35 000 of Jews, at least half of them were located in Zaryadye. In 1891 the first synagogue emerged , close to the Zaryadye district.<sup>44</sup>

The collapse of traditional small business happened after 1918, so the tenants of Zaryadye relocated to the remote workers' neighborhoods. The land was adopted by the State offices.

Before the revolution in Zaryadye, next to the church of St. Nicholas Mokrinsky was a famous mushroom market, which was visited by the people from all over Russia in the first week of Lent.

The question of reconstruction of the area was first raised in the 1930s. In the contest announced by

the Government participated Le Corbusier, who proposed to do Zaryadye as an architectural reserve.

#### 5.4 Zaryadye during the “Stalin era”

Moscow’s 1935 master plan proposed the destruction of the Zaryadye. In 1936 the preliminary demolition which disengaged the blocks beside Kremlin for the ramps of Bolshoy Moskvoretsky Bridge (Russ. Большой Москворецкий мост ), was planned by Alexey Shchusev. It was placed at the narrowest point of Moskva River, west of its predecessor.

In this period, all the bridges in the center of Moscow were replaced with high capacity bridges. . Moskvoretsky Bridge was first one completed and the only concrete bridge of the 1930s. The first and only bridge of the 1930s that was finished was the concrete Moskvoretsky Bridge. The biggest arch of the bridge was 92 meters in length and 6.1 meters in height. It consists of three concrete boxes. Two arches, which stretch up above the embankments are each 42,8 meters long. The total width of the bridge is 40 meters and this allows up to 8 lanes to be made. This bridge is purely

made out of concrete, but Shchusev coated it on both sides with pink granite slabs, so that it leaves an impression that the bridge is made of stone.

With the destruction of an old bridge of Zaryadye in 1947, the ground was clear and prepared for the building of Ministry of Heavy Industry and its riverside ramps. This was a project of the first high-rise building in Moscow designed by a famous architect Dmitry Chechulin. Stalinist skyscraper should have been built in the same style like the other “Seven Sisters”,<sup>45</sup> but the project was cancelled at the foundation stage. The second round of demolition spared the existing churches lined in Varvarka street, the 2-storey buildings on Moskvoretskaya Street, close to the bridge as well as the part of Kitay-gorod wall that faces the river. It was ordered that the St. Anna church and other relics should be disassembled and later on rebuilt again but on another location, in the Kolomenskoye park,<sup>45</sup> it did not happen. This site was not in use over 15 years.

In 1960s, the third round of destruction removed the buildings next to the bridge. The area of Zaryadye was now clean and prepared for the grandiose hotel Rossiya.

43 Москва, Source: <http://www.eleven.co.il/article/12853> , Retrieved on 26.9.2011.

44 The English name “Seven Sisters” or Stalinskie Vyotki (Russian Сталинские высотки) represent a group of skyscrapers in Moscow, designed in the Stalinist style in the middle of 20th century. They are: Kotelnicheskaya Embankment Apartments, the Kudrinskaya Square Building, the Hotel Leningradskaya, Hotel Ukraina, the Ministry of Foreign Affairs, the main building of the Moscow State University and the Red Gates Administrative Building.

45 Source: П.В.Сытин, “Из истории московских улиц” (P.V.Syтин "History of Moscow Streets"), 1958., p.34 Retrieved on 30.08.2011.



Fig. 62 - Varvarka Street in the 19th century



Fig. 63 - Hotel Russia demolished in 2006

### 5.5 Rossiya Hotel

Hotel “Rossiya” (Russ. Гостиница “Россия”) has been built in the years 1964-1969, again on a Chechulin's plan. A 21-storey hotel complex with 3200 rooms also included a concert hall with 2500 seats, the cinema “Zaryadye”, numerous restaurants and cafes. Almost the whole territory of Zaryadye was covered by the massive volume of “Rossiya”, therefore gaining the name Zaryadye.

Because of its size it is considered one of the most famous hotels in the world. Shortly after construction, it has been included in the “Guinness Book of Records”, being at that time the largest hotel in Europe. In the early 1970s it was recorded as the biggest hotel in the world until 1993. Originally, the project for the “Rossiya” hotel is a set of five multi-storey buildings on a single area of 13 hectares.

Description of hotel “Rossiya” would be incomplete without a brief explanation of the hotel's infrastructure. The hotel was enriched with such a content that one could say it was “a city within a city”. In addition to the standard set of services provided in any hotel of the highest category (parking, conference

facilities, bars, cafe, laundry, dry cleaning, pool, restaurant), the hotel “Rossiya” had its own library, post office, pharmacy and a health club, bank, medical center with sauna, a massage room and solarium, boutiques and nightlife. The hotel also offered travel agencies, exchange offices, game machines, souvenir shops, a beauty salon and was able to accommodate over 4000 guests.

Image of “Rossiya”, as a typical Soviet architectural building has been described from different points of view : “In Soviet times, they used to love building big, and thus Russia built the world’s tallest TV tower, the world's biggest bust of Lenin, and, in Moscow, Europe’s biggest hotel - which also sadly turned out to be one of Europe's ugliest”<sup>46</sup> but also as “a dull, faceless box made of steel and concrete”.<sup>47</sup>

A tragic moment in the history of the hotel happened in winter 1977. It suddenly caught fire which burned for several hours. In this fire were killed more than 42 people, but still, most of the guests and employees (1000) had evacuated. The reasons why the fire happened was investigated and this took a long time: security services worked through all the possible versions, including possible political sabotage or

terrorist attack. Enclosed in mystery and legends of the true reasons for the burned hotel “Rossiya” and this story continues till this very day.

The hotel was officially closed on January 1st 2006. Demolition of “Rossiya” started in March 2006 and was completed in 2007, for a new project of Zaryadye, which was managed by British architect Sir Norman Foster. In this new project a hotel was planned containing 2000 rooms, apartments and a garage. However the results of a tender for the reconstruction have been cancelled late 2006, by the Supreme Arbitration Court.



Fig. 64 - Rossiya Hotel

46 Moscow to pull down eyesore hotel, The BBC's Steve Rosenberg. Source <http://news.bbc.co.uk/2/hi/europe/3552520.stm> , Retrieved on 30.05.2011.

47 Moscow to pull down eyesore hotel, Vladimir Resin, Mayor Yury Luzhkov's deputy for construction, Source <http://news.bbc.co.uk/2/hi/europe/3552520.stm> , Retrieved on 30.05.2011.

### 5.6 Site scale

From the point of view of a master plan, Zaryadye is a huge open street block in the heart of the city, which confronts the river. What makes it so special is its rich history, size, location and different characters of objects which surrounds it. This historical district has an area of 17 ha, including the 10 remaining historical monuments. Compared to other sites in different cities, this area corresponds to:

- area of London's cultural centre on South Bank (includes Jubilee Gardens, Shell centre and buildings of London Country Hall) (~145.700 sqm)
- around ½ of Vienna International Center (~301.000 square meters)



Fig. 65 - Vienna international centre from above



Fig. 67 - London's cultural centre on South Bank from above



Fig. 66 - Vienna international centre



Fig. 68 - County hall and London eye

### 5.7 Traffic analysis

At present days, Zaryadye's southern boundary is a six-lane avenue on a riverbank. "It is hard to imagine that there was a street stretching along the river. Moskvoretskaya was a busy shopping street and it was a part of an old Zaradye district. There was a pier at the Moscow River and many boats anchored nearby."<sup>48</sup> . The embankment is now an important connection inside of the Moscow's Garden Ring - Sadovoye Kol'tso (Russian Садовое кольцо ), and it is often overcrowded with traffic. This kind of "highway" grown beside the river exists in other big cities for example:

- London (Thames embankment)
- Chicago (Chicago river embankment)
- Budapest (Danube embankment)



Growing number of cars in Moscow affect pedestrians and put them in a very bad situation, since they are literally in danger just by attempting to cross the street. Many streets do not even have sidewalks for the pedestrians. This pyramid shows that pedestrians are at the bottom of the hierarchy, while the cars stand at the very top. Moscow lacks good pedestrian environment which would improve the quality of life in the city and encourages people to walk and ride their bicycle instead of using cars.

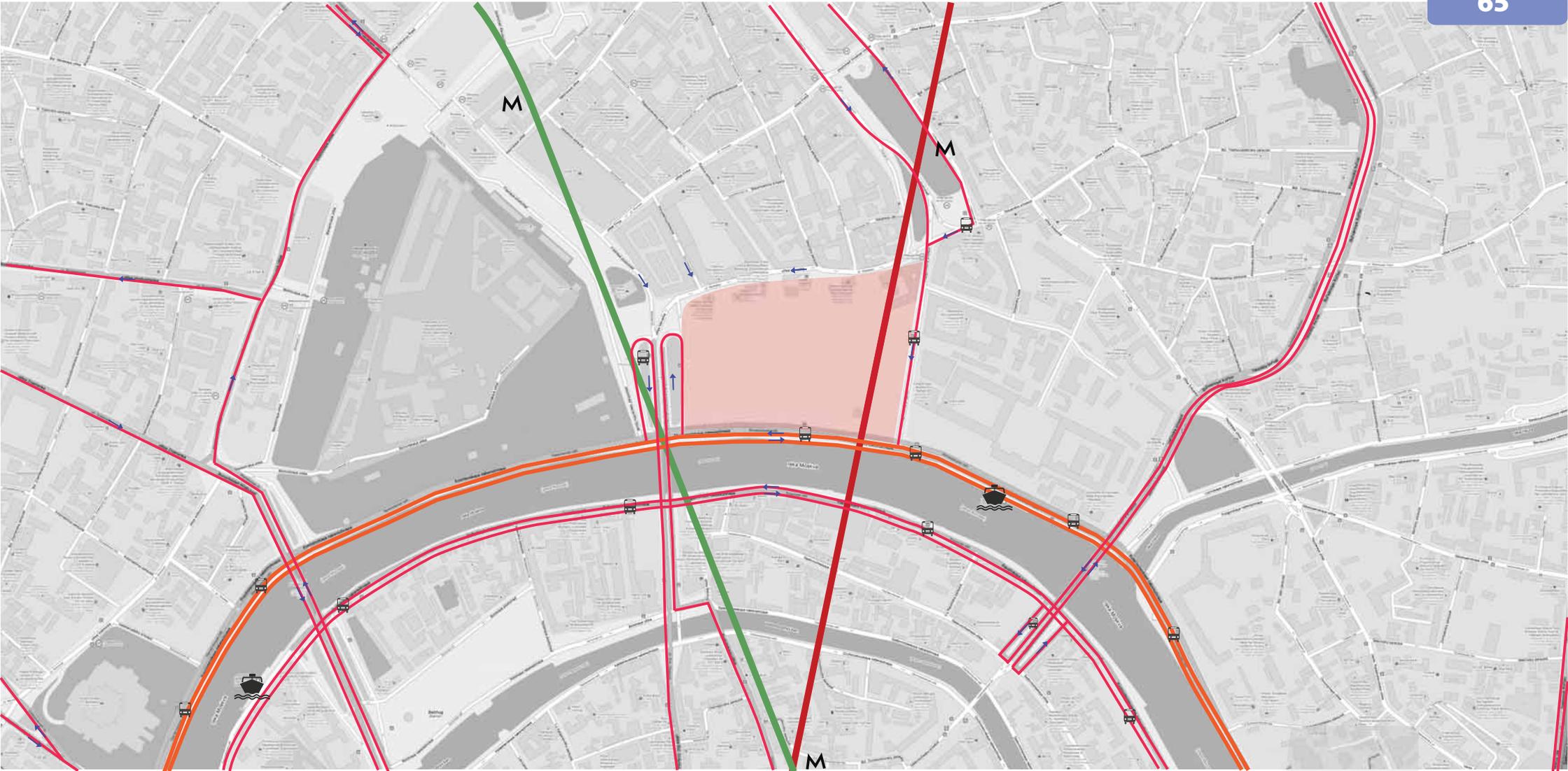


Fig. 69 - Traffic jam beside Kremlin

<sup>48</sup> The view of Kremlevskaya embankment, Source <http://bridgetomoscow.com/time-gap-the-view-on-kremlevskaya-embankment>, Retrieved on: 15.6.2011.

5

# existing traffic plan



**M** metro station

 bus station

 boat dock

 metro line Zamoskvoretskaya

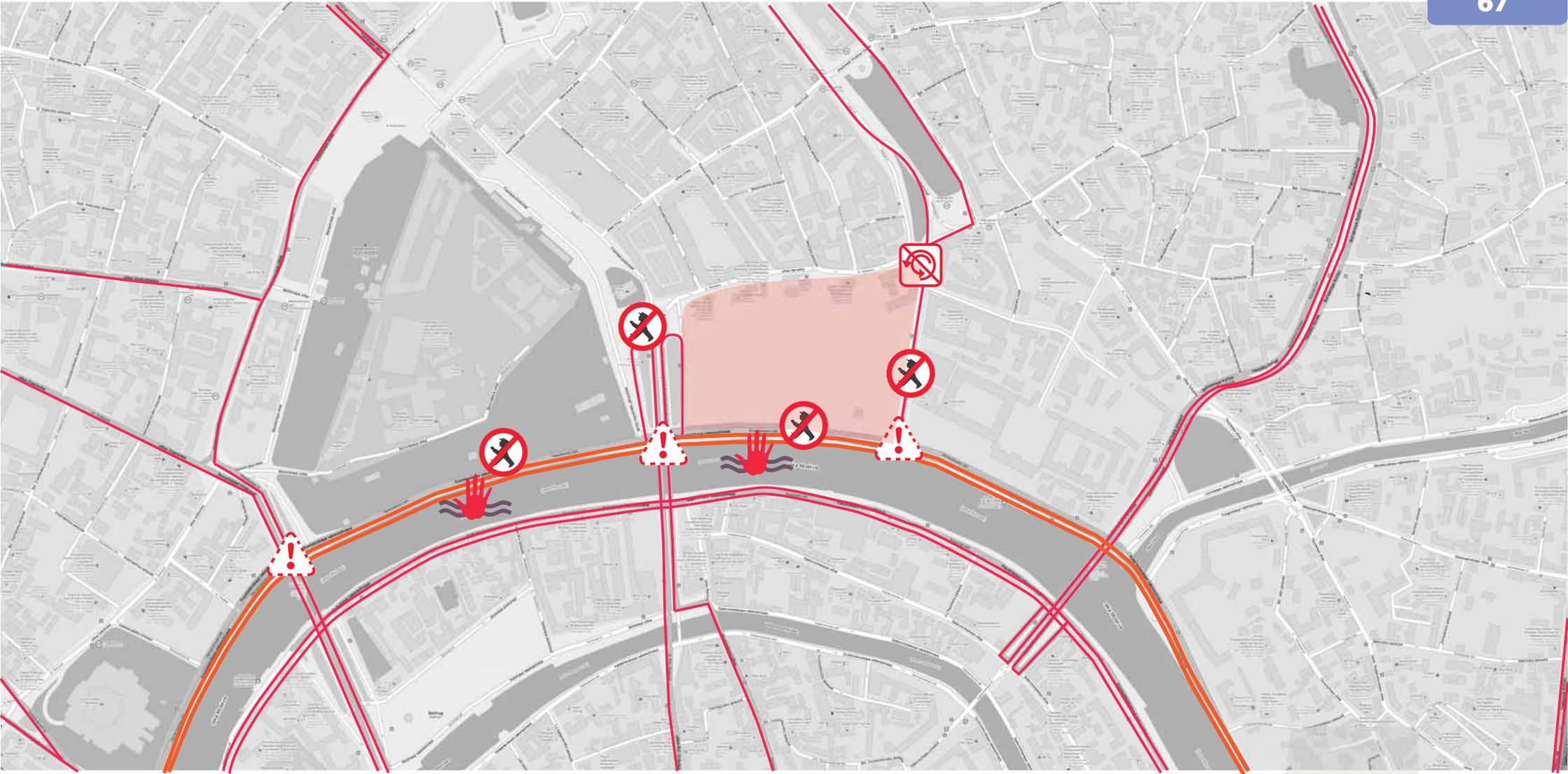
 metro line Sokolnicheskaya

 heavy traffic

 busy traffic

5

# problem zones

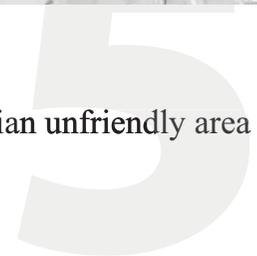


 critical traffic point

 no access to the river

 disabled car circulation

 pedestrian unfriendly area



5

people movement - tourist attractions

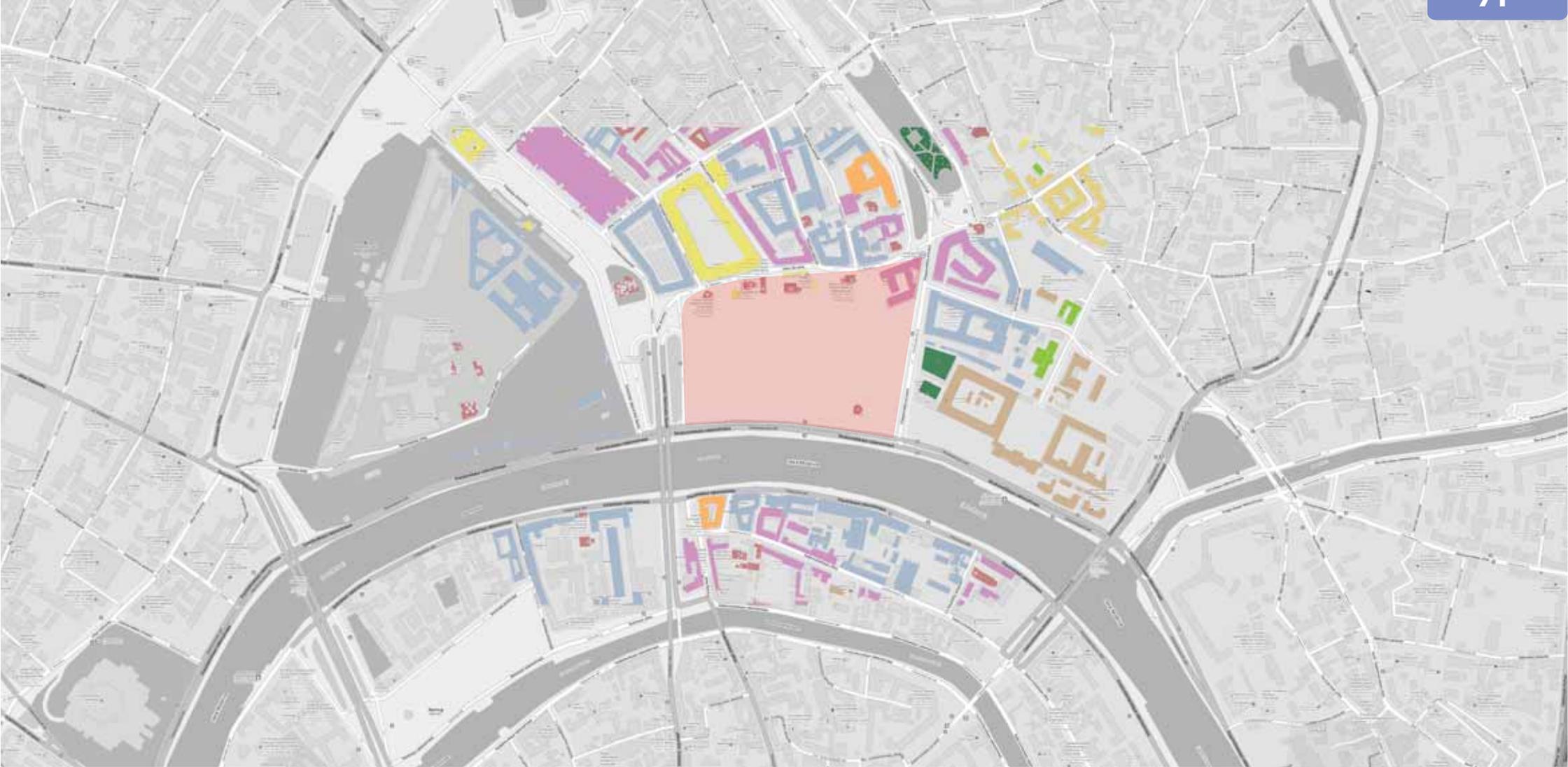


hotspots



# 5

analysis of functions around the site

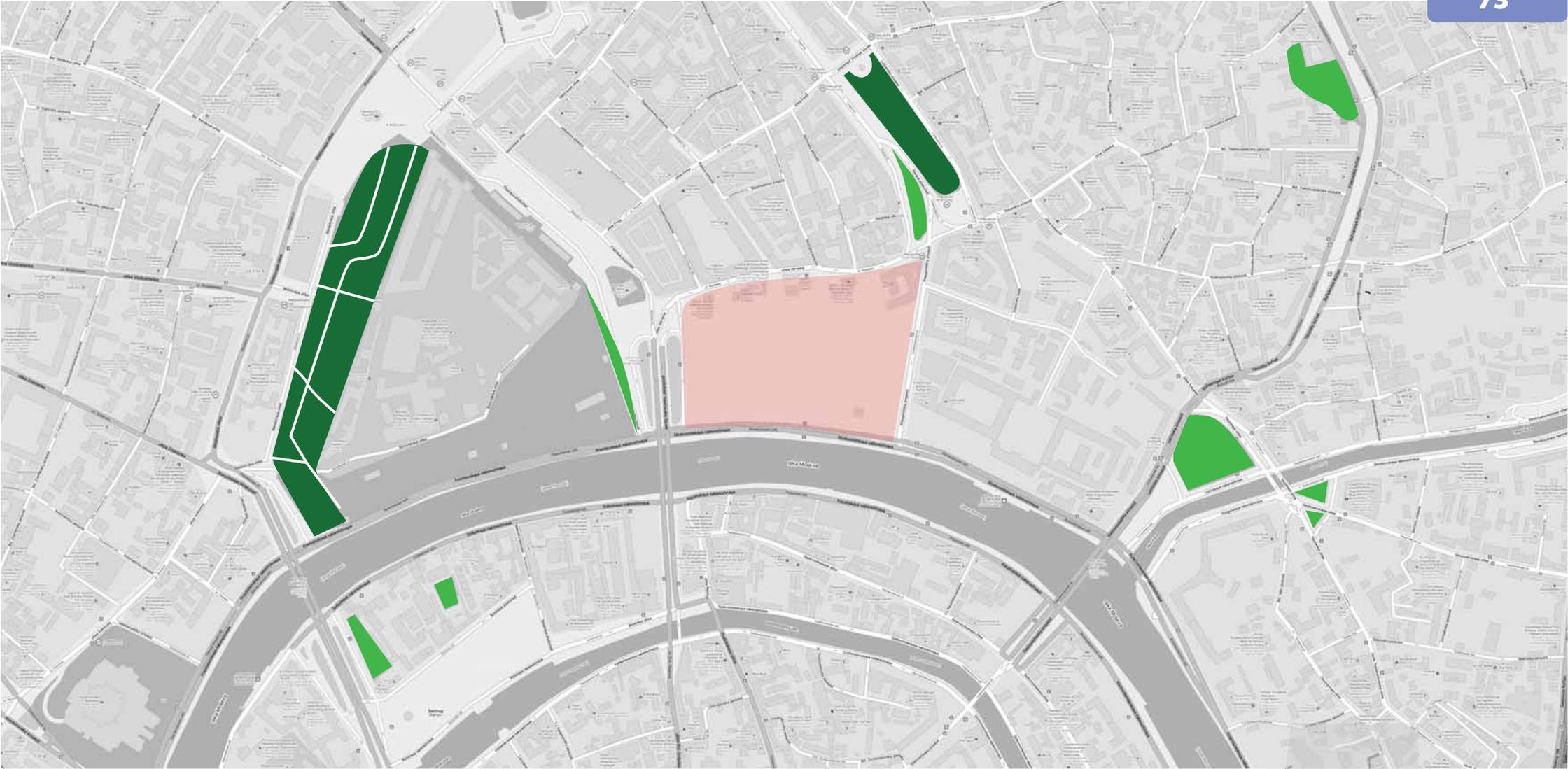


- Religion buildings
- Commercial
- Culture
- Government
- Education
- Hotel
- Residential
- Recreation
- Health care



5

green areas around the site

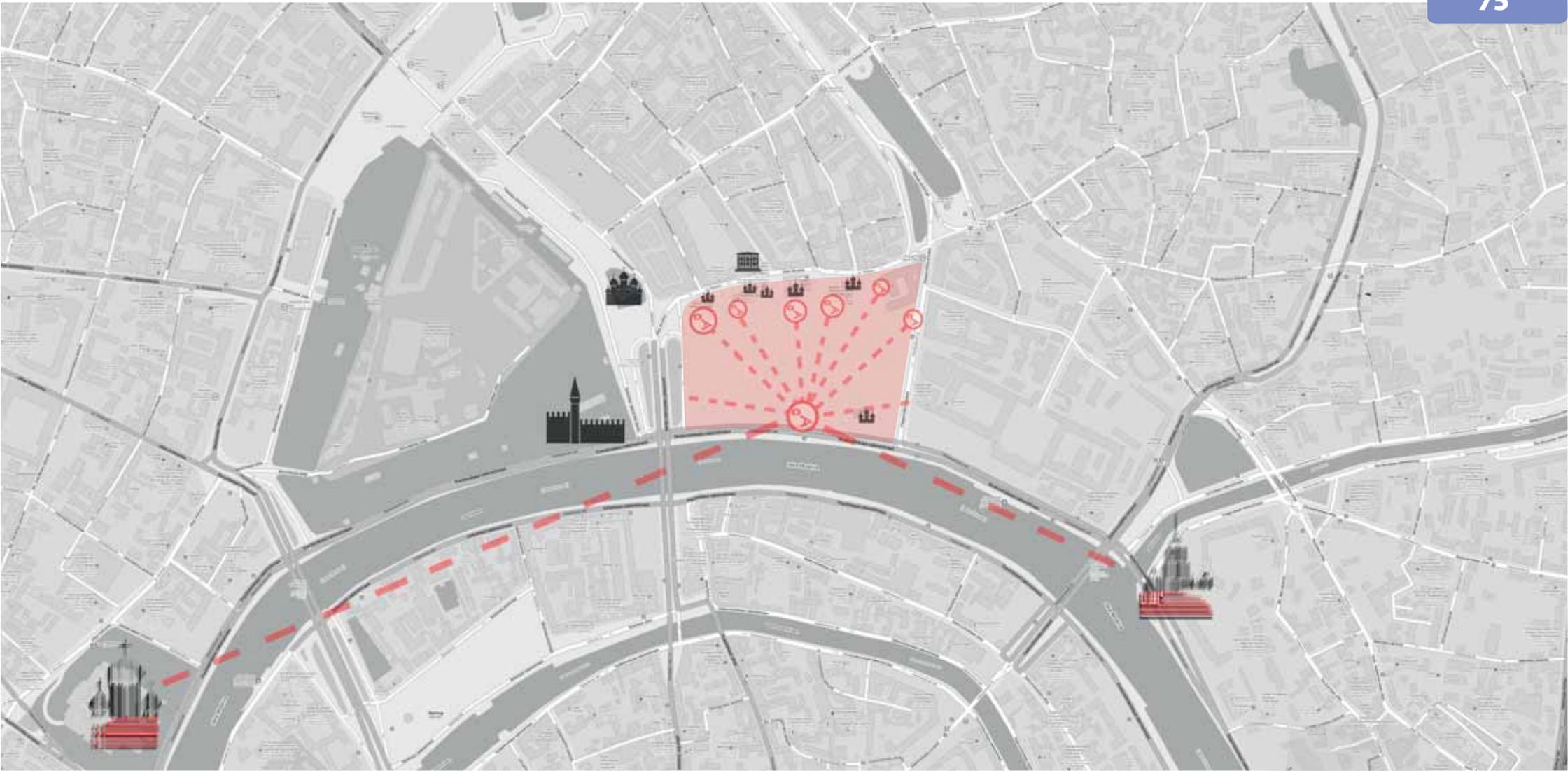


green area park



5

# important visual connections



-  visual connection
-  St. Basil's Cathedral
-  Kremlin
-  church
-  Cathedral of Christ
-  Stalinist Skyscraper
-  Gostiny Dvor



# one step away

6

Fig. 70 - Night panorama view from the new pedestrian bridge



# 6

# 6

Fig. 71 - Moscow city plan

## 6.1. Master planning – principles and examples

“Cities are organisms. They have metabolisms that synthesize energy and nutrients. They are linked to their regions through complex networks, both natural and cultivated, that circulate biological nutrition—food, wood, fiber, water—and technical nutrition—the hardware and software of the 21st century. These flows of nutrients are the metabolism of the living city. They are the foundation that allows industry and ecology, human settlements and the natural world to flourish side by side. If we are to make our cities truly sustaining we need to take this as a literal, strategic truth that informs all of our designs.”<sup>49</sup>

The importance of master plan is essential since it determines the future image of a community. It defines a general development model together with existing and future land uses. The master plan should be the base for the future development of an area and should take into account, the evolution and the growth of, for example, public facilities, transportation and green areas.

Every master planning process starts with an understanding of the given area, by gathering the

necessary information, such as the character of the area and the environmental context, its access, transportation and ends with a final plan design which should improve the quality of life and offer new contents in a certain community or city.

A brief overview of important guidelines for the master planning process is cited below. Emphasis is given to planning which proposes a better quality of life in cities, built along the river side:

### 6.1.1. Access

Easy access to all services and facilities as well as to public transport services should be guaranteed to all the users. These facilities should be positioned so that users can easily access and move and oriented themselves in every moment. Movement must be safe to enable well-used routes of high quality.

#### a) Creating attractive pedestrian/cyclist environment

“In cities and towns around the world, people are crying out for lively gathering places where civic life flourishes and different cultures mix. Public squares are

<sup>49</sup> Overtaken from [http://www.mcdonough.com/writings/living\\_city.htm](http://www.mcdonough.com/writings/living_city.htm), “The Living City/ Nature, Design and the Greening of Chicago”, By William McDonough & Michael Braungart © 2002; Retrieved on 08.09.2011.



important to cities' social and economic future because they are where people experience their neighborhoods and each other.”<sup>50</sup>

An attractive pedestrian environment is a starting point for a high quality life in cities. The best quality of every waterfront is continuous public access and undisturbed public space. However, not only is the safety and continuity of pedestrians required, but also the diversity of the streets. Spirited and lively streets are a highlight of every attractive city. In other words, streets should be designed in such a way to make



Fig. 72 - New York water taxi

50 Overtaken from; <http://www.pps.org/squares/approach/>, PPS Project for public spaces, Approach; Retrieved on 08.09.2011.

people want to walk down them, not only for their necessity but also for their pleasure, thus making them want to spend time there, away from traffic. Also, creating consequent hierarchy of the streets with main boulevard and plazas as well as enabling different activities for the pedestrians, contributes to the successful planning of the area.

#### b) Access Made Easy by Boat, Bike and Foot

In order to make a waterfront attractive, it is necessary to enable various access possibilities. “Waterfronts flourish when they can be accessed by means other than private vehicles.”<sup>51</sup> In many famous cities such as Sydney, Hong Kong, Venice and Stockholm, waterfronts can be accessed not only by car, but also by bicycle, on foot, and by boat. However, most important, is access for pedestrian and cyclists. The best waterfronts in the world have very attractive pedestrian promenades and bike tracks. Waterfronts have always been interesting to people and by enabling diverse enjoyable activities, among others events and festivals, it will blossom. In that case, traffic streets especially high ways, should be kept away, where possible.

51 Overtaken from [http://www.pps.org/articles/10\\_qualities\\_of\\_a\\_great\\_waterfront/](http://www.pps.org/articles/10_qualities_of_a_great_waterfront/), PPS Project for public spaces,

### 6.1.1. Connection

#### a) “Connect destinations along the waterfront”

In cases where there are multiple destinations which neighbor each other, the main pedestrian promenade that goes along the waterfront can be an ideal connection between different destinations that share the same riverfront. They should be linked to one another and integrated into an image of the waterfront. The foregoing contributes to the attractiveness and liveliness of the waterfront, and it also makes connectivity between destinations stronger.



Fig. 73 - Connect destinations on the waterfront, Guayaquil, Ecuador.

### b) “Create multiple-use destinations”

A well planned waterfront gives an identity both to the community and to the city. In that manner, planning of the waterfront is a very responsible and demanding task. It is very important to create an image and character, together with the community, of the waterfront. The best way to start this process is to create a new destination along the waterfront, allowing users to define happenings and activities themselves. In that way, the waterfront will get a character and identity set by the users themselves.

A square becomes more functional when having many destinations intersecting it. This attracts various kinds of people thereby providing opportunities for various activities on it, such as, reading, playing, gathering and exchanging of different cultural experiences.

### 6.1.3. Equity

One of the important points of planning is providing inter-generational equity. Implantation of the social, economic and cultural diversity of residents,

workers or visitors should be achieved as a vision for a better community life.

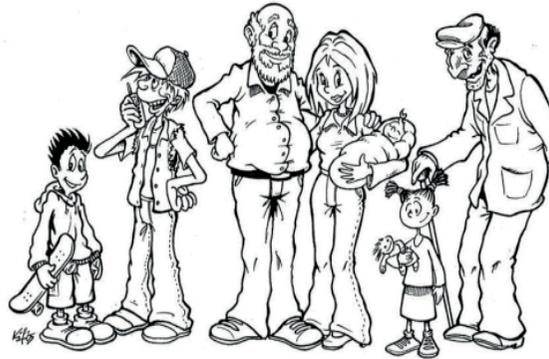


Fig. 74 - Inter-generational equity

### 6.1.4. Equality

While master planning, different needs of the inhabitants, or tourists should be taken into consideration “In planning for the provision of community and cultural facilities consideration is given to recognition of the dignity, worth, independence, cultural diversity and human rights of people seeking to access facilities for cultural and community activities.”<sup>52</sup>

<sup>52</sup> Overtaken from [http://www.actpla.act.gov.au/\\_data/assets/pdf\\_file/0014/2813/appendix02.pdf](http://www.actpla.act.gov.au/_data/assets/pdf_file/0014/2813/appendix02.pdf); Appendix 2, URBAN DESIGN AND CULTURAL FACILITY PLANNING PRINCIPLES; Retrieved on 08.09.2011.

### 6.1.5. Flexibility and innovation

One of the key criteria for designing a good waterfront is its ability to adapt to changes that come with different users and different seasons. It is necessary to focus on flexibility in the process of urban design, which means the planning of facilities or public spaces to be easily changeable, depending on the conditions.

Diverse activities for different seasons should be considered, for example, in summer a huge open square could turn into an ice-skating area in the winter. Furthermore, facilities should be designed to meet changeable needs of users, or different weather conditions.

#### a) “Extraordinary Buildings Serve a Variety of Functions”

In order to make a waterfront as eye-catching and interesting as possible, it is good to avoid the standard solutions, and improve the city’s skyline, by constructing remarkable buildings “that reflect human scale”. However, they should respect the environmental context.



### b) Re-integrating waterfront - defining a waterfront's identity

People have always been attracted to the waterfront and to the river, for that reason the waterfront is considered one of the most valuable qualities to the city. The first step is to re-integrate the waterfront into the immediate surroundings, since many have been inaccessible or cut off, by public roads, train tracks, or closed industrial facilities. Furthermore, it is very important to make it as attractive as possible to the users. In that manner, the public goal should be the primary objective. With the motto: "Experience the river view", activities should be offered on, or by the river. The wealth of events is not only inviting users to the waterfront but also causes interest amongst the onlookers. Organizing of, for example, boat festivals, shows or concerts on floating stages and on the bridges, introducing water- taxis, bars and restaurants, embrace and improve the quality of the waterfront.

#### 6.1.5. Sustainability

Nowadays, where an energy and ecological awareness is growing, architects, urban planners and designers need to integrate sustainability into their de-

sign. Sustainability helps to create a healthy community that will continue for generations to come. For this reason it is very important to consider the energy efficiency, minimization of a negative impact on the environment, incorporated land use and transport planning in the very beginning of the planning. In addition, the use and choice of materials is very important for the sustainability.

#### a) Materials

The materials we choose in the planning process are very important. The choice of good quality materials contribute to the sustainability and enable long term use. In addition, the materials make up the identity of the place, so if they are sustainable and high quality, they will contribute to the popularity of the place and enable long and flexible use for many generations.

#### 6.1.6. Amenity

Facilities and services should be planned to be in the first line practical, people oriented, and user friendly in order to provide comfort and intensify beauty and importance of the place.

#### 6.1.7. Preserve and protect the local cultural and historical heritage

Cultural heritage is defined as historical legacy maintained from past generations until present time and given as a benefit for the new generations. Every cultural heritage is usually seen as only one of its kind and the present generation has to protected and preserved it for the upcoming age. A good example for protecting and preserving heritage would be the re-using of old buildings, by creating a new, attractive space in a forceful shell.



Fig. 75 - "Re-use of old building—former industrial building retrofitted to attractive office space." London, UK.

### 6.1.7. Public space/landscape design



Fig. 76 - Space for activities and spontaneity invites people to spend time on the public square. Paris, France

Good public space/ landscape design is one of the most important criteria of a successful master plan. It determines if and how people will use the space. Therefore, it is very important to make a good, flexible design that adapts to different needs and seasons. Mix people and activities such as recreational entertainment and planning, gathering and communication places, this guarantees a successful design.

“Streetscapes become more varied, rich and interesting. Overlapping activities animate the streets at all hours. Liveliness attracts life, people attract people, local business thrives and diversifies, and safety improves. Combined with dynamic public spaces and plazas, mixing it up creates vibrancy in and above the streets.”<sup>53</sup>

Big cities and cultural capitals especially need to have generous public space that allows various events to happen like festivals, concerts and other cultural gatherings. Also the form and design of a building is very important for the successful planning of a public space, because architecture intensifies the activity on the square, so to say revives it. Therefore, it would be of great advantage to create different purpose buildings in the aim of interaction between various users of that space. Making “flexible design and destinations that are open all year round”- referring to the square but also all the buildings around it. This is especially important for designing a successful public space on or close to the waterfront.

Furthermore, since it is important to create adequate lighting, this would make them feel comfortable and give them the feeling of warmth.

<sup>53</sup> Overtaken from [http://www.itdp.org/documents/ITDPBook1-110826\\_FINAL.pdf](http://www.itdp.org/documents/ITDPBook1-110826_FINAL.pdf); “our cities ourselves” Principles for Transport in Urban Life; Retrieved on 08.09.2011.

To summarize, it could be said that when planning public space and landscape, everything needs to be considered: lighting, sitting possibilities, cooling during the hot summer days or hiding from the bitter, greenery, flexible design...



Fig. 77 - Establish main pedestrian boulevards and a subsequent hierarchy of streets. Melbourne, Australia.



## 6.2. Examples of Master plans, described with key principles and main goals

### 6.2.1. Groene Loper A2 Maastricht

The goal of this project is under tunneling of the highway that splits the city of Maastricht in Holland in two, thereby making the highway dominate in the city's landscape. By moving the national motorway underground a quiet and safe park is created with a generous area and wide paths for the pedestrian and the cyclist, and a green environment that significantly improves the life quality of inhabitants.



Fig. 78,79 i 80- Groene Loper-A2 Maastricht master plan

### 6.2.2. Toronto Central Waterfront

The main goal of this project is to connect the city life and the lake, by making a waterfront publicly accessible. The generous waterfront promenade links major waterfront destinations transforming the waterfront area into a new vibrant public space.

The elegant design of the waterfront promenade connected by five wooden pedestrian bridges contributes to the identity of the city of Toronto. In addition, generous implantations of trees, public furnishings and materials make it more attractive to the users. This project won several awards for innovative designs including ASLA Honor Award (2009), CSLA National Merit Award (2009) and the Award of Excellence at the Toronto Urban Design Awards (2009).<sup>54</sup>



Fig. 81- Wave Deck



Fig. 82- Toronto Central Waterfront master plan

<sup>54</sup> Overtaken from  
[http://www.west8.nl/projects/all/toronto\\_central\\_waterfront/](http://www.west8.nl/projects/all/toronto_central_waterfront/); WEST8, Toronto Central Waterfront; Retrieved on 08.09.2011.



### 6.2.3. The Valencia Parque Central project

In the words of Valencia's major Rita Barberá, the Valencia Parque Central project is "a historical milestone of the city's urban development" and "the most attractive, important and certainly the economically most significant project in Europe".<sup>55</sup>

The new park in Valencia, was built by moving the existing train tracks under the ground, thereby liberating abundant green space in the very heart of the city.

Rich with gardens, green areas, various playgrounds and not only recreational, but also cultural and educational activities, this park fulfills the most important goal of all, which is giving a better quality of life to the inhabitants of the whole city and improving the city's image.

Being positioned in the epicenter of city, this park celebrates the culture of living in a healthy environment.



Fig. 83 "The Valencia Parque Central project"

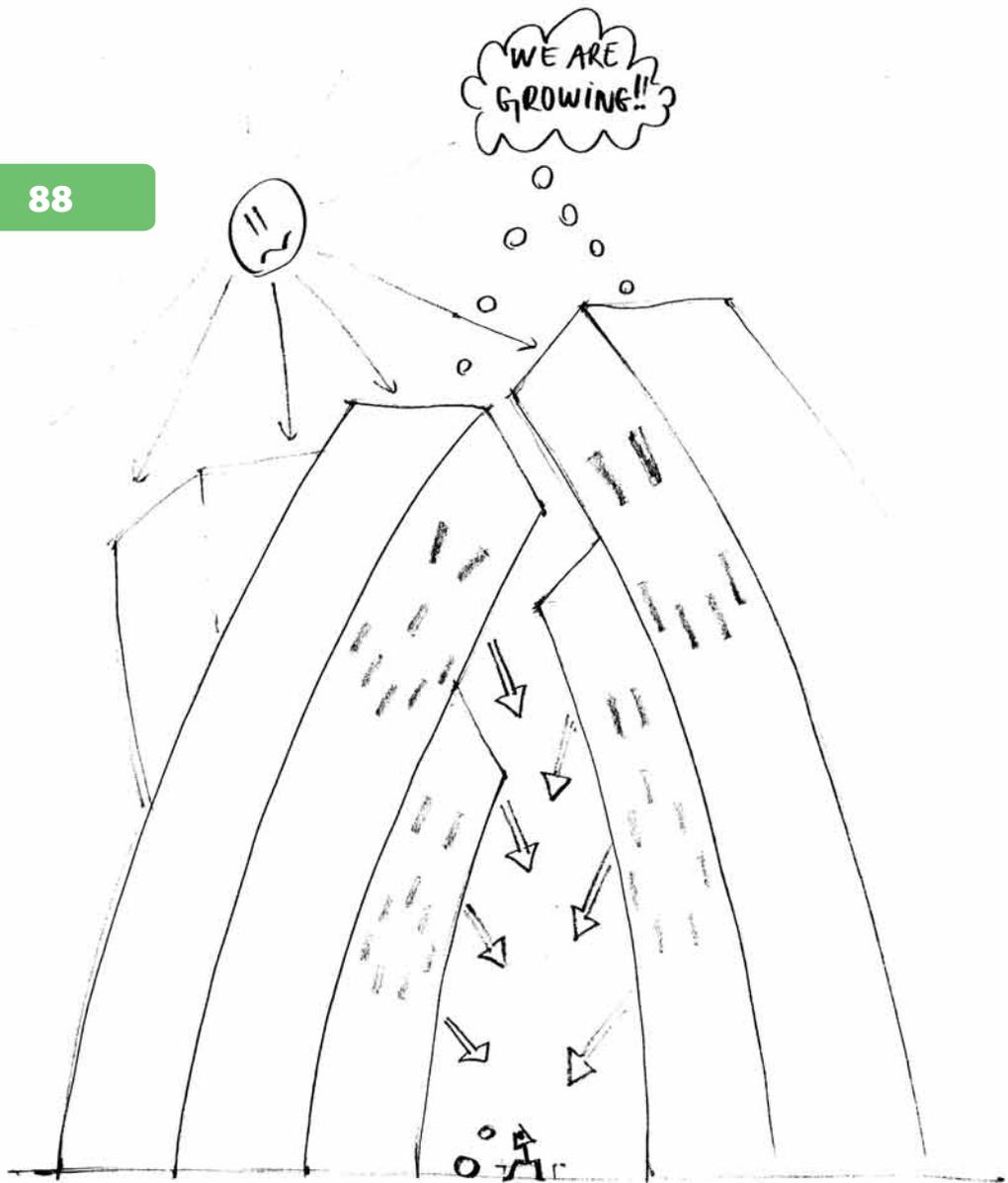
<sup>55</sup> Overtaken from <http://www.worldlandscapearchitect.com/gustafson-porter-win-valencia-parque-central-competition/#more-7285> Gustafson Porter win Valencia Parque Central competition ; By Damian Holmes on January 31, 2011; Retrieved on 12.09.2011.

### 6.3. Concept development

The aim of this Master plan is to create a quarter for all generations and people of different backgrounds. It produces a place where the young meets the elderly, where parents bring children to learn about art and to communicate with other children, and where tourists meet Muscovites, it also allows place for all to contribute to creating art, or to simply enjoy the city view.

The main goals are to invent different kinds of entertainment in one place and to improve the existing public zones with new ones by proposing new connections, both pedestrian and transportation.

Furthermore, it is very important to make space as attractive as possible to users. In that manner, public purpose should be the primary objective. With the motto: “Experience the river view”, activities are offered on, or by the river. The possibilities of organizing boat festivals, shows or concerts on floating stages and on bridges, introducing water- taxis, bars and restaurants, embrace and improve the quality of the waterfront. The old district of Zaryadye reintegrates this way successfully into the urban tissue of Moscow



I AM SO SMALL!!



we enjoy privacy



we come to watch a movie under the ridge

what a delightful day!!!



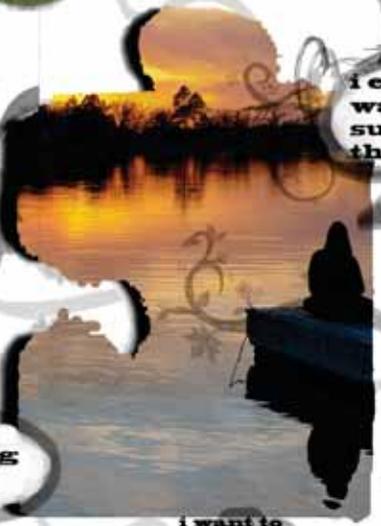
IT'S SWELL!



i like to do yoga on the grass



i enjoy watching sunset on the river



i just want to watch the skyline in a nice furniture



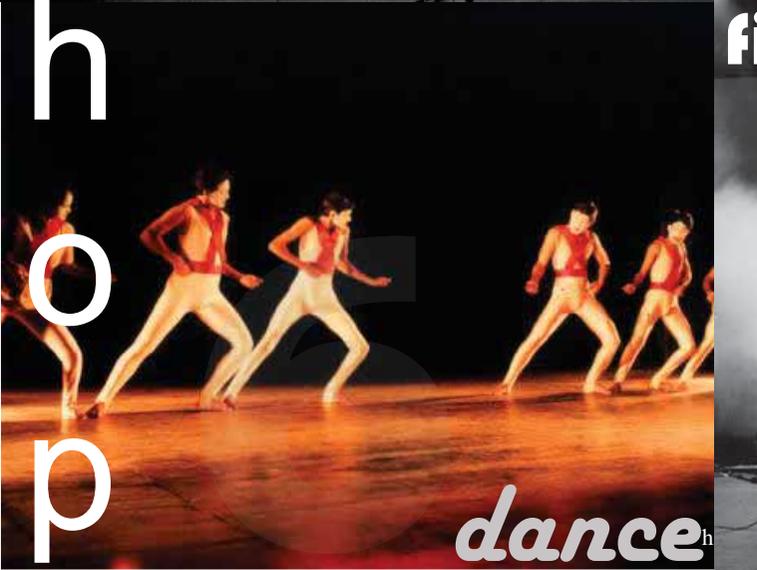
i enjoy dancing on the street



i want to play with my balloon



Fig. 84 - "Landscape concept"



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fashion

photography

film

painting

music

dance

sculpture



Fig. 84 (left)- Ideas for facilities functions

Fig. 85 (up)- Different examples of the open space



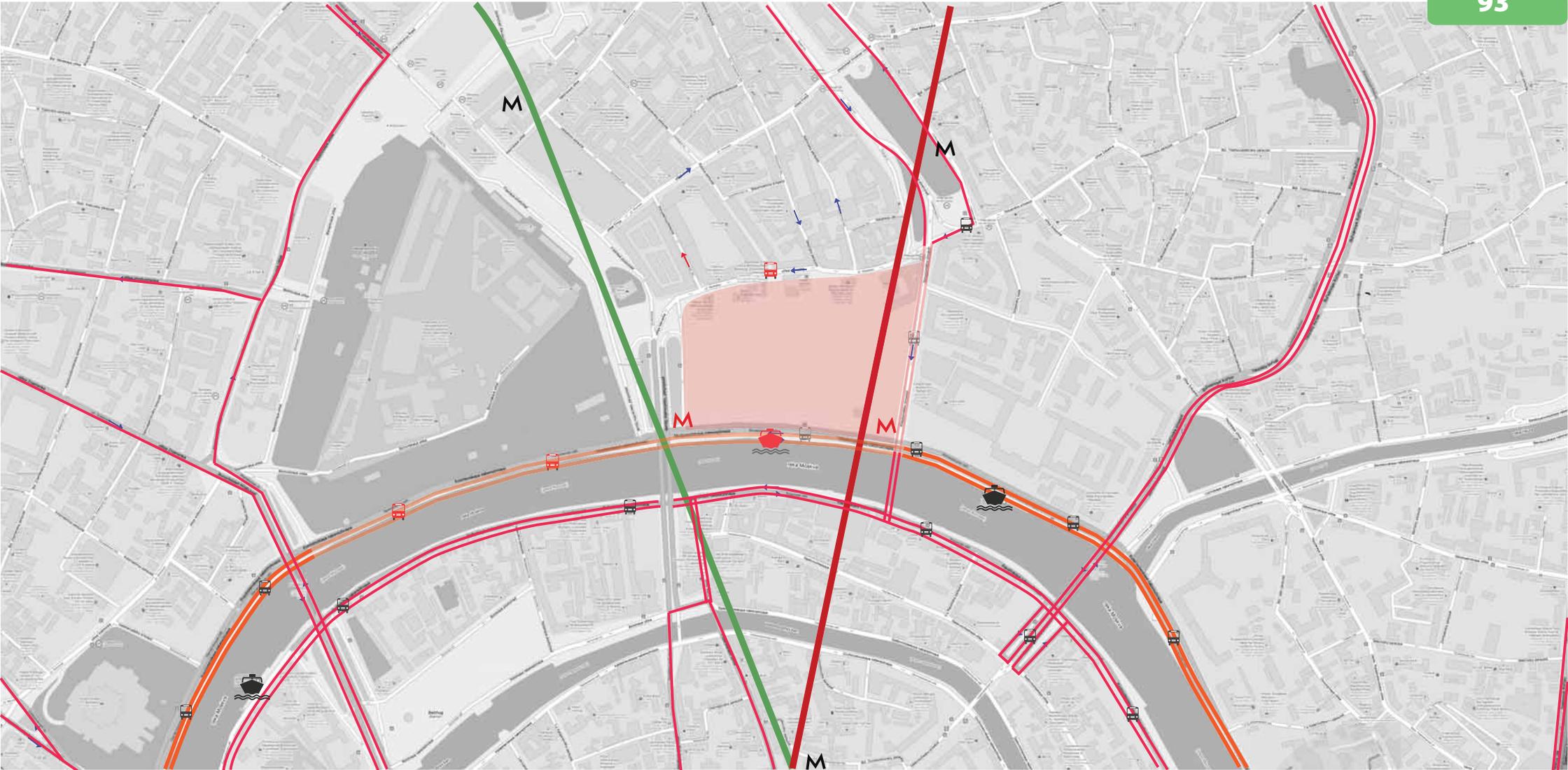
### 6.3.1. The New traffic plan

Heavy traffic around Kremlin is a serious problem for the pedestrians. Not only does this problem represent the weakest point in this famous tourist destination, but also makes the Moscow River totally inaccessible to the pedestrians and cyclists.

The starting point of the new master plan dealt with the issue of traffic, and turning the waterfront to a public space, rather than traffic space. By moving heavy traffic underneath the ground, walking freely and enjoying the view beside the river would be allowed. Long walking distances between the public traffic stations in Moscow are sometimes a real problem for the pedestrians. The plan proposes a new station “Zaryadskaya” on metro lines Zamoskvoretskaya and Sokolnicheskaya, new bus stations and a “water taxi” station on the prominent position, considered as a public “crossroad” of this site. With this proposal, the distances between the Moscow’s most visited tourist zones of the Red Square, Kremlin the historical district of Zaryadye would be shortened. This will also make another tourist attractions along the river easily accessible - the Cathedral of the Christ the Savior and

one of the famous Stalinist’s seven sisters “Vysotka” which is today Radisson Royal hotel.

# new traffic plan



**M** new metro station

 new bus station

 new boat dock

 heavy traffic underground street  
 busy underground street



### 6.3.2. Make pedestrian/tourist continuity

One large public space that stretches beside the river is now created, and the six lane boulevard of the Moscow embankment is no longer a barrier which stops people to move freely. Rich pedestrian as well as cyclist promenade is providing undisturbed movement and easy access to and through the site. Accessing new pedestrian area on the riverbank is possible since the vehicle traffic from the Moskvoretsky bridge has been put under the ground. This allows the main tourist movement of the Red Square to continue where it stopped, on the pavement few steps behind the St.Basil's Cathedral, so it flows now undisturbed and the new lively waterfront promenade invites for various activities.

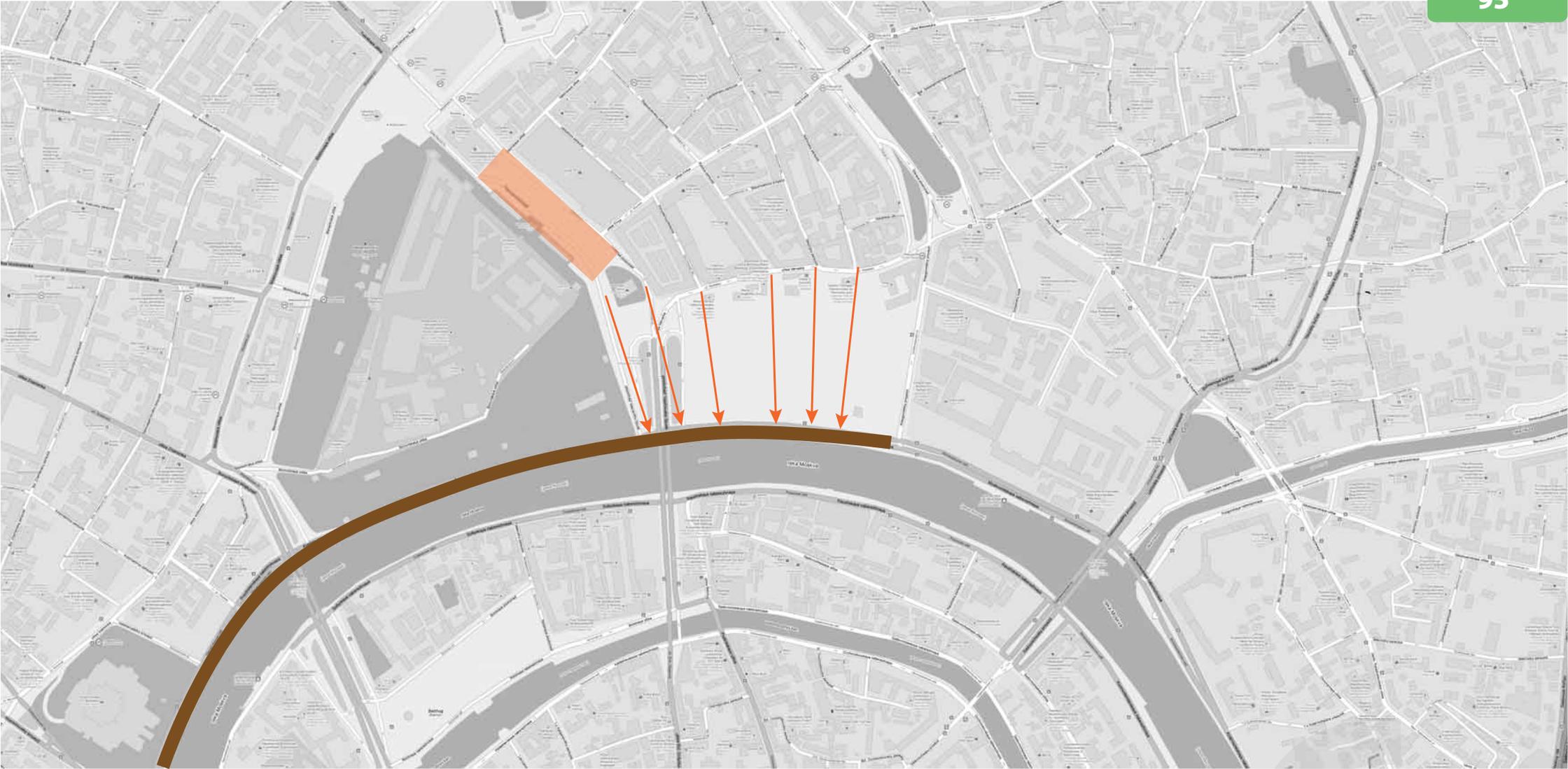
The new pedestrian friendly zone becomes a linkage between the old historical district with one of the most important Moscow's tourist attractions - the Cathedral of the Christ the Savior. Also, the streets of Kitay gorod get a direct approach to the riverfront over the area of Zaryadye.

Providing new access and connections for the pedestrians within the inner centre of Moscow would

give continuity to the cultural hotspots which will make sightseeing in Moscow a whole new experience.



make pedestrian/tourist continuity



main tourist area



people movement



waterfront promenade



### **6.3.3. Creating a green belt and extending main tourist zone**

By excluding the traffic and putting it under the ground, around 90m below the St. Basil's Cathedral, people are enabled to move freely beside Kremlin walls and Moskvoretsky bridge. Similarly, the street beside Kitay Gorod wall becomes a non-traffic area, and continuation of the existing park located between Staraya Ploshchad and Lubyanskiy proezd boulevards.

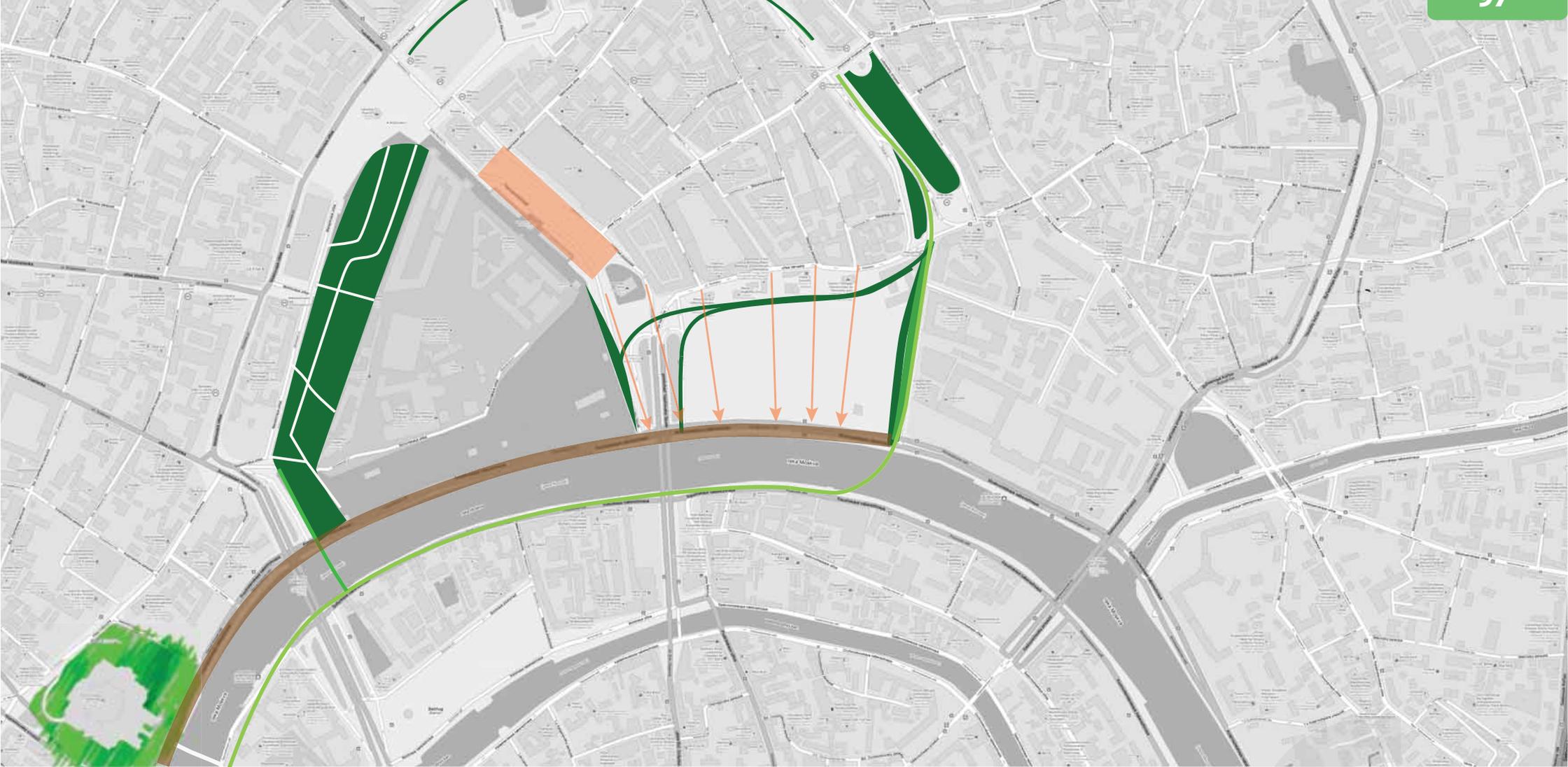
When walking from the Moscow center, passing the Red Square, Kremlin, GUM and St. Basil's Cathedral one would like to reach the river bank, and to get to the other side as well. With the motto "on the river", two pedestrian/cyclist connections - bridges are introduced as an extension of the existing pedestrian zones. They would be also an most-valuable tie with the Balchug island - which is a large business district.

Historically significant Kitay gorod wall which accommodates today some of the nicest restaurants and cafes, is now surrounded by long green recreational area which has been created around it. This makes it possible to create gardens, bars or restaurants; one can sit and enjoy reading in the park, or simply lay on the

grass, without being disturbed with noisy traffic. This green zone connects the new pedestrian area on the other side of the river via green pedestrian bridge in order to form a continuation of sightseeing/recreation zone in the very centre of Moscow city.

Historical district of Zaryadye becomes surrounded with a lot of trees on both sides, along the Kremlin walls and beside the rest of the medieval Kitay gorod wall, where an extended park exists, therefore having a natural environment.

creating a green belt and extending main tourist zone



main tourist area



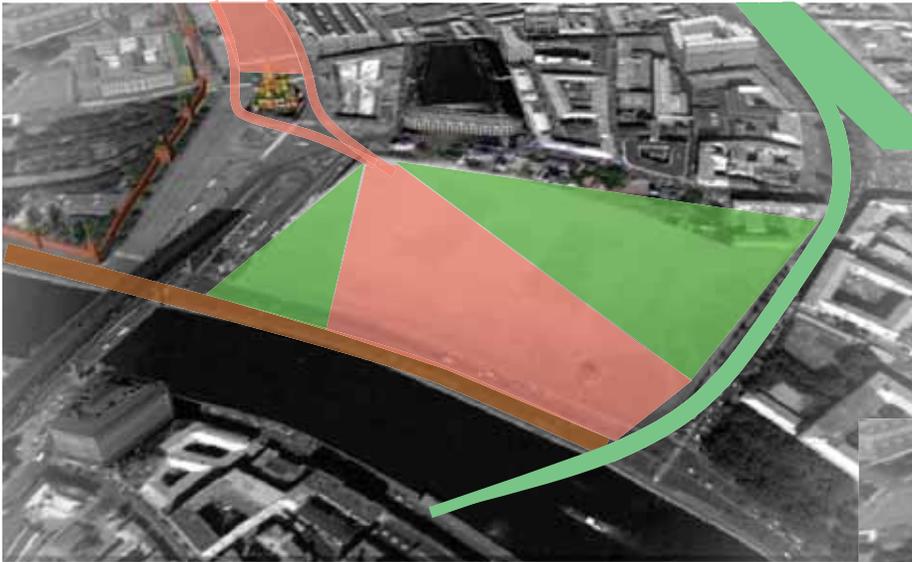
people movement



green area



park



**6.3.4. Cultural heritage- Puffer zone**

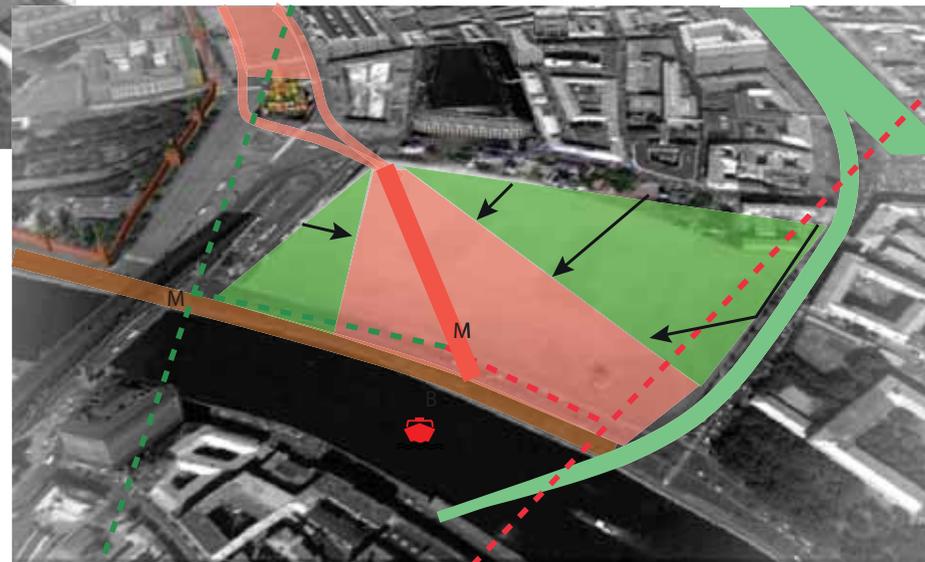
The old churches of Zaradye, which represent historical heritage of Moscow, stand high on the naturally sloped landscape, like on a pedestal. In order to save this natural highlight of the city, and to take advantage of the rising topography of the site, the proposal is to use landscape as a starting point.

Puffer zone is created in form of landscaped architecture which is not going to grow too high so that churches of Zaradye could still have a panoramic view on the whole site and the surrounding. Also, this allows churches to be visible from the river and Kremlin, which would again emphasize the importance of the historic part of Moscow.

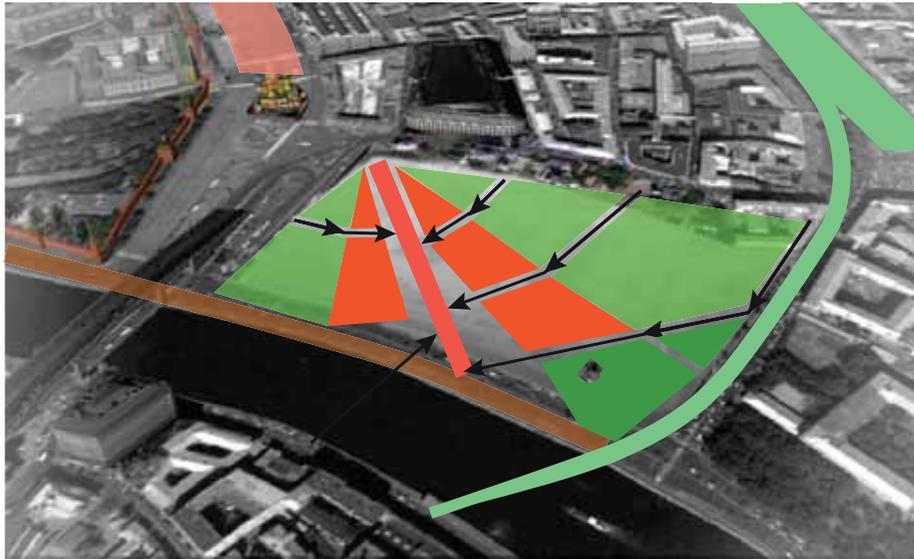
**6.3.5. Pedestrian paths reach the extended tourist zone**

The old streets of the Kitay gorod are extended in the form of the narrow paths which are linked to the strong tourist axis, stretched diagonal over the block of Zaryadye. These pathways split the two landscaped zones into five smaller blocks. They also create narrow spaces between the split blocks, which is very convenient in cold Moscow's winter.

The main tourist zone is linked to the waterfront promenade and this creates a kind of a "pedestrian network", which develops with the hierarchy of smaller pathways to larger ones reaching to the most prominent zone.



waterfront promenade
  extension of the park
  pedestrian movement
  landscape (buffer) zone
  tourist axis

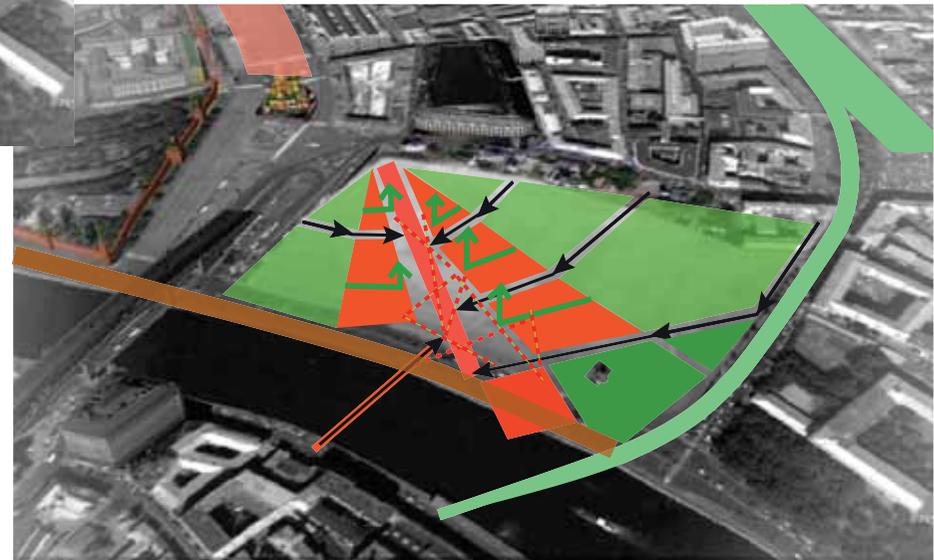


**6.3.6. Forming the landscaped architecture - expands in the direction of the main axis and waterfront**

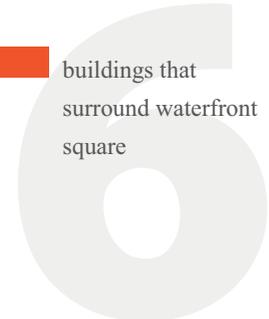
In a form of landscaped bands, objects of the puffer zone are successfully integrated in the nature. The sliced bands allow the daylight to come into the inner space. Roofs, which are covered with natural materials, start to grow. This allows people to move freely on the landscaped buildings, and experience the view of the surroundings from the top. That way the symbiosis between nature and man is achieved. The sloping bands are made by using ramps to create an attractive, consistent zone which provides a new way of exploring the space.

**6.3.7. Surrounding buildings create waterfront square**

Iconic buildings expand as a direct extension from the landscaped blocks, and are oriented with the entrances to the main pedestrian axis. The functions of the existing landscaped architecture are further developing in the new buildings. Connections between those buildings create a new interactive space which is positioned directly on a crossroad of the waterfront promenade, continued park and extended tourist axis. This intersection becomes a new square, the place where various activities take place throughout the year.

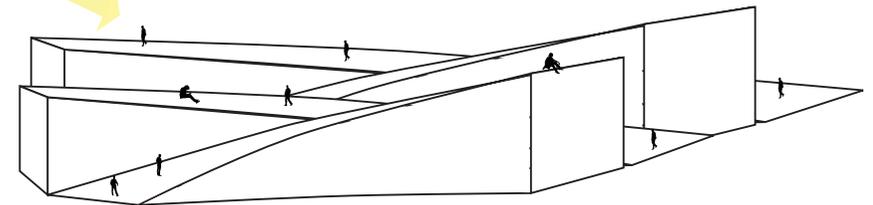
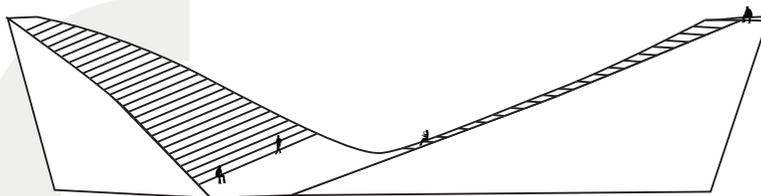
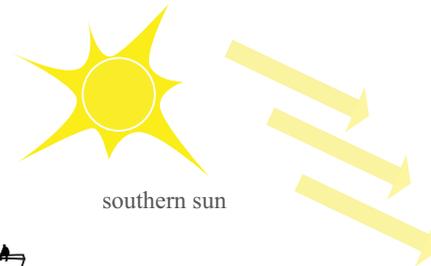
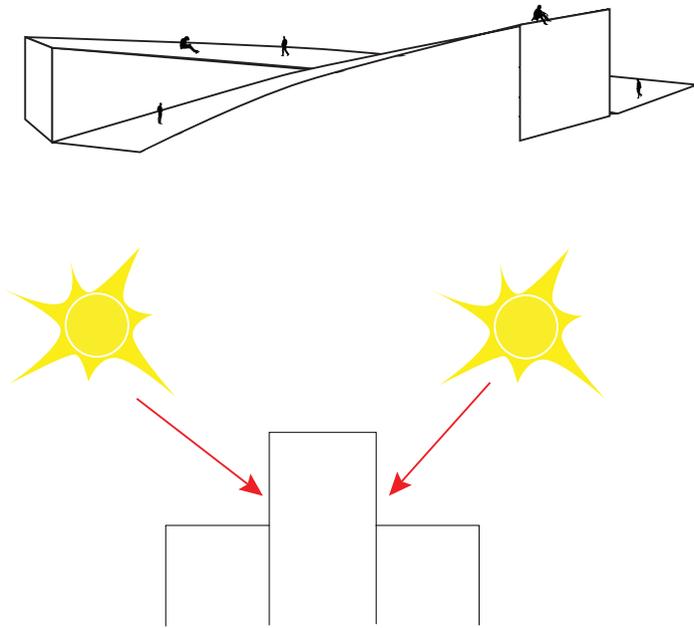


- waterfront promenade
- extension of the park
- pedestrian movement
- landscape (buffer) zone
- tourist axis
- buildings that surround waterfront square





LANDSCAPE ARCHITECTURE CONCEPT



#### 6.4 About the project

The area of this master plan covers 17 ha and it is a mixed-functional complex which consists of 16 buildings (45 952 square meters), public space (119 783 square meters, where the green area covers 37 809 square meters).

##### The form

“Sloping bands” accommodate various workshops reserved for the arts, where people from all over the world would work together in an aim to share, learn and indulge in the different spheres of art. This creates a space for communication, creativity and amusement. There are music, dance, film, photography studios, and a fashion centre with a small hotel, library as well as shops which are exhibiting musical instruments or photography equipment. There are also restaurants and cafes where contact between professionals and public are realized, allowing them to be part of these creative surrounding. The main public square accommodates performances, exhibitions and concerts, in both conventional and modern with a view over Moscow as its natural environment. In winter it becomes an ice skating area in the center of the city making Moscow’s bitter winter more enjoyable. Eight remarkable buildings surround the main square, which is takes a considerable portion of the

renewed waterfront. This architecture elevates when the “buffer zone” of the landscaped roofs expand to reach the main path – the important tourist and pedestrian axis, which connects the Red Square with the other side of the river. The square becomes the intersection of paths which connect the theatre to the museum of modern arts, or the media and movie centre with the “house of art”, where various kinds of art assemble all in one place, making a creative interaction of various performers gathered in one place.

The idea of extending public activities “on the river” is an important part of this Master plan. It is achieved by inventing a new pedestrian bridge that connects the newly introduced metro station, on one side, and the business zone on the other side of the river. This connection also accomplishes a significant flow of people moving through the site. At the same time, the bridge is a part of the main square, and a continuation of events on the site. A band plays there while people enjoy their drink watching the city, while the sun sets behind the Kremlin. Or there are jugglers performing, while painters are painting Moscow’s skyline. During the winter, the bridge serves as the closest connection from the “business island” to the metro station.

This plan also proposes an extension of evening and night-time activities directly to the river. A place is created

where people can congregate in the summer, sitting on the steps and watching the ships on the river passing by. One of the leading principles was creating comfortable spaces, as an answer to Moscow’s monumentality. Whether surrounded by Stalinist buildings or modern skyscrapers it isn’t rare to feel small and lost in this city which lacks small, cozy places with a “warm” atmosphere, where one could simply enjoy the view or sit on the green area listening to the birds whistle. In order to make the city welcoming to the visitors and inhabitants, it longs to be covered with warm and nature friendly materials. The form and choice of materials reflect the artist’s spirit of the new quarter in the central part of Moscow.

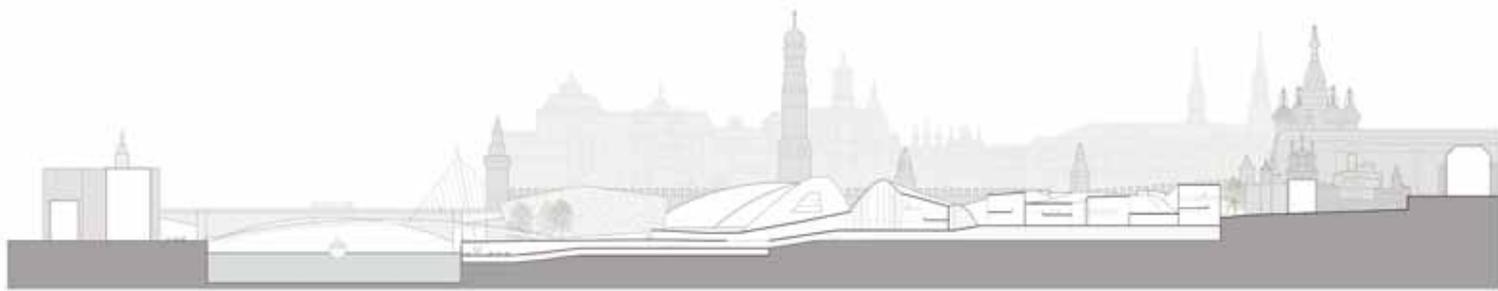
An opportunity of using the same space in different weather conditions is convenient, due to Moscow’s extreme climate. Narrow pedestrian streets and small courtyards allow people to move on the site, protected from severe cold and wind and in the summer this area allows people to move undisturbed but also to relax and chill on the patios, protected from the noisy and restless big city. The goal of this project is to modernize Moscow city centre while maintaining a warm green city feeling. This will preserve the colorful Moscow culture and history and make it a part of a new modern, but yet human city.



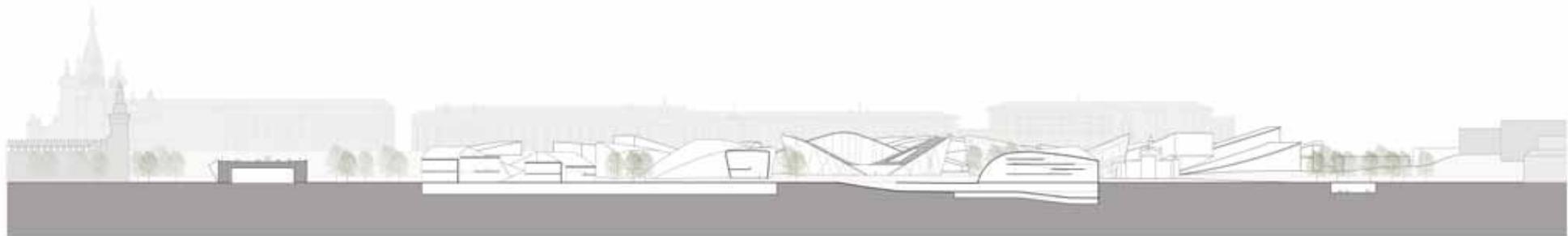








section b-b



section a-a



view from the river



view from kitay gorod wall



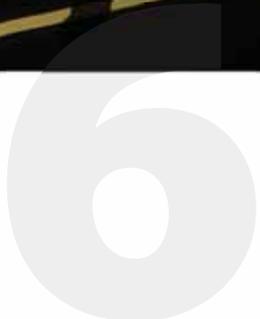
6

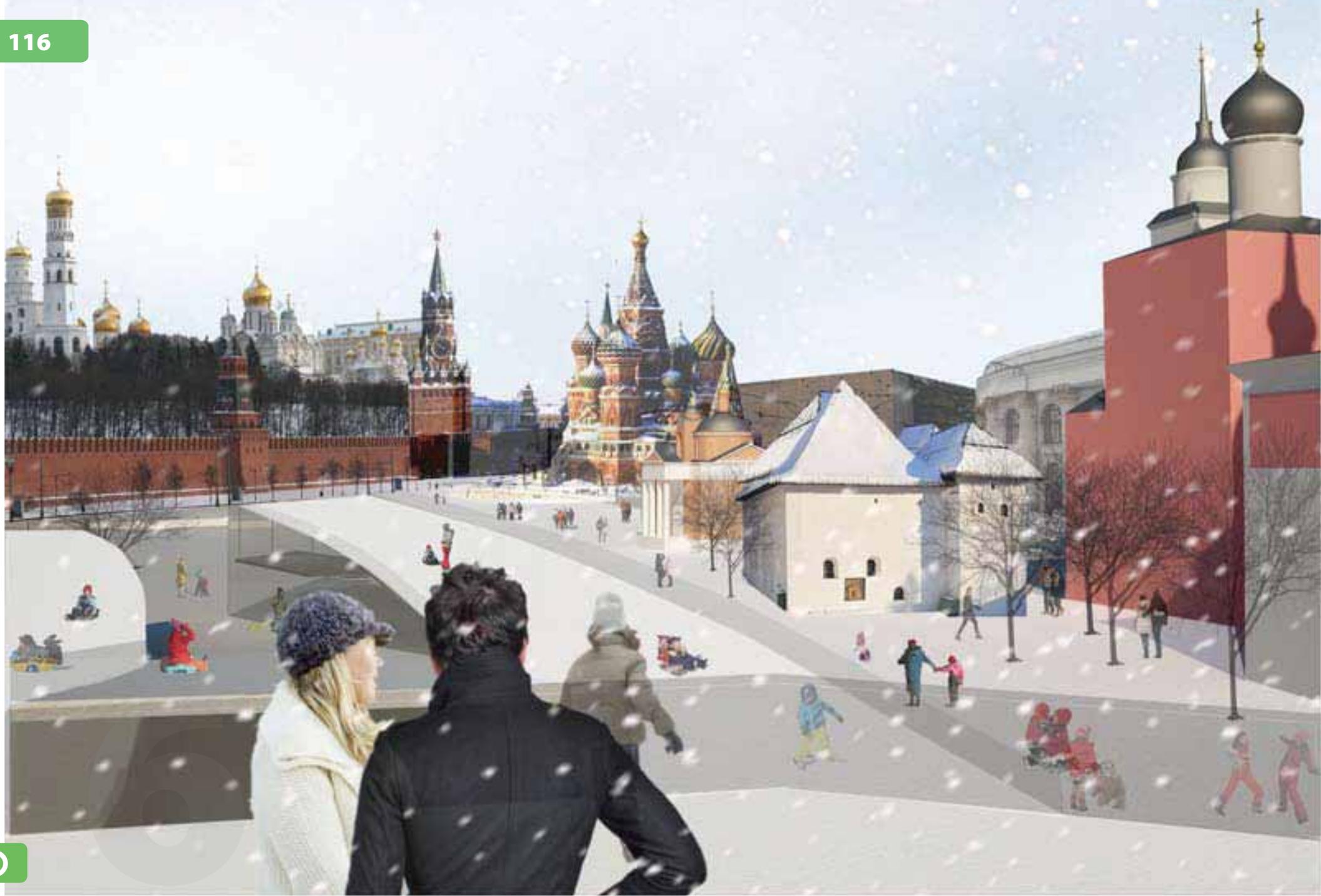














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Fig. 01

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Fig. 02

File:Russian Federation (orthographic projection).svg.

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Fig. 04

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Fig. 05

Our Homeland → The Vladimir-Suzdal Principality

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Fig. 06

File:Moscow daniel.jpg; From Wikipedia, the free encyclopedia

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Fig. 07

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Fig 08

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Fig. 09

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Fig. 10

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Fig. 11

photobucket; Presidential Flag of the Russian Federation

Source:

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Fig. 12

Image\_23777-43. “Matryoshkas displayed in shop window on Arbat Street”, Lonely planet Travel guide

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Fig. 13

“Garden Ring, Moscow”, Lonely planet Travel guide

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Fig. 14

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Fig. 15

Image\_24034-1 “Brass band of the Central Museum of Armed Forces”, Lonely planet Travel guide

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Fig. 19

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Fig. 20

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Fig. 21

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Fig. 22

Lenin speaking in the open air in the revolutionary year of 1917

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Fig. 23

Russland und Stalin heute - Auswirkungen des Stalinismus auf die heutige russische Gesellschaft

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Fig. 24

Stalinist Urbanism

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Fig. 25

Stalinist Urbanism

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Fig. 26

Stalinist Urbanism

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