

INTRODUCTION

The squares can be analyzed in term of use, sense of space and shape. In this first stage we give an overview about all these squares classification given by three architects.

THE SQUARE IN SPACE AND TIME

PART 1// CLASSIFICATION AND TYPOLOGIES

KAISA KANGUR / MIRKO TRAKS

TALLINN 2011

THE SQUARE IN PLACE AND TIME

The open area of the square, the surrounding buildings and the sky creates a genuine emotional experience comparable to the impact of any other work of art.

Its only secondary for this effect whether and to what extent in each instance specific functional demands are fulfilled.

Square means structural organization as a frame for human activities and is based on very definite factors: on the relation of buildings, on their uniformity or variety; on their dimensions and relative proportions in comparison to open area; on the angle of the entering street; and on the location of monuments, fountains etc.

Lately the fundamental importance of the square as a basic factor and as a very heart of the city in town planning are somewhat overshadowed by the problems such as the use of the land, the improvement of traffic, zoning, the relationships between residential and industrial areas. Squares serve all the same purpose- they create a gathering place for the people, humanizing them with mutual contact, providing them with a shelter against the traffic and ease the tension of the web of streets. The square represents a physical parking place with the civic landscape.

The city planner of the past faced the same kind of problems as does the city planner of today.

Whether the open area has to be shaped for royal spectacles or for political rallies does not make any difference in principle. These functional considerations have influenced the shapes and sizes of streets and squares, and planning in space today is hardly more functionalist than it was in earlier centuries.

Historical squares can be basically divided into two: square within a town either might have been developed gradually with town or

have been planned as clearly defined as a any individual piece of architecture. Gradually developed squares can be found in Hellenistic and late medieval towns of Central Europe. Planned squares appeared in ancient Greece from the 5-th century B.C and were resulted indirectly from gridiron scheme.

After the decline of ancient civilization, planned squares appeared again in England, Germany and France. In the early Renaissance architects starting with L. B. Alberti or L. da Vinci planned whole towns and their squares equally to churches or palaces. Architects interest in squares reached its climax during the 17-18-th centuries in France and Italy.

ARCHETYPES

For the square there are three space confining elements: the row of surrounding structures, the expansion of the floor, and the imaginary sphere of the sky above. These three factors may vary in themselves: the surrounding structure may be uniform height, proportion and design or they may differ. The floor may be homogeneous in expansion and texture or it may be articulated by slopes, steps, different levels, etc. The impression of height of sky (ceiling) is caused by the interplay of the height of the surrounding buildings and the expansion of the wall.

The correlation of these principal elements that confine the square is based on the focal point of all architecture and city planning: the constant awareness of human scale. As long as the size of human body and the range of human vision are not recognized as the basic principles, any rules about proportions, design or composition, are meaningless. The appearance of each individual square represents a blend of topographical, climatic and national factors. Although squares of certain types reveal in certain periods general space-volume relations are independent of particular historical forms. There exist basic types of squares that appear again and again.

The specific function of the square, for example, as a market square or as a traffic center never produces automatically a definite spatial form. Each different function may be expressed in many different shapes. Many squares have changed their function in time. These developments prove that the archetypes are structural, that they are spatially, not functionally defined.

Archetypes may be classified as follows:

1. The CLOSED SQUARE: space self-contained (Place des Vosges, Paris)
2. The DOMINATED SQUARE: space directed (parvis of Notre Dame Cathedral, Paris)
3. The NUCLEAR SQUARE: space formed around the center (Piazza di SS. Giovanni e Paolo with Verocchio's Colleoni monument, Venice)
4. The GROUPED SQUARES: space units combined (Salzburg Cathedral, Austria)
5. the AMORPHOUS SQUARE: space unlimited (Place de L'Opera, Paris)

Of course every square may be not only one pure type but combined. Squares are living organisms and are changing continuously with varying socioeconomic conditions and technological possibilities.

TOWN AND SQUARE IN ANTIQUITY

Since the Indian, Mesopotamian and Egyptian civilizations did not provide the political, governmental social and psychological conditions which would create the need for gathering places.

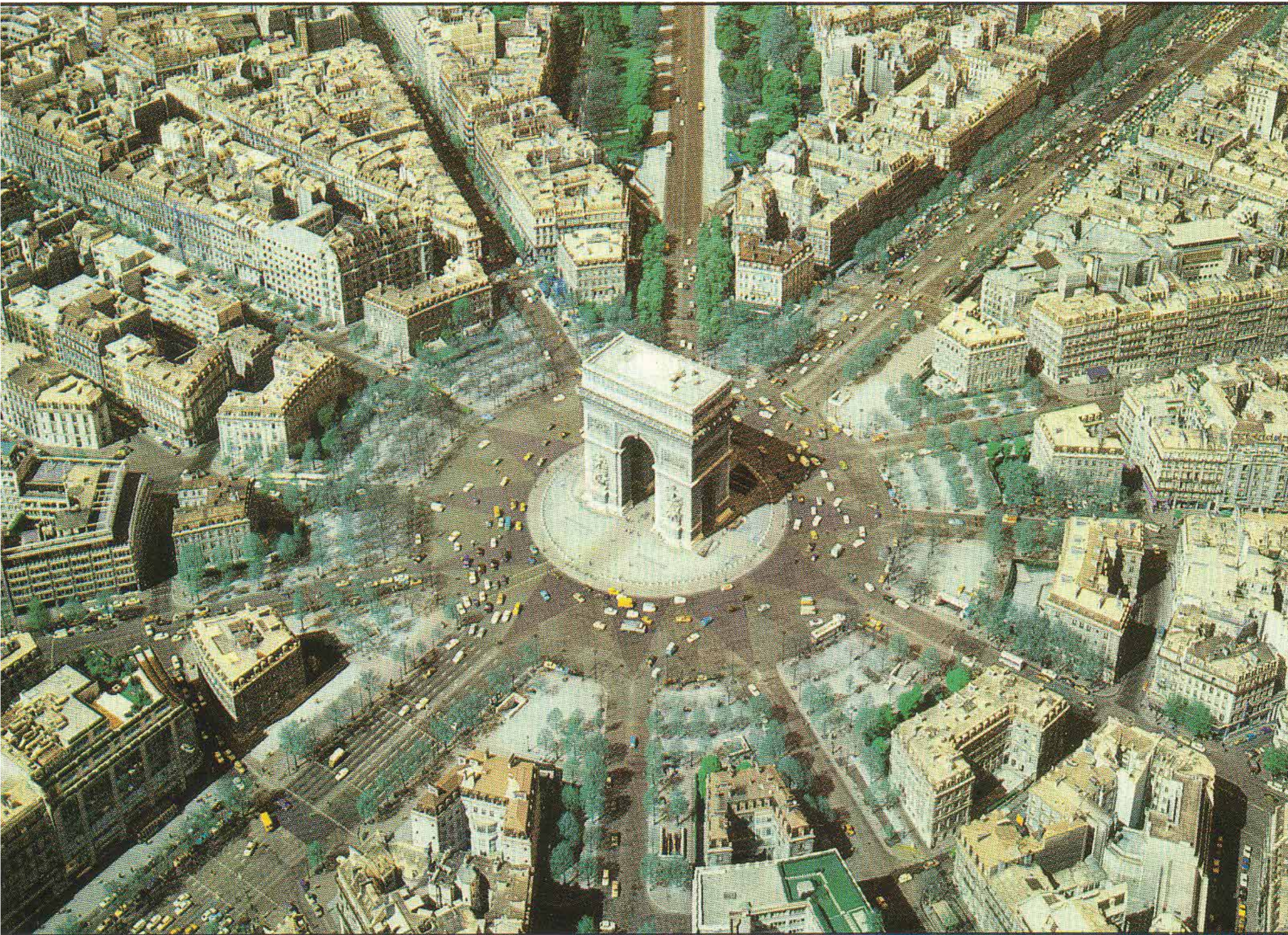
Square begins in Greece. Though first Greek towns had grown out from villages and the chaotic structure remained unchanged-irregular. Also space in acropolis where never organized- general interest was concentrated on statues or single buildings. It was acropolis Thera where the archaic agora can be constructed. And it was agora that made town a polis.

Usually agora was the focal point of town located in the center, if topographical conditions allowed it. In the beginning, as described by Homer, agora was a place for political gathering and changed gradually into a center for marketing and eventually become solely commercial and political gatherings where taken over by sacred places in acropolis.

During archaic period to the beginning of the 5-th century B. C. the layout of agora was irregular and was mainly defined by topography. The decisive step towards regularity was taken by Hippodamus of Miletus had invented new theoretical principle for organizing city grid.

There could also be many agoras in Greek town. Besides the traditional agora where the public functions and buildings continued to prevail, there were individual agoras for fish market, meat market, etc.

SQUARES CLASSIFICATION



Classification By Joseph Stübben- 1845-1936 (German architect, urban planner and professor)

First category: Traffic squares, modern interchanges, circular and polygonal “star plazas”

Example: Place de l'Étoile ("Square of the Star")

Arc de Triomphe stands at the center of the Place de l'Étoile. Construction works were completed in 1777. In this time it was the point of convergence of several hunting trails.

There is no pedestrian access to the Arc de Triomphe from any of the twelve avenues as there is constant movement of automobile traffic on and around the road junction. Through an underpass is possible to visit the Arc de Triomphe.

1. It is large road junction in Paris and it is meeting point for twelve straight avenues.

SQUARES CLASSIFICATON

Second category: Square for public use.
These squares comprise places for markets,
parades, and public festivities.



2. Marktplatz in Germany.

SQUARES CLASSIFICATON

Third category: English garden squares, landscaped squares



3. Russel Square in London

SQUARES CLASSIFICATON



4. Trafalgar square



5. Piazza dello Statuto

Fourth category: Architectural square, monument square

This type of square is serving single monumental building or has architectural frame.

Example: Trafalgar square

Trafalgar Square is a public space and tourist attraction in central London. Nelson's Column stands at the center of square. On the north side of the square is the National Gallery and to its east St Martin-in-the-Fields church. The square consists of a large central area with roadways on three sides, and a terrace to the north, in front of the National Gallery. Square was completed in 1845. The square is used for political demonstrations and community gatherings, such as the celebration of New Year's Eve.

Example: Piazza dello Statuto

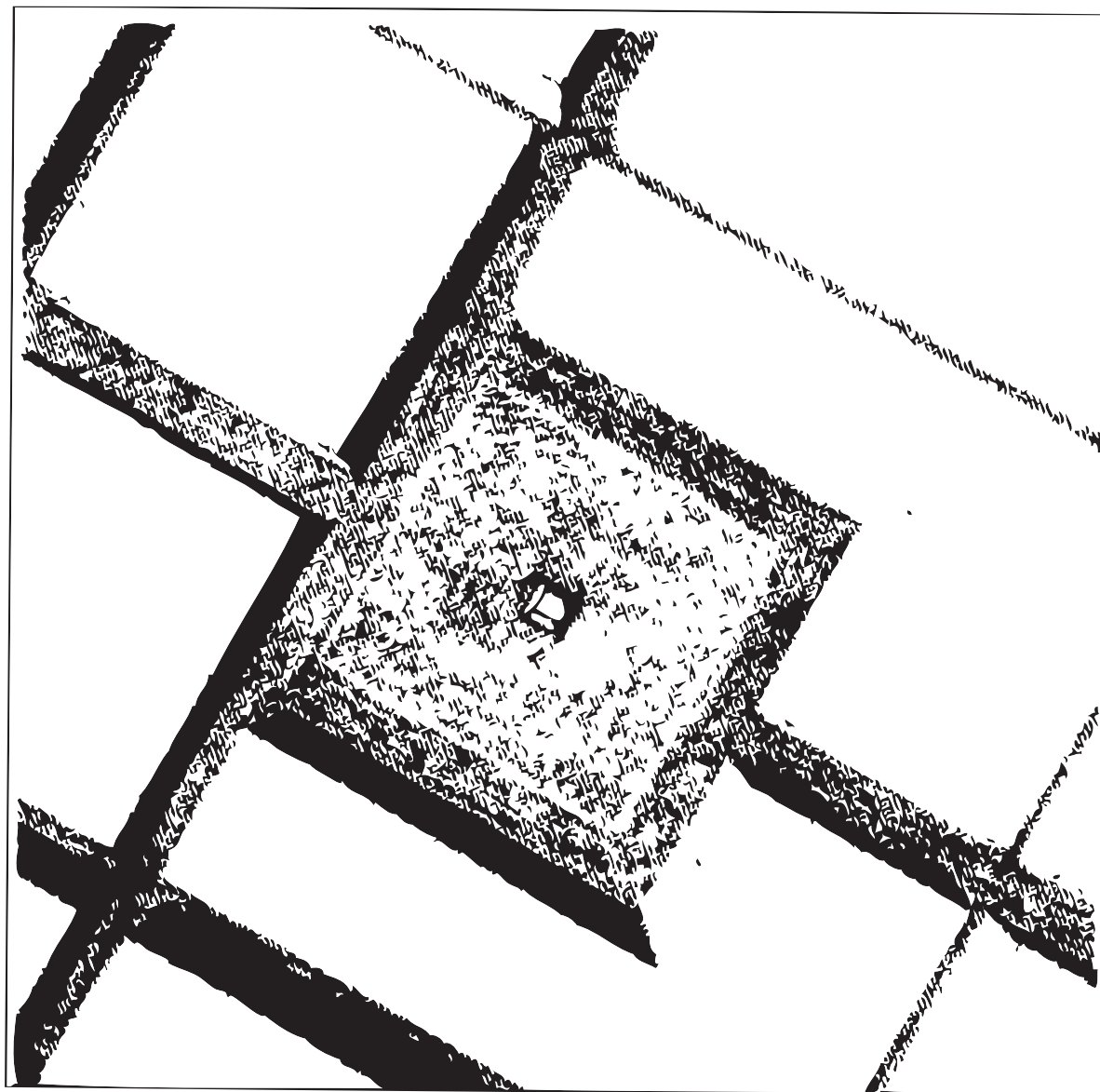
Piazza Statuto is located in the Torino city center. It has an elongated shape. In the center is an impressive monument dedicated to the creation of the railway tunnel of Frejus (it connects France with Italy).

SQUARES CLASSIFICATON

Classification By Paul Zucker- 1888- 1971
(German architect, art historian, art critic).

1. The Closed Squares

Example: Place des Vosges
Place des Vosges is the oldest planned square in Paris. Des Vosges was built by Henri IV from 1605 to 1612 and is originally known as the Place Royale.



6.

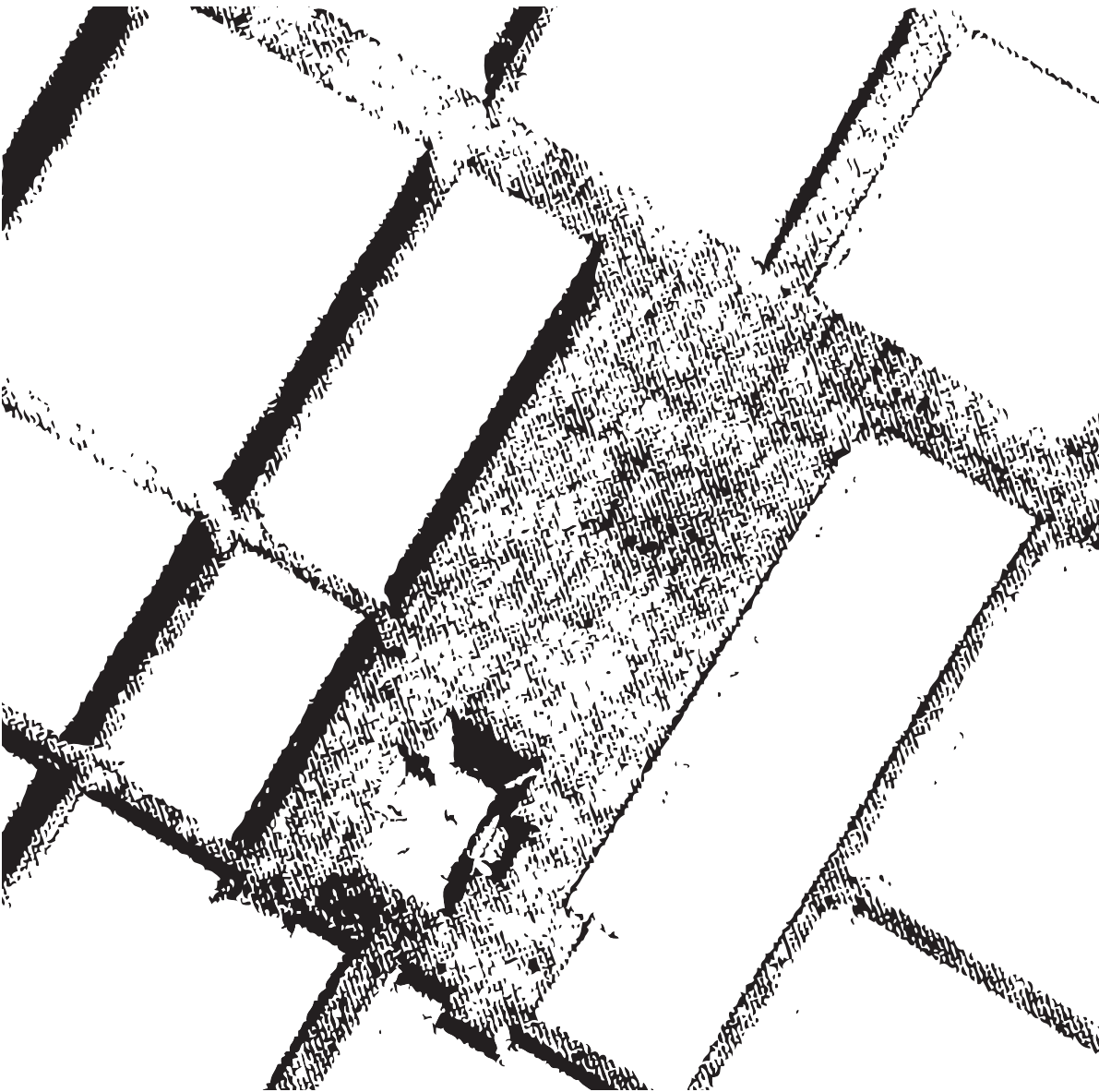


7. It is a true square 140 m x 140 m. Square is surrounded with clipped bosquet of Tilia.

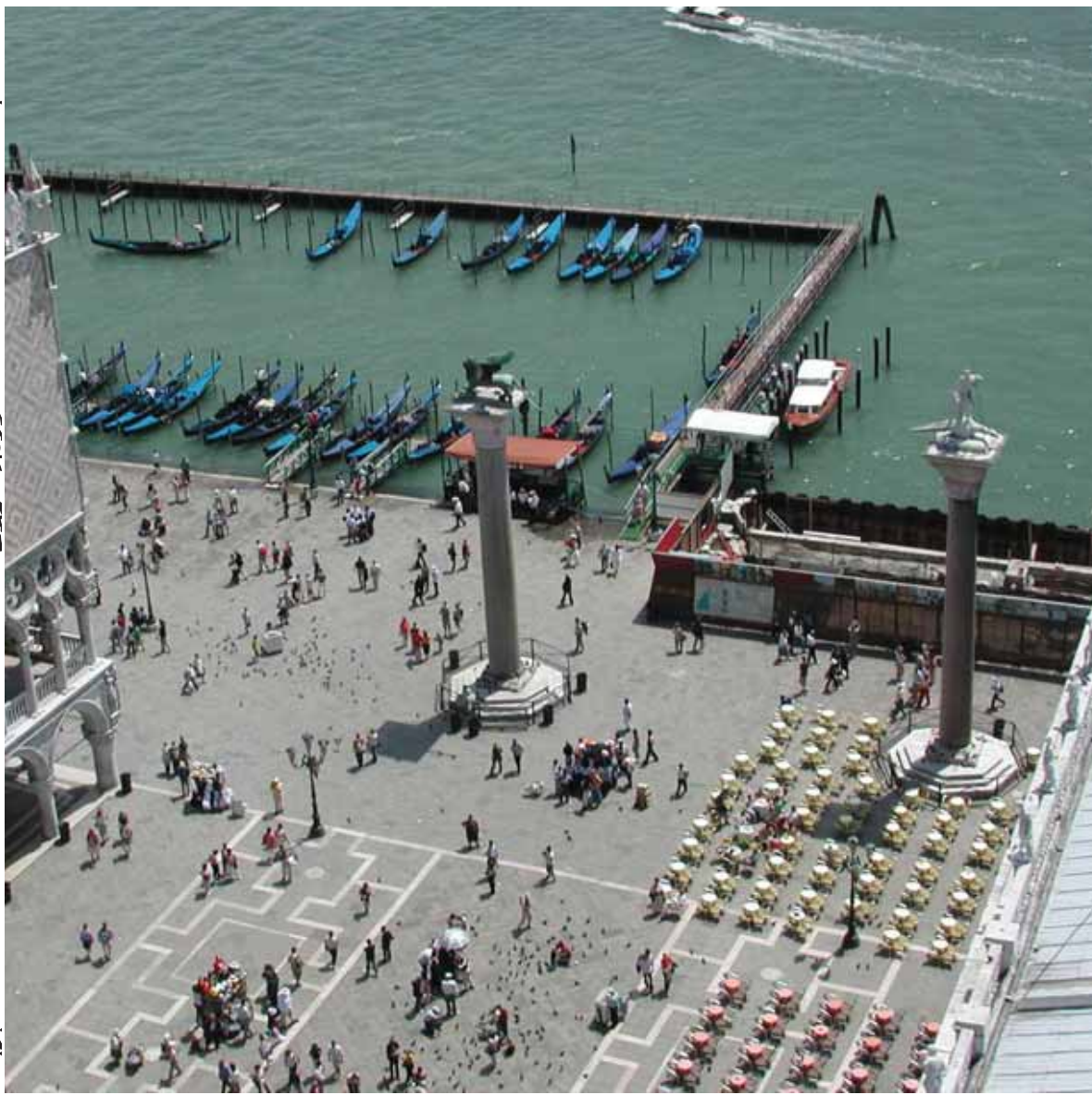
SQUARES CLASSIFICATON

2. The dominated squares

Exsample: Piazza San Marco
Piazza is the principal public square in Venice. The Piazzetta is an extension of the Piazza towards the lagoon. Spaces together form a social, religious and political center of Venice.



8. The space is dynamic and is directed toward a terminal object which can be church, a gate or an arch, a fountain or a view.

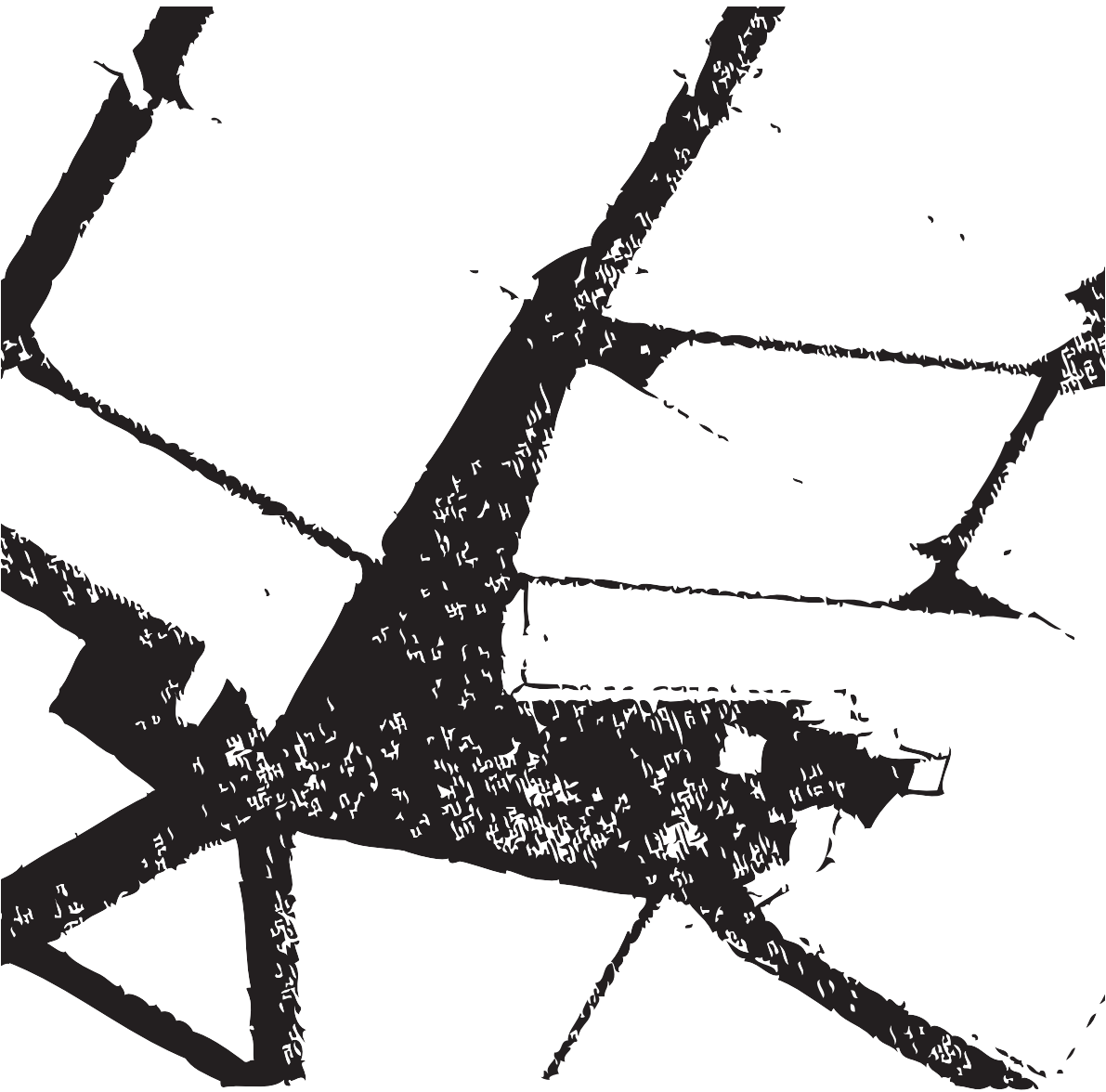


9. Square is directed toward the sea.

SQUARES CLASSIFICATON

3. The nuclear square

Space is formed around the central statue, fountain, or other vertical accent “does not represent any aesthetic qualities or artistic possibilities



10. The space is dynamic and is directed toward a terminal object which can be church, a gate or an arch, a fountain or a view.

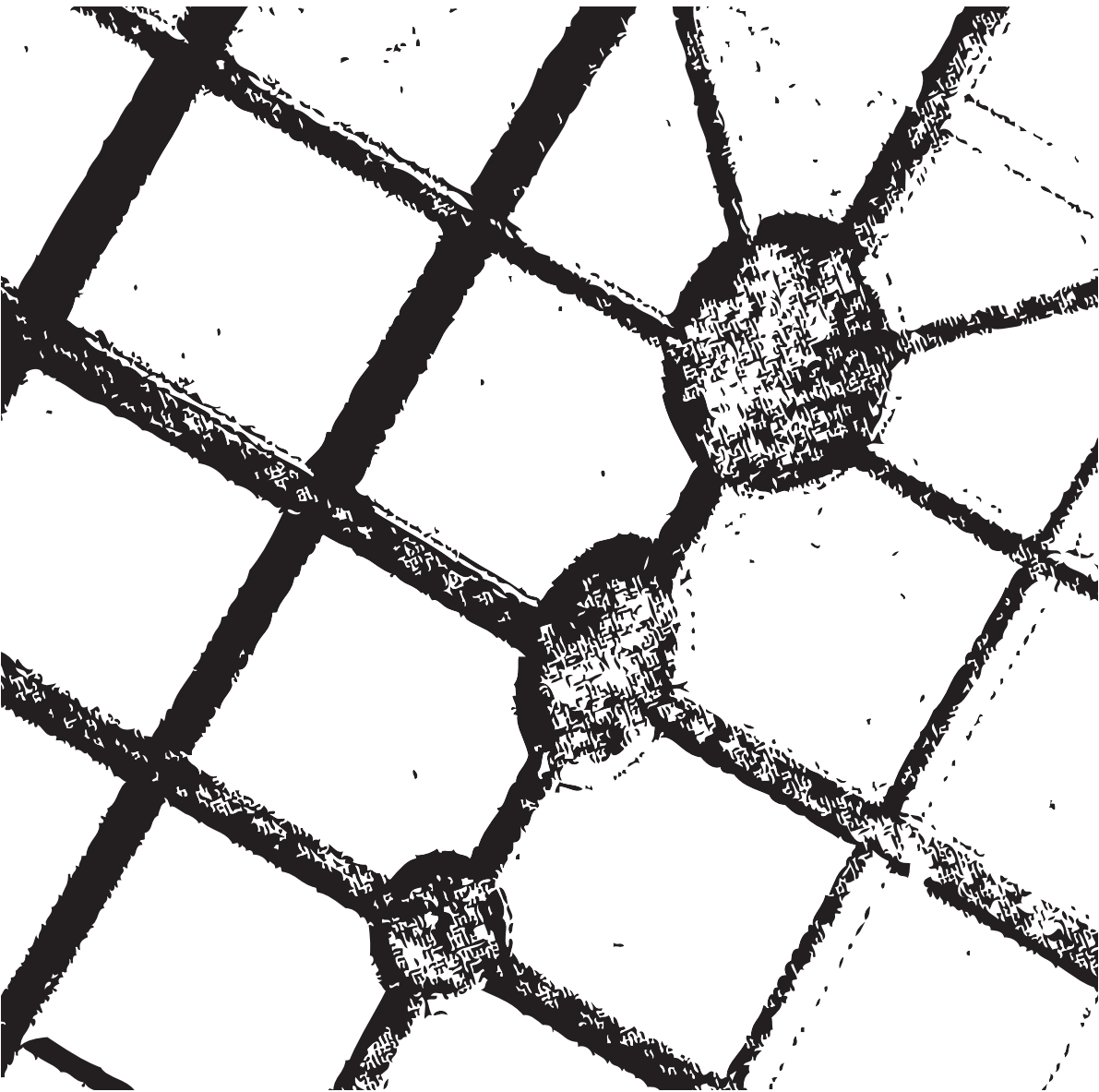


11. Piazza di SS. Giovanni e Paolo in Venice. As long as there is a nucleus, a strong vertical accent powerful enough to charge the space around with a tension that keeps the whole together, the impression of a square will be evoked.

SQUARES CLASSIFICATON

4. Grouped squares

The combination of spatial units. A sequence of squares, different in size and form, could develop in only one direction, thus establishing a straight axis.



12. The Imperial Fora in Rome. It consist of a series of monumental public squares



13. The Imperial Fora in Rome. It consist of a series of monumental public squares

SQUARES CLASSIFICATON

5. The amorphous square

Example: Times Square

Times Square is a major commercial intersection in the borough of Manhattan in New York City, at the junction of Broadway and Seventh Avenue and stretching from West 42nd to West 47th Streets.



14. Spatial experience is too diffuse to be positive



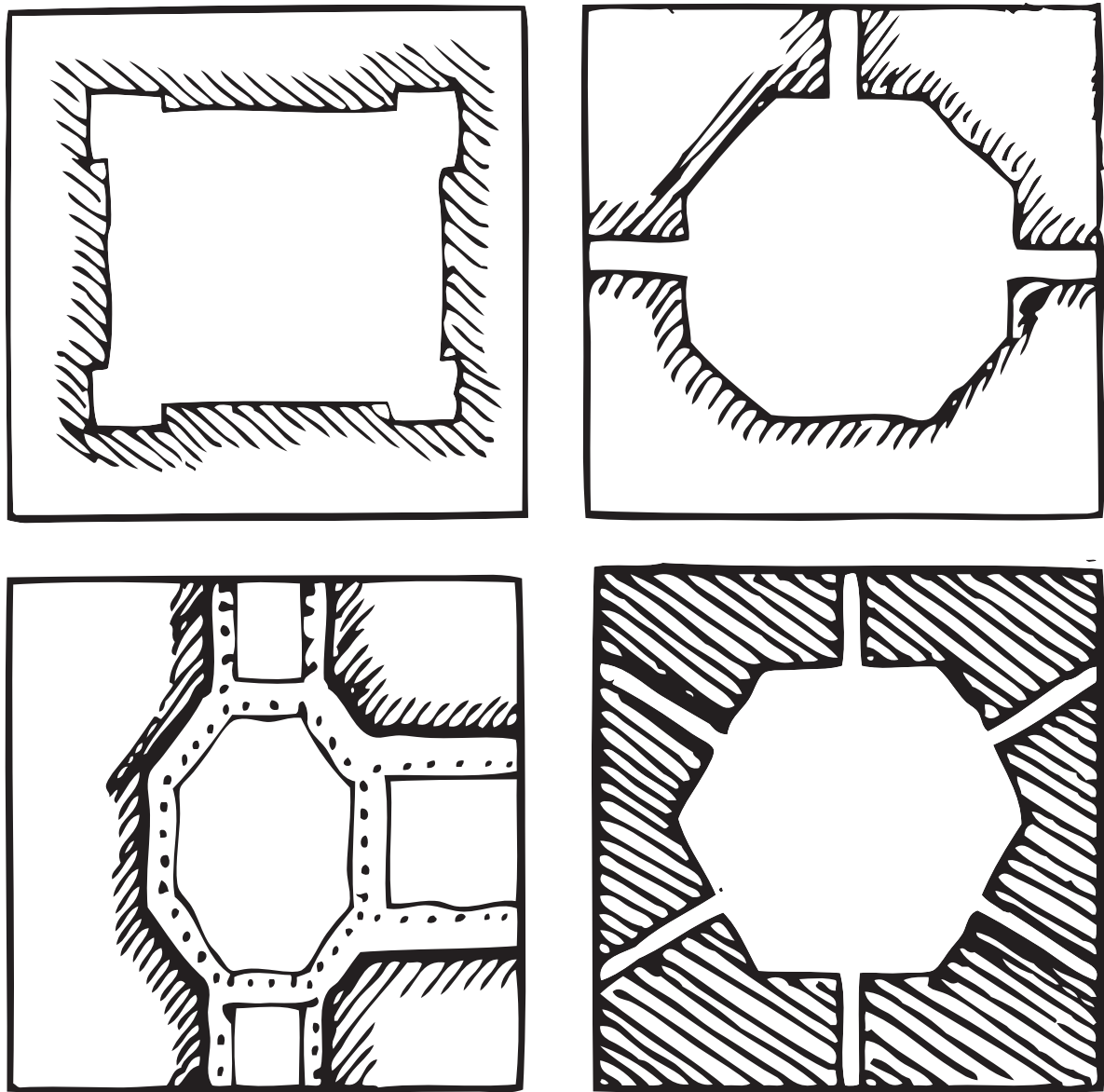
15. Times Square became New York's agora, a place to gather to await great tidings and to celebrate them.

SQUARES CLASSIFICATON

Classification by Rob Krier- 1938-
(Luxembourgian architect, practicing urban designer in Germany)

1. Rectangular squares with variations:

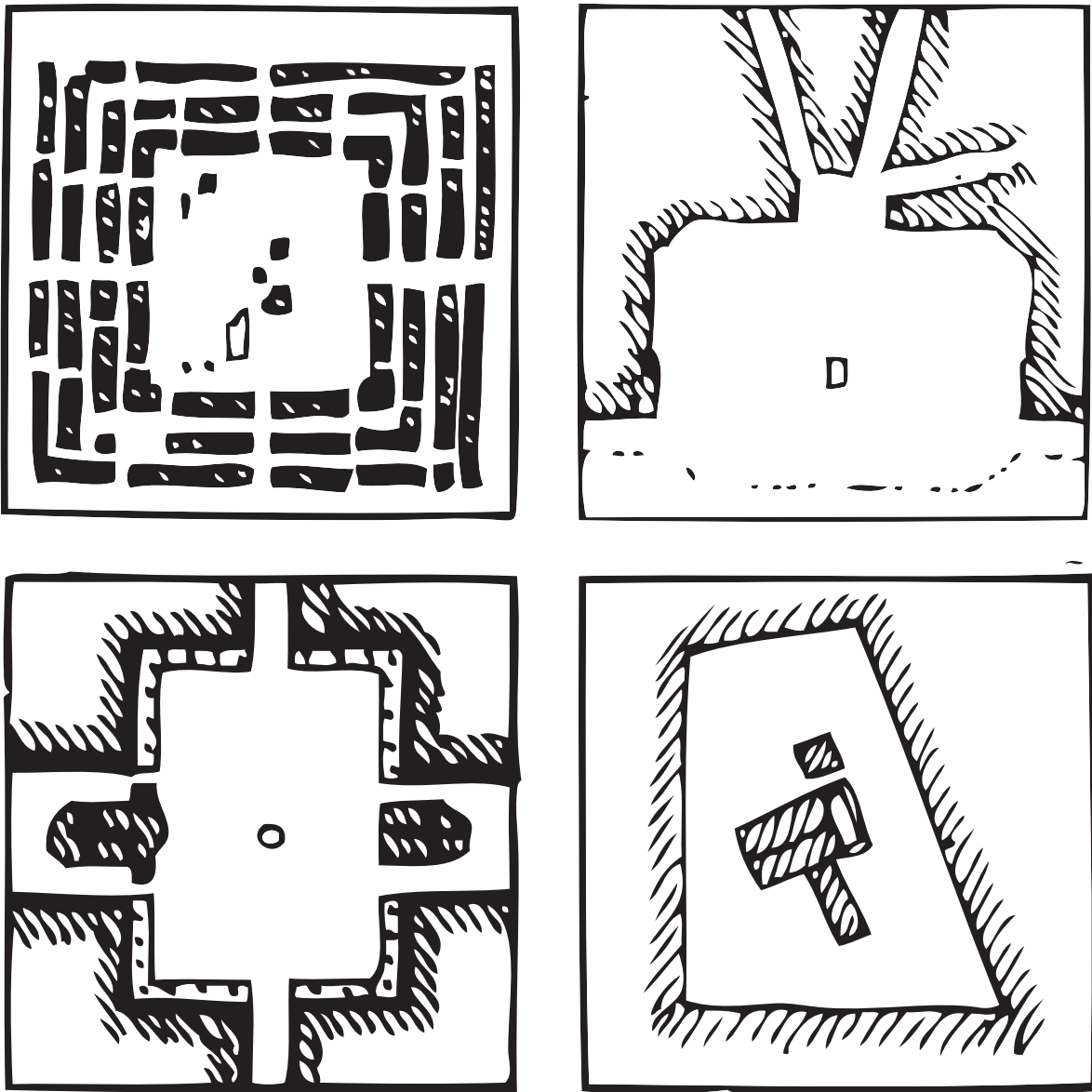
Because of the equality of the sides, this type does not easily lend itself to architectural emphasis, directing attention onto the open space. The common rectangle is possibly the most frequently used shape for the public place. One of its advantages is precisely that it allows a directional axis toward a culminating monument. In the case of ancient Roman forums, this is the main temple of the city. Examples: Place des Vosges in Paris, Queen Square in Bath.



16. A an imaginary square with modified corners; B Piazza di S. Lorenzo; C Stuttgart, Rotebühlplatz; D Palmanova

SQUARES CLASSIFICATON

2. Orthogonal plans for squares



17. A Freudenstadt; B Bordeaux, Place Royale; C Le Corbusier´s “redents”; D a variant with central building: Leptis Magna, Roman period

SQUARES CLASSIFICATON

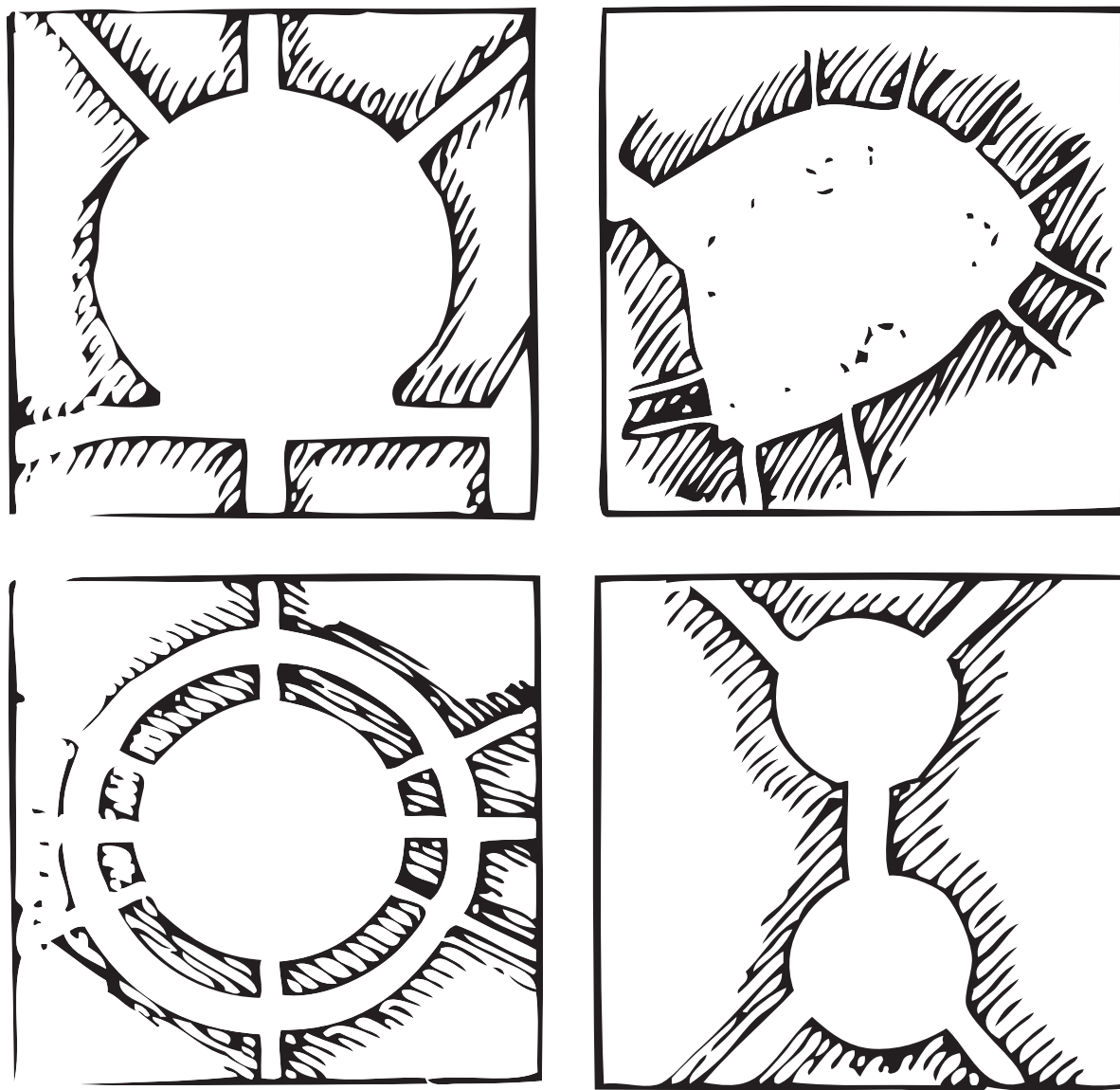
3. Circuses and variations

Accidental medieval ellipses are survivals of Roman amphitheaters. The first stage in the transformation of the amphitheater came with the conversion of the building into a fortified clan stronghold.

This was a common practice in the south of France where each amphitheater was occupied by several knights. The central space of the arena was left open as the community piazza: the periphery was turned into a circuit of defense, and the houses were built on the seat tiers in concrete rows. When this arrangement could no longer be tolerated in the context of an independent city, the defense was dismantled and the open space converted to a public square.

Conception of the public place as a setting for spectacle- in this case bullfights, open-air theater.

Circular form, as pure shapes, were a favorite of Neoclassicism. The circle itself, with diameter 570m, was defined by porticoes and official buildings of Neoclassical design that included a theater, a customs house, an exchange, a bath and a pantheon.



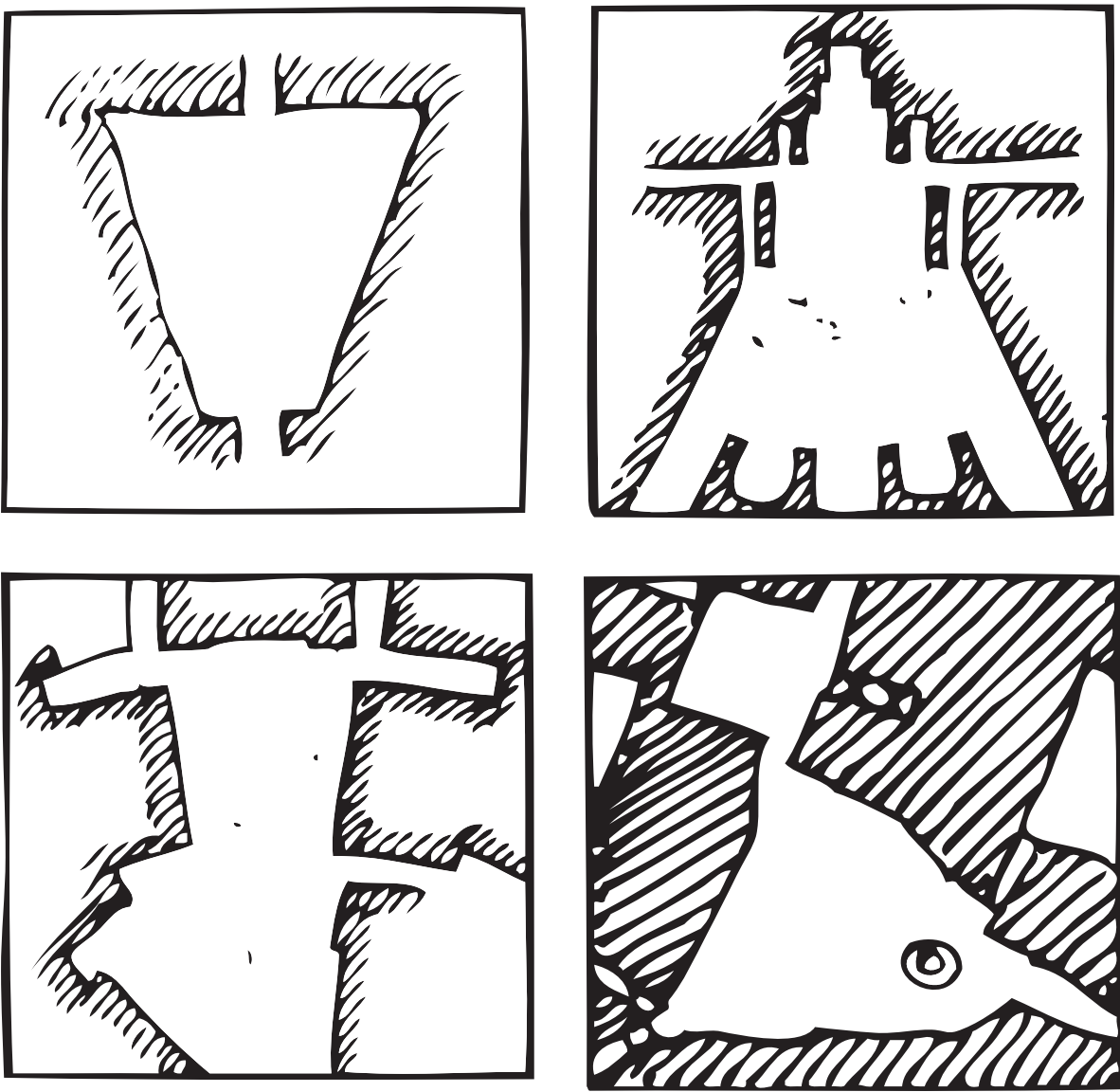
18. A Paris, place des Victoires; B Siena, campo; C a variant with an inset ring of buildings Paris, place de Lois XV; D combination of circuses

SQUARES CLASSIFICATON

4. Triangular squares and their derivatives

The triangular public place of “organic” towns is almost always the inflated cross-roads, the characteristic setting for open-air markets.

The feature is a commonplace of English medieval towns. In geometricized form, the triangle is rare. The best-known instance is Place Dauphine in Paris.



19. A Paris, place Dauphine; B Versailles, Place d’ Armes; C Rome , Campidoglio;D S. Gimignano, Piazza della Cisterna

SQUARES CLASSIFICATON

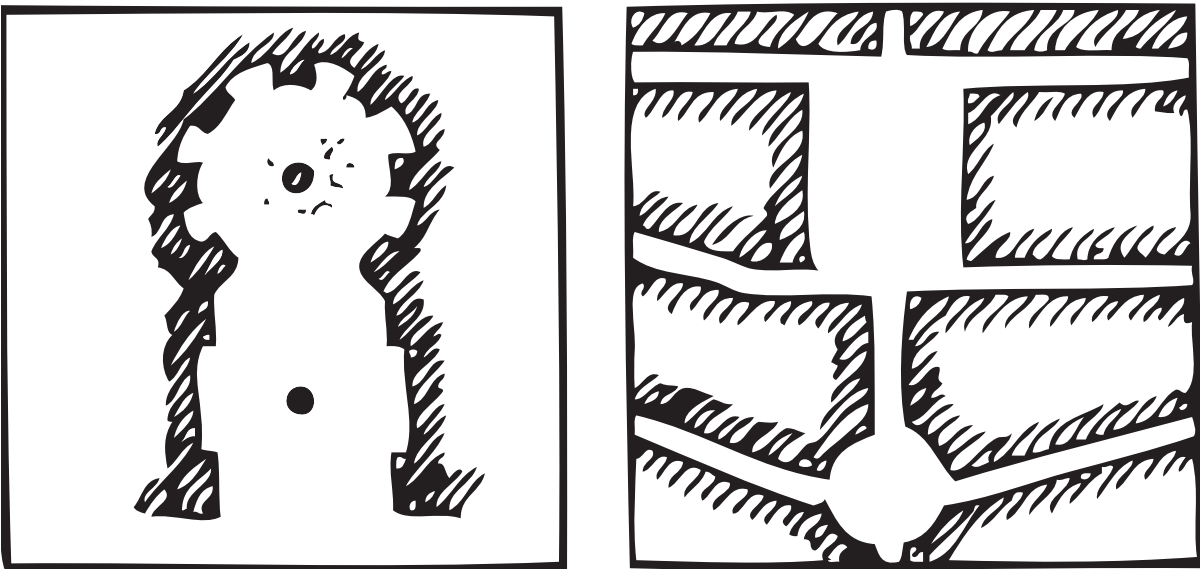
5. Spaces which are angeled, divided,
added and superimposed



20. A Verona, Piazza delle Erbe and Piazza dei Signori; B Volterra, Piazza del Battistero

SQUARES CLASSIFICATON

6. Geometrically complex systems



21. A Ludwigsburg, on the ramparts; B Karlsruhe, Marktplatz and Rondellplatz

USED MATERIALS

References to the text part:

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Zucker P. 1970. Town and Square. The M.I.T Press. Cambridge 1-9 lk.
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http://en.wikipedia.org/wiki/Trevi_Fountain
http://en.wikipedia.org/wiki/Times_Square

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16. Spiro K. 1999
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18. Spiro K. 1999
19. Spiro K. 1999
20. Spiro K. 1999
21. Spiro K. 1999

TOOLBOX FOR PLANNING SQUARES

PART 2// TYPOLOGY BY PAUL ZUCKER

KAISA KANGUR / MIRKO TRAKS

TALLINN 2011

INTRODUCTION

During the second stage we concentrated on one classification. We analyzed deeply Paul Zucker's square typologies and created toolbox which shows how we understand the main concepts and the layouts. Our toolbox relies on representative square examples in the World.

CLOSED SQUARE

OVERVIEW

Closed square would be visualized as a complete enclosure interrupted only by the streets leading into it. In terms of town planning, closed square represents the purest and most immediate expression of mans´ fight against being lost in a gelatinous world, in a disorderly mass of urban dwellings.

Closed square by careful proportioning creates a static equilibrium.

INNER YARD OF MUSEUM CS

We tried to find reference in Tallinn for each square type.
Closed squares are not common in Estonia because of medieval town planning. Mostly they exist only in private courtyards but we found one in History museum which can be visited during the day time.

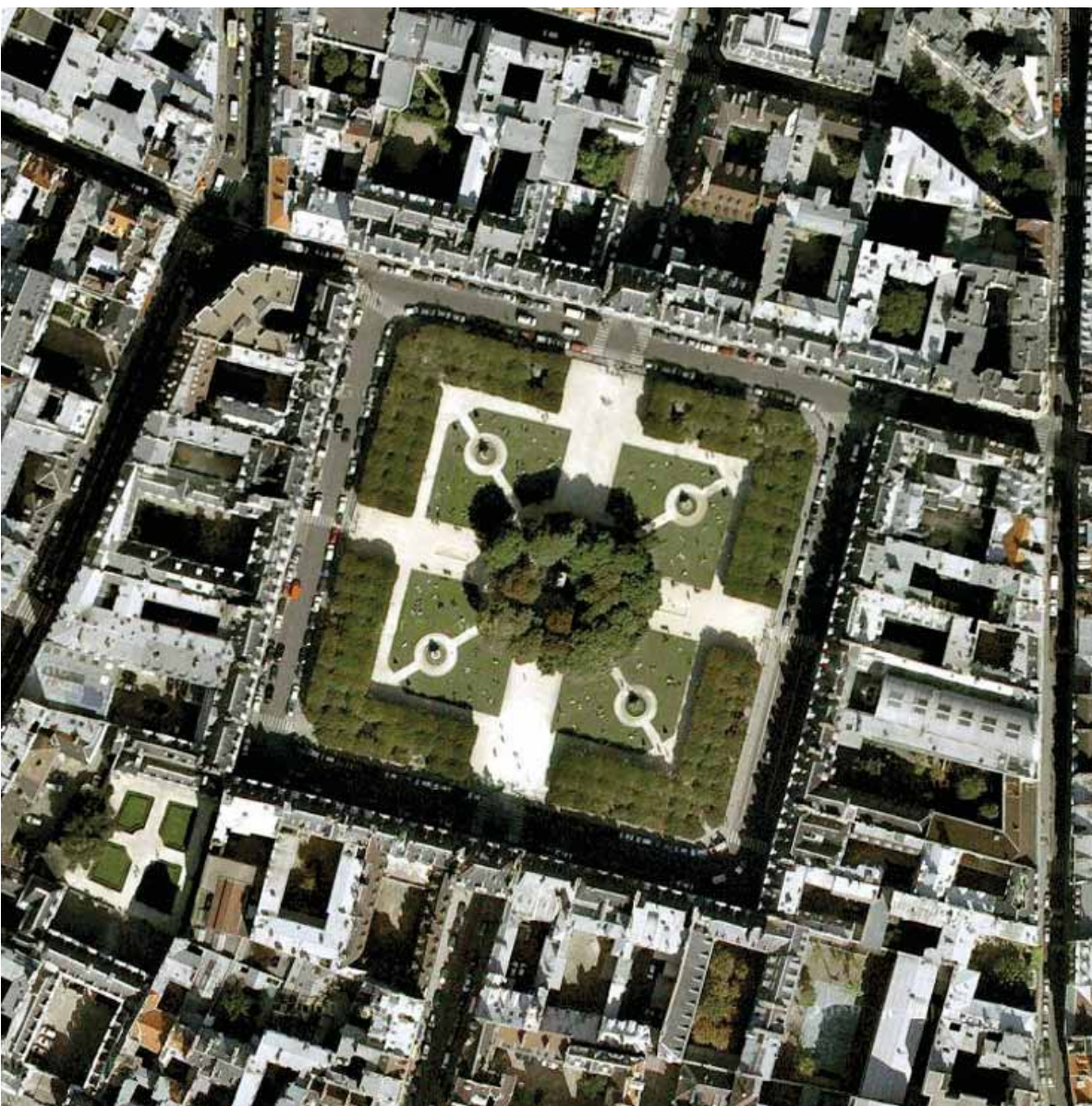


PLACE DES VOSGES CS

The primary element is its layout, which can be any geometrical form (circle, rectangle etc.)

The second important thing is repetition of identical house types. Also rhythmical alternation could be used- architectural accents concentrated on the corners or on the central parts of each side, or framing the streets running into square.

Era: Not bound to specific periods or definite architectural styles. Most perfect examples from Hellenistic and Roman eras and then again in 17-th and 18-th centuries.



<http://maps.google.com>



<http://www.holidaystudio.fr/accueil/le-saint-antoine/les-bons-plans-du-quartier/>

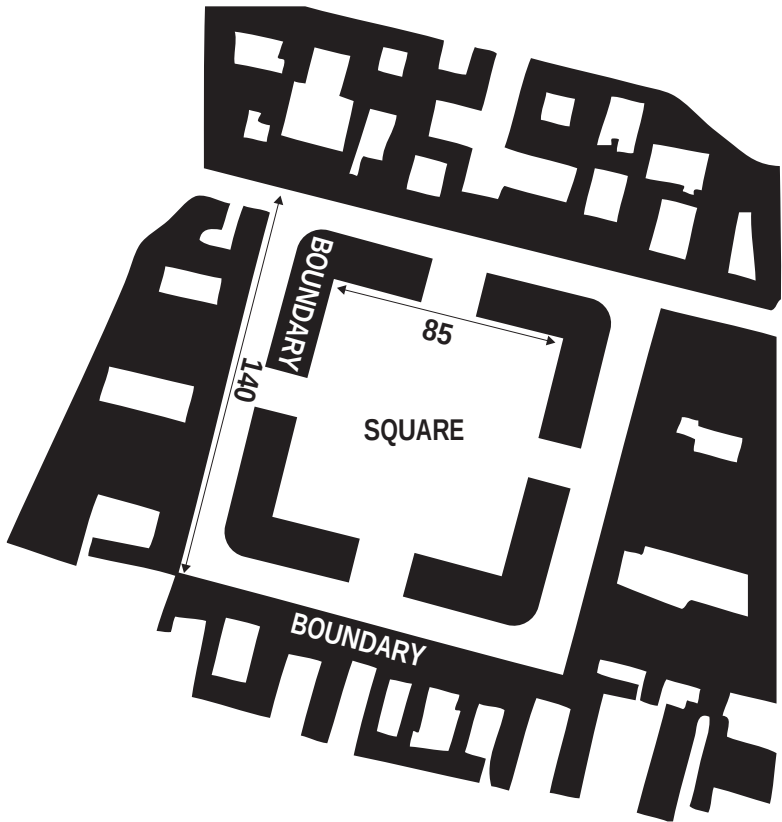
The measurements of the square are shown in the plan.

Also the framing structures- the square has two rows of boundaries housing and vegetation. The social field of vision is approximately 100 meters.

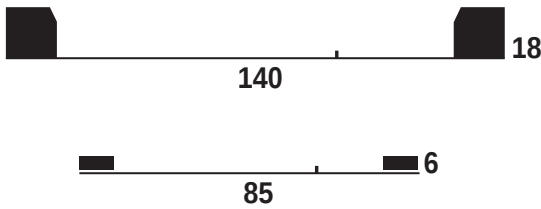
The space which is framed by clipped trees is 85 meters, so one can see activities everywhere.

The dimensions of the space give best of two worlds: overview and detail.

PLAN



SECTION



TOOLBOX OF PLACE DES VOSGES CS

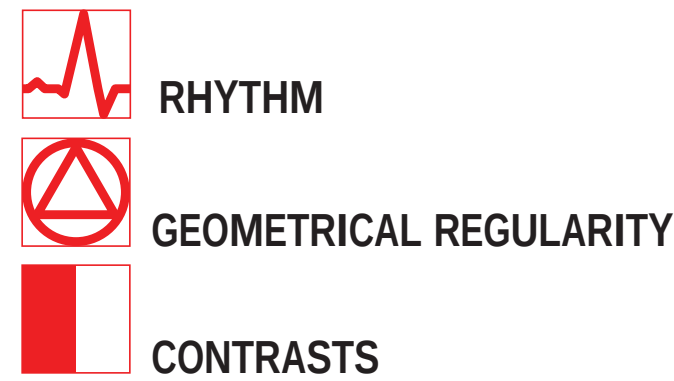
To give the best sense of closed space, the boundaries and layout are most important. In case of Place des Vosges there are used housing, vegetation and arcades to frame the square. Floor is flat and paving is made of lawn and hard surface.

Equally important are additional elements which are rhythm of housing units, geometrical regularity in layout and contrasts of higher and lower structures.

BASE ELEMENTS



ADDITIONAL ELEMENTS



TOOLBOX FOR CLOSED SQUARE CS

BASE ELEMENTS



BOUNDARY

HOUSING



VEGETATION



COLONNADE



ARCADE





FLOOR

FLAT



BOWL



DOMED



SLANT



The spatial impression of the square depends on all the base and additional elements. Boundaries can be housing, vegetation, colonnades and arcades.

Each façade fulfills a dual function: on the one hand, it is part of an individual structure; on the other hand, it forms part of a common urban spatial order.

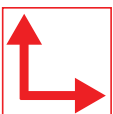
Floor can be flat, bowl, dome or slant the more important thing is that the layout is in geometrical form.

Contrast of higher and lower structures have to be in relationship with height and width.

ADDITIONAL ELEMENTS



RHYTHM



HEIGHT & WIDTH RELATIONS



GEOMETRICAL REGULARITY



CONTRASTS

FORMULA

CS

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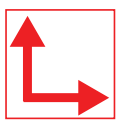


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DOMINATED SQUARE DS

Overview: The dominated square is characterized by one individual structure or a group of buildings toward which the open space is directed and to which all other surrounding structures are related.

The perspective of the surrounding buildings and the suction of the dominant structure create the spatial tension of the square, compelling the spectator to move toward and to look at the focal architecture.

Thus the dominant square produces a dynamic directive of motion.

TOWN HALL SQUARE DS

Example in Tallinn is well-known.
It does not have perfect leader because the main street directs to the Town hall side but however people perceive it as strong dominant.
It attracts tourists all year round due to its history.



<http://www.maaamet.ee>

ST. PETERS SQUARE DS

The most distinct relationship between the dominating building and the square exists in the parvis, originally the enclosed vacant area before a church.

Era: Rome, Medieval, Renaissance, Baroque.



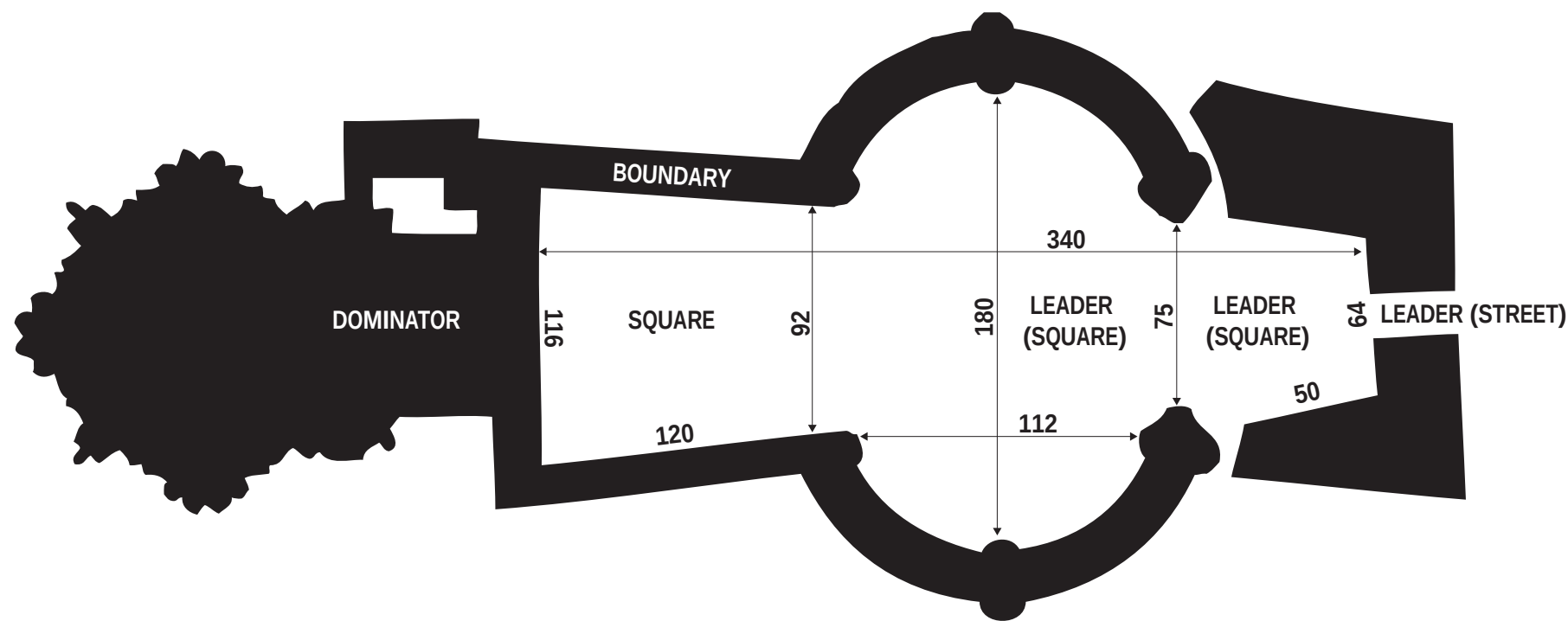
<http://maps.google.com>



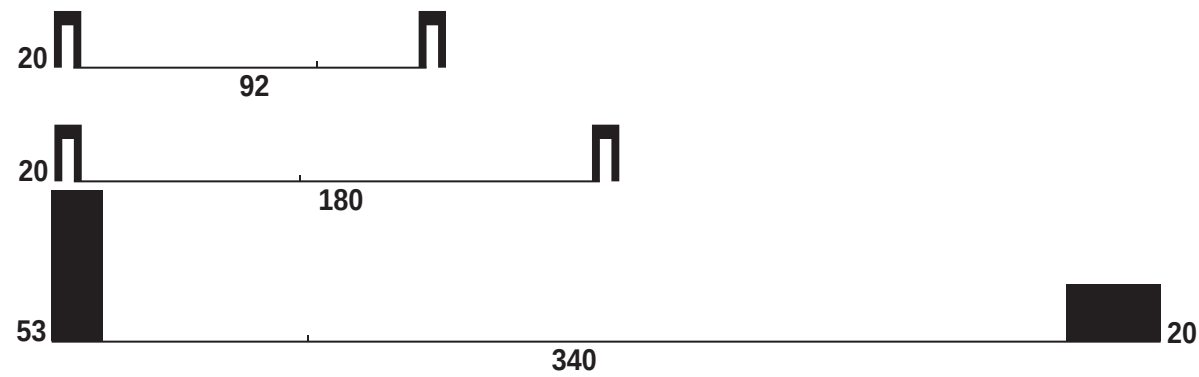
<http://catholicheritage.blogspot.com/2009/12/st-peters-basilica-and-1962-missals.html>

ST PETER'S SQUARE DS

PLAN



SECTION



Direction of the main street which opens into the squares establishes the axis toward the dominant building.

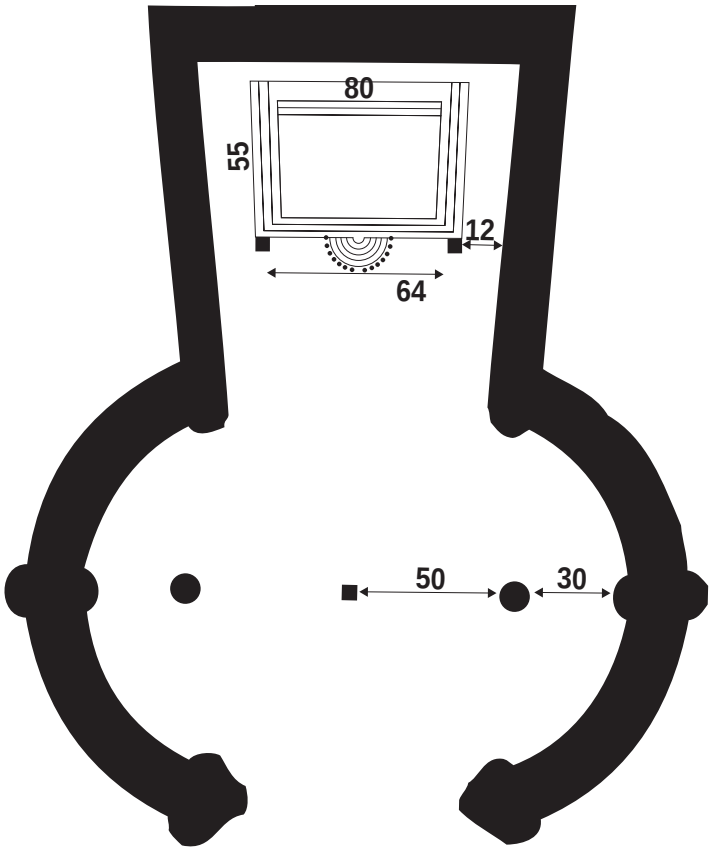
There is sequence of develops: the street leading to the public square, this expanse of the proper public square and finally there is church parvis.

The square has gigantic dimensions, but the space is partitioned, so it feels more like sequence of squares.

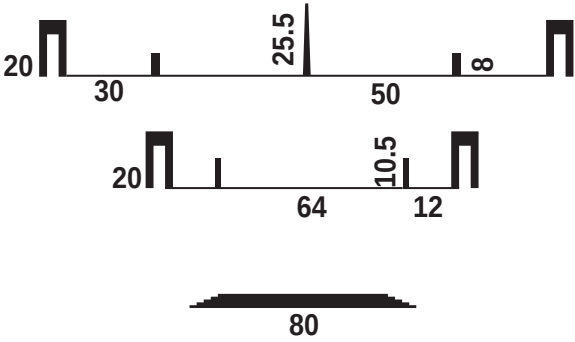
ST PETER'S SQUARE

DS

PLAN



SECTION



TOOLBOX OF ST PETER’S SQUARE

DS

To give the best sense of dominated space, the dominant and boundaries are most important.

In case of St. Peter’s square the dominant is building which is a church and the boundaries are created by the buildings, colonnades, bollards and stairways.

They cause stage effect. The leading elements are main street and sequence of squares themselves. For the right spatial impression there is relationship between height (dominant) and width (square).

BASE ELEMENTS



BOUNDARY



HOUSING



COLONNADE



BOLLARDS



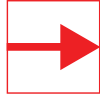
STAIRWAYS



DOMINAROR



BUILDING



LEADER



STREET



SQUARE

ADDITIONAL ELEMENTS



HEIGHT & WIDTH RELATIONS

TOOLBOX FOR DOMINATED SQUATRE DS

Dominant element may be whatever impor-
tant is that it directs the open space.

Most common dominant elements are
important buildings and statues also it can
be a void, allowing a vista toward a mountain
range in the distance.

Leaders are usually street, in case of river a
bridge, a square before the dominant and
arcades.
Layout varies and floor shape could be also
different.

BASE ELEMENTS



ADDITIONAL ELEMENTS



FORMULA

DS

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AMORPHOUS SQUARE AS

Overview: Shape of square is amorphous, formless, unorganized and don't have specific shape.

It does not represent any aesthetic qualities or artistic possibilities. It may share some elements of each type of square.

We found quite a lot amorphous squares in Tallinn especially in Old town.

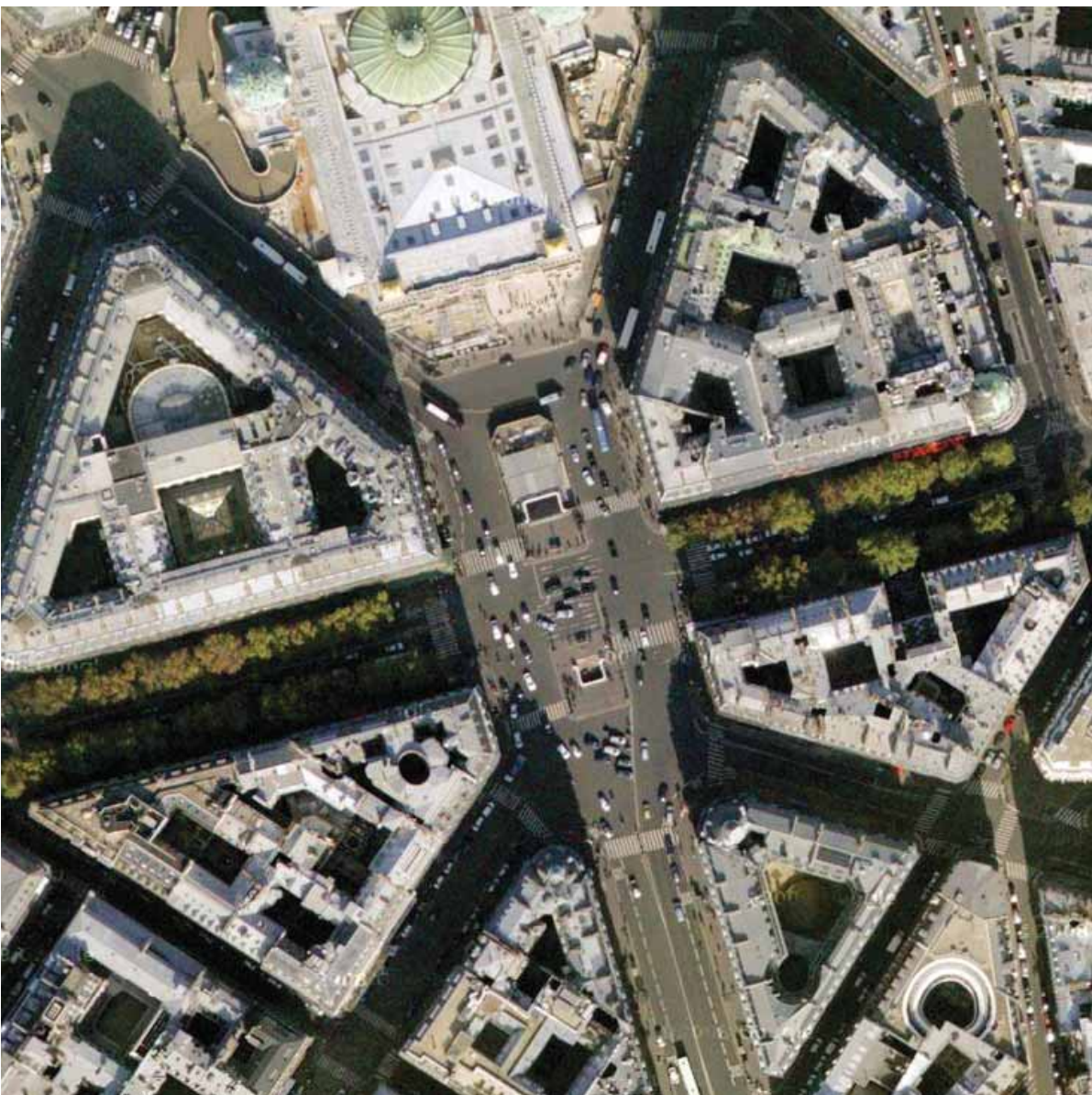
In this case there was all needed parts: club Hollywood is dominant in front of it is cross-road where pedestrian don't have certain path, they move all directions.



PLACE DE L'OPERA AS

There is important visual element (a church, a theater, etc) which is surrounded by free area which is usually dynamical street network where pedestrian and car traffic are mixed.

Era: Mostly in nineteenth century, an era which had almost no feeling for three-dimensional qualities.



<http://maps.google.com>



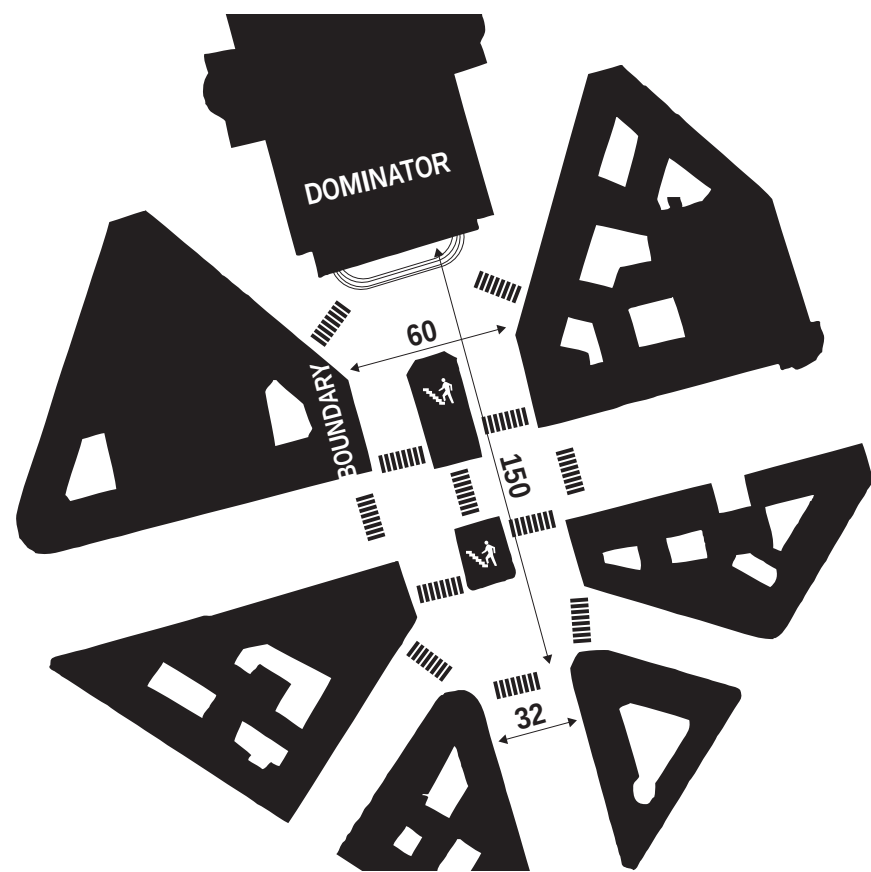
<https://plus.google.com/117690673854187012438/posts/9QHiWU6QbqC>

PLACE DE L'OPERA AS

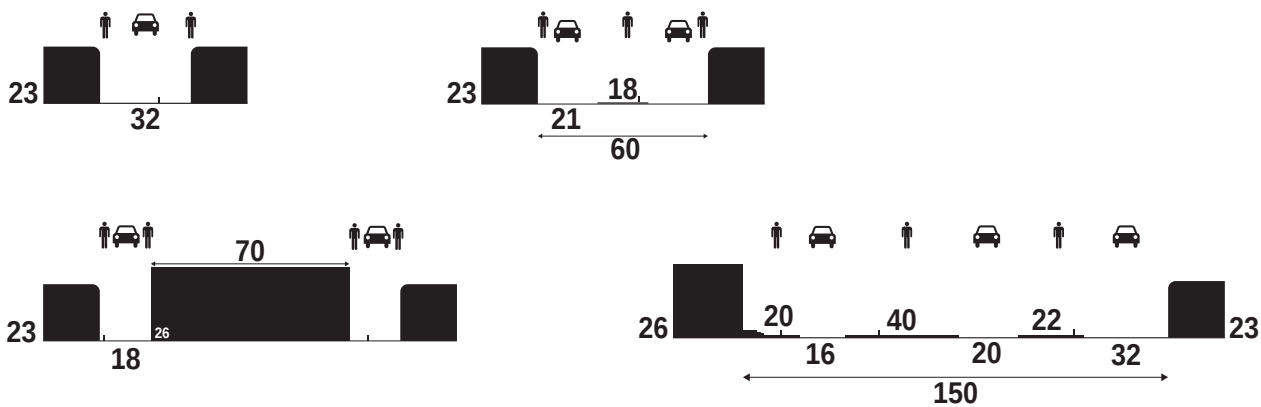
Layout is irregular, mere crossroads which creates different sense of space.

Proportion of surrounding structures may be heterogeneous, irregular and they can be different in size.

PLAN



SECTION



TOOLBOX OF PLACE DE L'OPERA

AS

Amorphous square nature is also movement trough space, so there have to be some dominant which creates this movement.

In this case the dominant is building which is opera house.

Boundaries are building groups which forms the streets. The floor is flat but due to traffic there are underground passes.

BASE ELEMENTS

BOUNDARY

HOUSING

FLOOR

FLAT

DOMINAROR

BUILDING

ADDITIONAL ELEMENTS

IRREGULARITY

CROSSROAD

TRAFFIC

TOOLBOX FOR AMORPHOUS SQUARE AS

To create formless and unorganized space there is need big crossroad, some boundaries, dominant to direct and lots of traffic which creates this needed movement.

BASE ELEMENTS



BOUNDARY



HOUSING



FLOOR



FLAT



BOWL



DOME



SLANT



DOMINAROR



BUILDING

ADDITIONAL ELEMENTS



IRREGULARITY



CROSSROAD



TRAFFIC

FORMULA

AS

=



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NUCLEAR SQUARE

Overview: The space is formed around a center. The square is combined of closed square and dominated square.

It is directed through the visual magnetism of the governing structure or the dominant vista.

As long as there is a nucleus, a strong vertical accent powerful enough to charge the space around with a tension that keeps the whole together, the impression of a square will be evoked.

It was hard to find proper nuclear square in Tallinn, because of the Estonians modesty, all important and dominant elements are located at the edges.

There was well in Rataskaevu street which gather people around it, around the well was free space for movement.



PIAZZA DI SS. GIOVANNI e PAOLO NS

Square layout is not important, it could be irregular. Important is strong visual effect of the central element.

Buildings that adjacent to the dominant element are lower.
Street space is dynamical and lead to the main element.

Era: The most typical nuclear squares belong to the Renaissance.



<http://maps.google.com>



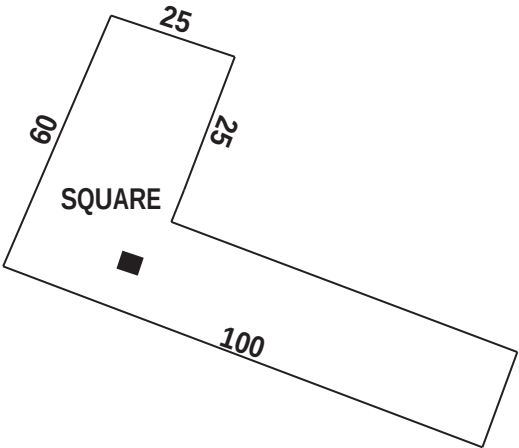
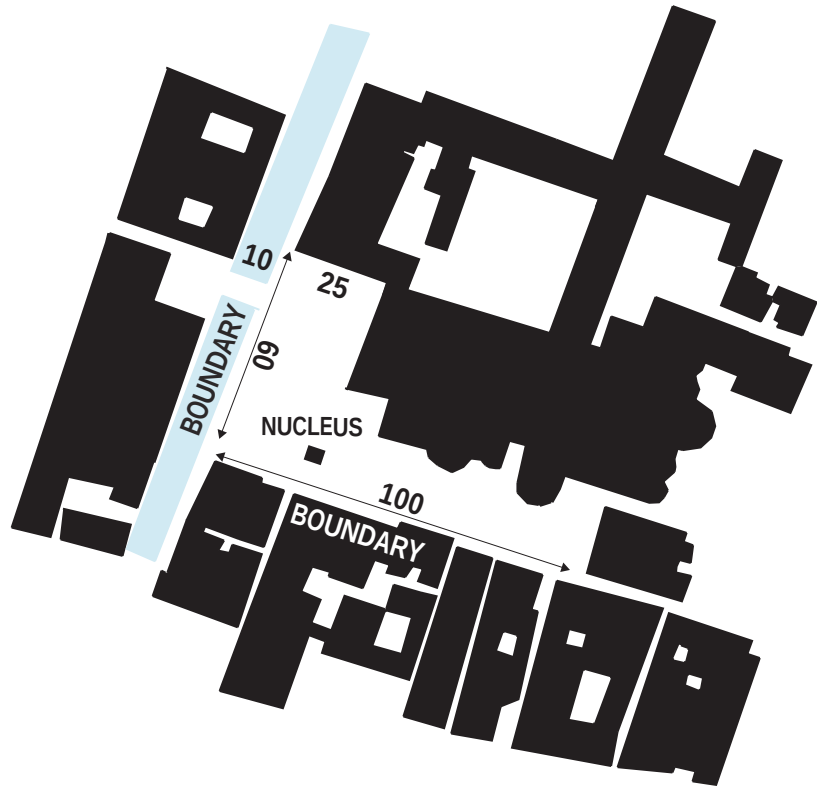
http://upload.wikimedia.org/wikipedia/commons/4/4b/Veneto_Venezia4_tango7174.jpg

PIAZZA DI SS. GIOVANNI e PAOLO NS

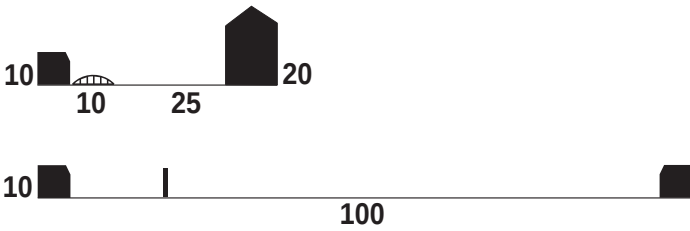
Square has two parts and they are framed by adjacent buildings and river in one side.

The central element creates an aesthetically impervious space around it. There is existing spatial oneness, even if the whole square is not visible at the time.

PLAN



SECTION



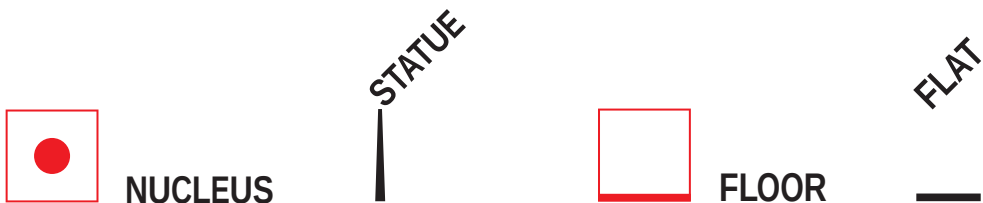
TOOLBOX OF PIAZZA DI SS. GIOVANNI e PAOLO NS

The nucleus in this case is big statue which is framed by buildings and water.

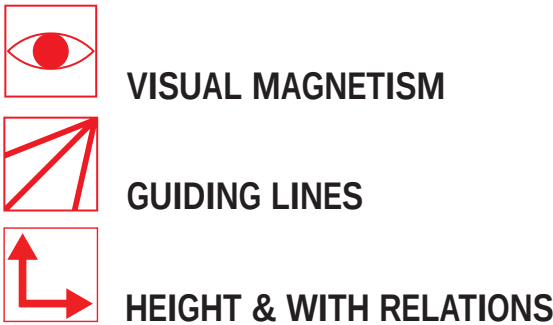
The central element is higher from the adjacent elements and that way the visual magnetism is created.

There can be some guiding lines on pavement to direct people to the central element.

BASE ELEMENTS



ADDITIONAL ELEMENTS



TOOLBOX FOR NUCLEAR SQUARE NS

Nature of the nuclear square is strong vertical element which can be a monument, a fountain, a obelisk or even an individual building which will tie the heterogeneous elements of the periphery into one visual unit.

Boundary varies, it can be also imagine, if the nucleus is powerful enough (pyramids in the desert).

BASE ELEMENTS



NUCLEUS



BUILDING



STATUE



FOUNTAIN



BOUNDARY



HOUSING



VEGETATION



COLONNADE



WATER



IMAGINE



FLOOR



FLAT



BOWL



DOME



SLANT

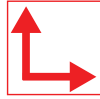
ADDITIONAL ELEMENTS



VISUAL MAGNETISM



GUIDING LINES



HEIGHT & WITH RELATIONS

FORMULA

NS

=



+



+



+



+



+



GROUPED SQUARE



Overview: The space units are combined and may be fused organically and aesthetically into one comprehensive whole.

The individual square represents an entity per se, aesthetically self-sufficient and yet part of the comprehensive higher order-“individuation and unity”.

An analogy on a more limited scale would be the relationship of successive rooms inside a baroque palace: the first room preparing for the second, the second for the third, etc., each room meaningful as a link in a chain, beyond its own architectural significance.

GROUPED SQUARE

GS

The reconstructed houses are creating in different scale of open spaces between the buildings.

Also there is one main square where takes place different events.



<http://www.maaamet.ee>



http://pilt.delfi.ee/show_original/9320487/

PIAZZA DEI SIGNORI GS

Square has two parts and they are framed by adjacent buildings and river in one side. The central element creates an aesthetically impervious space around it.

There is existing spatial oneness, even if the whole square is not visible at the time.



<http://maps.google.com>



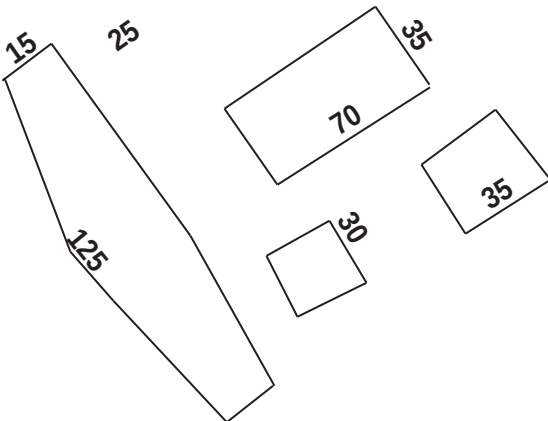
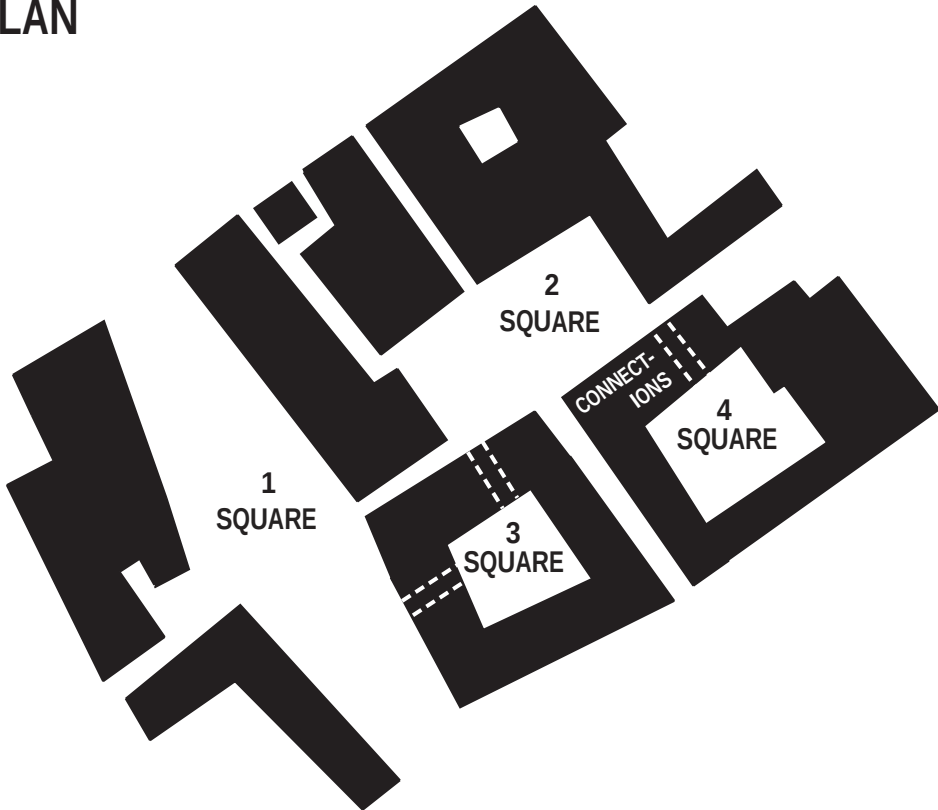
<http://www.holiday-verona.com/2011/09/tocati-festival-in-verona.html>

PIAZZA DEI SIGNORI GS

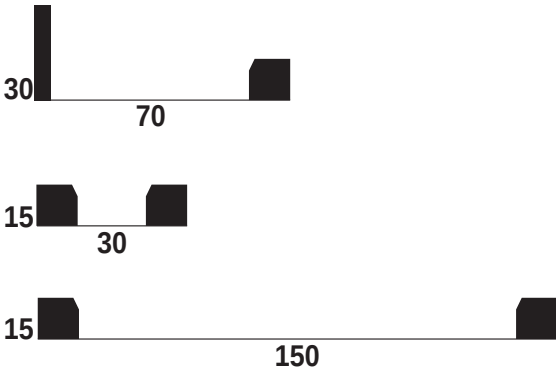
Squares may be related to each other without any direct physical connection, they could be separated from each other by blocks of houses, but if there are short streets between both squares then they function as passageways.

Era: There is not certain age, but the most subtle relations are created in the planned organizations of the eighteen century

PLAN



SECTION



TOOLBOX OF PIAZZA DEI SIGNORI GS

The sense of grouped squares is created by sequences of open spaces which are connected with small streets.

The squares are framed with buildings and colonnades.

BASE ELEMENTS



SPACE



SEQUENCE



BOUNDARY



HOUSING
COLONNADE



CONNECTION



STREET



FLOOR



FLAT

ADDITIONAL ELEMENTS



HEIGHT & WITH RELATIONS

TOOLBOX FOR GROUPED SQUARE GS

The squares can be separated from each other with buildings, vegetation and colonnades.

The connection may be street or axis or non-axial organization where a smaller square opens with one of its sides upon a larger square, so that individual axes of each square meet in a right angle.

Contrast of larger monumental buildings and smaller adjacent houses, of higher and lower eaves, of the location of monuments and fountains, of separating or connecting arcades and triumphal arches may increase or decrease the actual dimensions.

BASE ELEMENTS

 SPACE

SEQUENCE



BOUNDARY



HOUSING



VEGETATION



COLONNADE



 CONNECTION

STREET



FLOOR



FLAT



BOWL



DOME



SLANT



ADDITIONAL ELEMENTS

 AXIS

CONTRASTS



HEIGHT & WITH RELATIONS



FORMULA

GS

=



+



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THE SQUARE IN SPACE AND TIME

PART 3// TOOLBOX FOR SQUARES IN ACTION

KAISA KANGUR / MIRKO TRAKS

TALLINN 2011

INTRODUCTION

The aim for 3rd part of historic typologies of squares was to test Toolbox for Squares developed in for previous seminar in real situation.

The assumption for this part was, that created toolbox gives enough information to really design space using elements and formulas that were compiled from historical data.

Our test area was situated in Tallinn and was area around historical Kadriorg Palace.

OVERVIEW OF KADRIORG PARK



Kadriorg park is one of the oldest greeneries in Estonia. In 1718 Peter I and Roman architect Niccolo Michetti picked suitable place for palace and park around it.

One part of the area was Italian-French-Netherland-style regular gardens, in front of the palace there was the Lower Garden and behind the palace the Upper Garden.

Gardens were for public use. This layout was preserved until 19th century.

In 1897 the director of parks in Riga, G. Kuphaldt put together design for renewing part of the park as landscape park.

http://ca.wikipedia.org/wiki/Fitxer:Kadriorg_Tallinn.jpg



<http://aita1950.blogspot.com>

PROPOSING NEW SQUARES IN KADRIORG

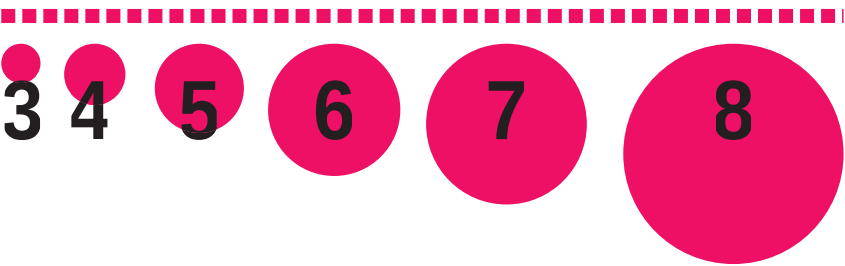
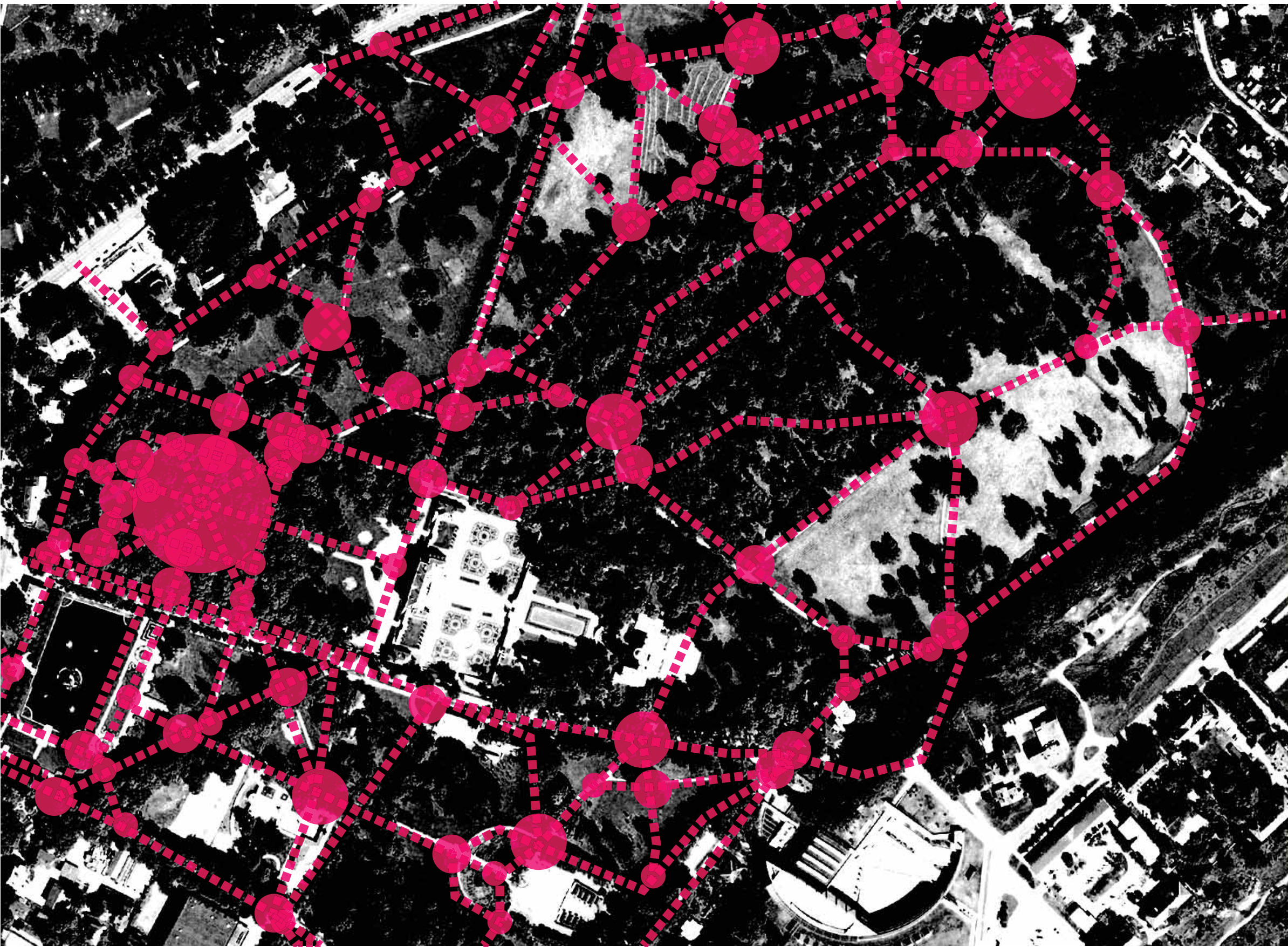
We realised, that our proposal for new square(s) to historical park of Kadriorg is a bit nonsense and can end up as a disaster. Altogether quite many ideas were considered and eventually it was agreed, that it could be something temporary or even sudden, built legally or guerrilla style. We gave up ideas for permanent squares since it seemed, that they really wouldn't be too convincing.

Our final proposal was not too extreme, but that wasn't because we wanted to get smooth landing with the design, but it appeared, that some of our extremest designs just wouldn't work in reality and created more gaps in area than solved.

As written in the Development Plan of Kadriorg Park, they have problems (as most of leisure time oriented places) with small number of visitors. So we found squares to be good methods to design some-kind of gathering spots or active nodes especially in Kadriorg's landscape park area.

PATHWAY CROSSINGS // POSSIBLE ACTIVITY NODES

Scheme displays nodes, where pathways are crossing. Our assumption was, that the more node crossings, the more it has potential to transform into active place.



PATHWAY

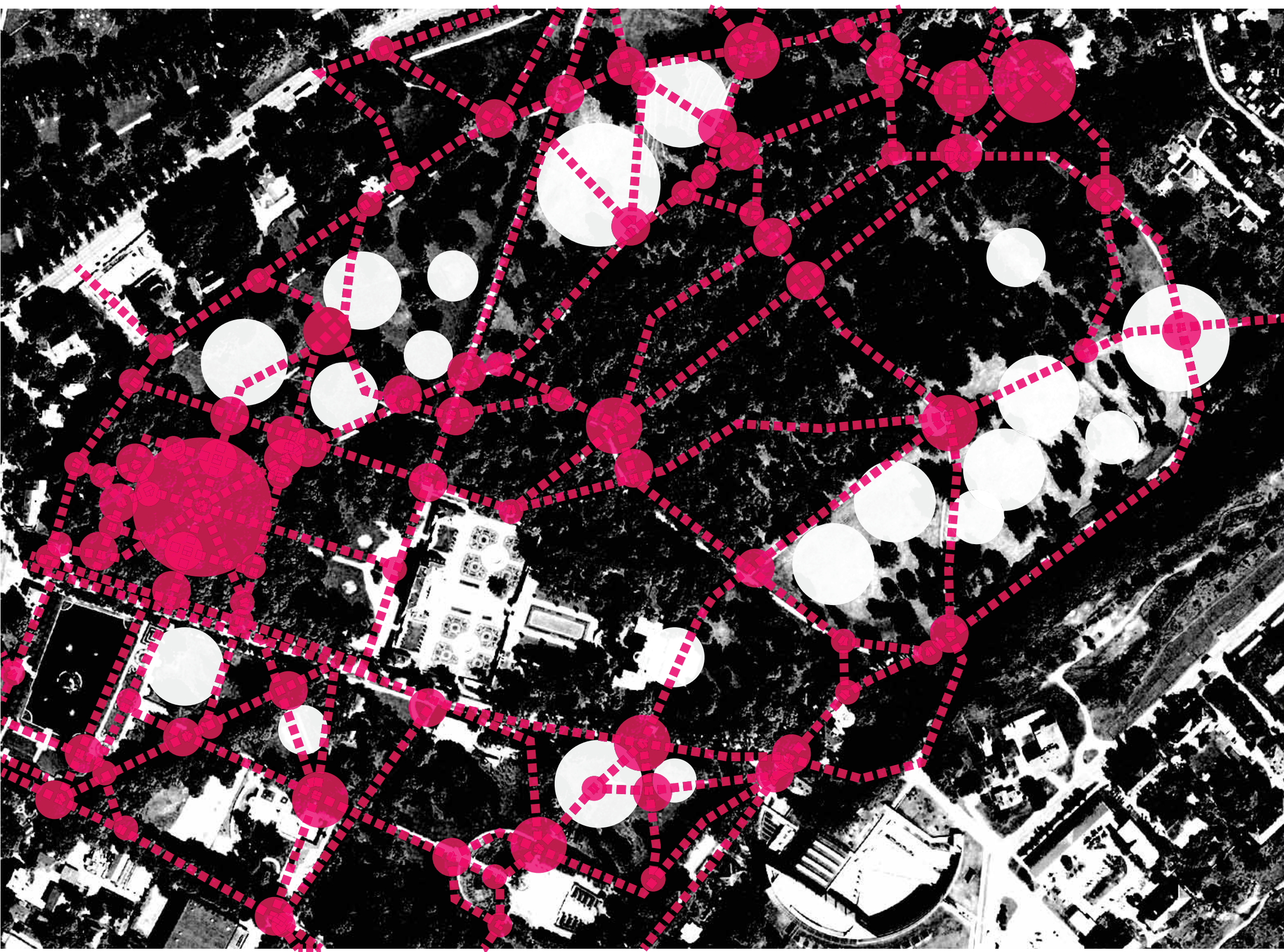
NUMBER OF CROSSINGS

VOIDS IN EXISTING PARK // POTENTIALITY FOR SQUARES



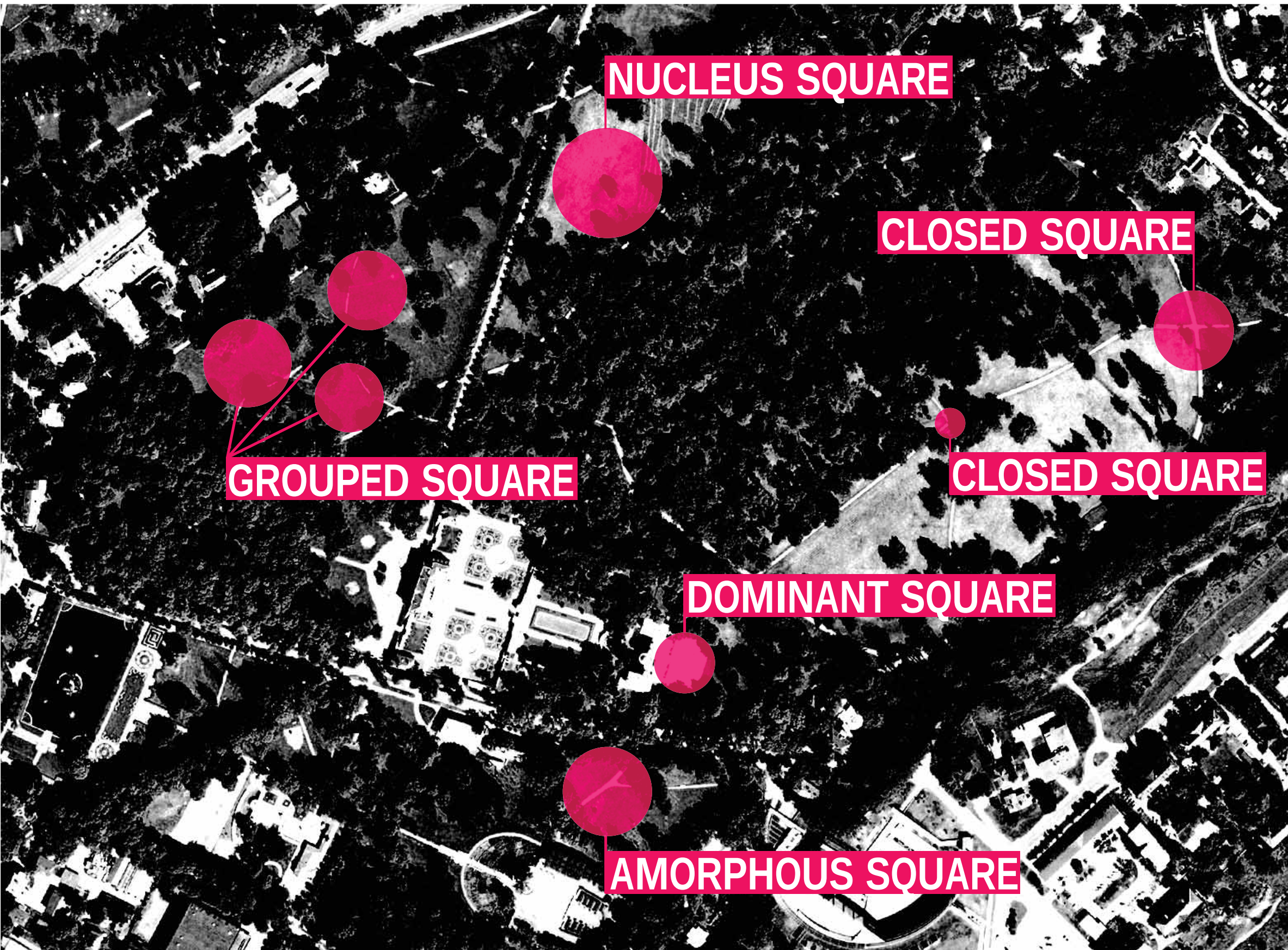
Scheme mapped out voids in existing landscape park. Since we knew from the start, that our design should be something temporary, we did not want to harm existing greenery by cutting down trees, etc. So voids in park's tissue were our priority.

VOIDS VS NODES// POTENTIALITY FOR SQUARES



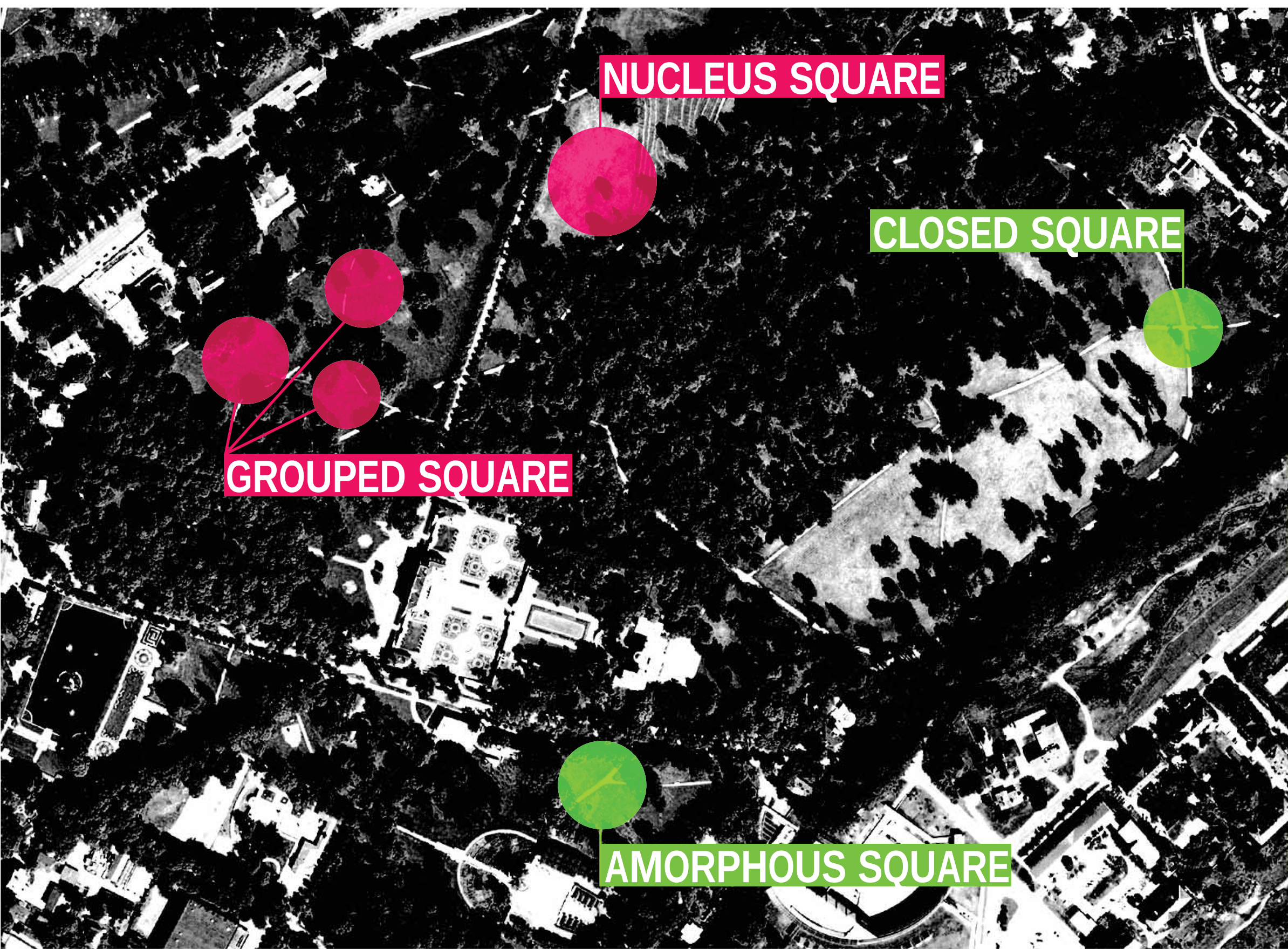
Scheme shows overlapping nodes and voids. Most near or overlapping attributes of both would be the favorable places for possible new squares.

POTENTIAL SQUARES + TYPES



With perquisites from historical typology of squares we found places for concrete squares. Considered historical perquisites can be found in part 1 (research of historical typography) and 2 (toolbox).

PROPOSED SQUARES + TYPES

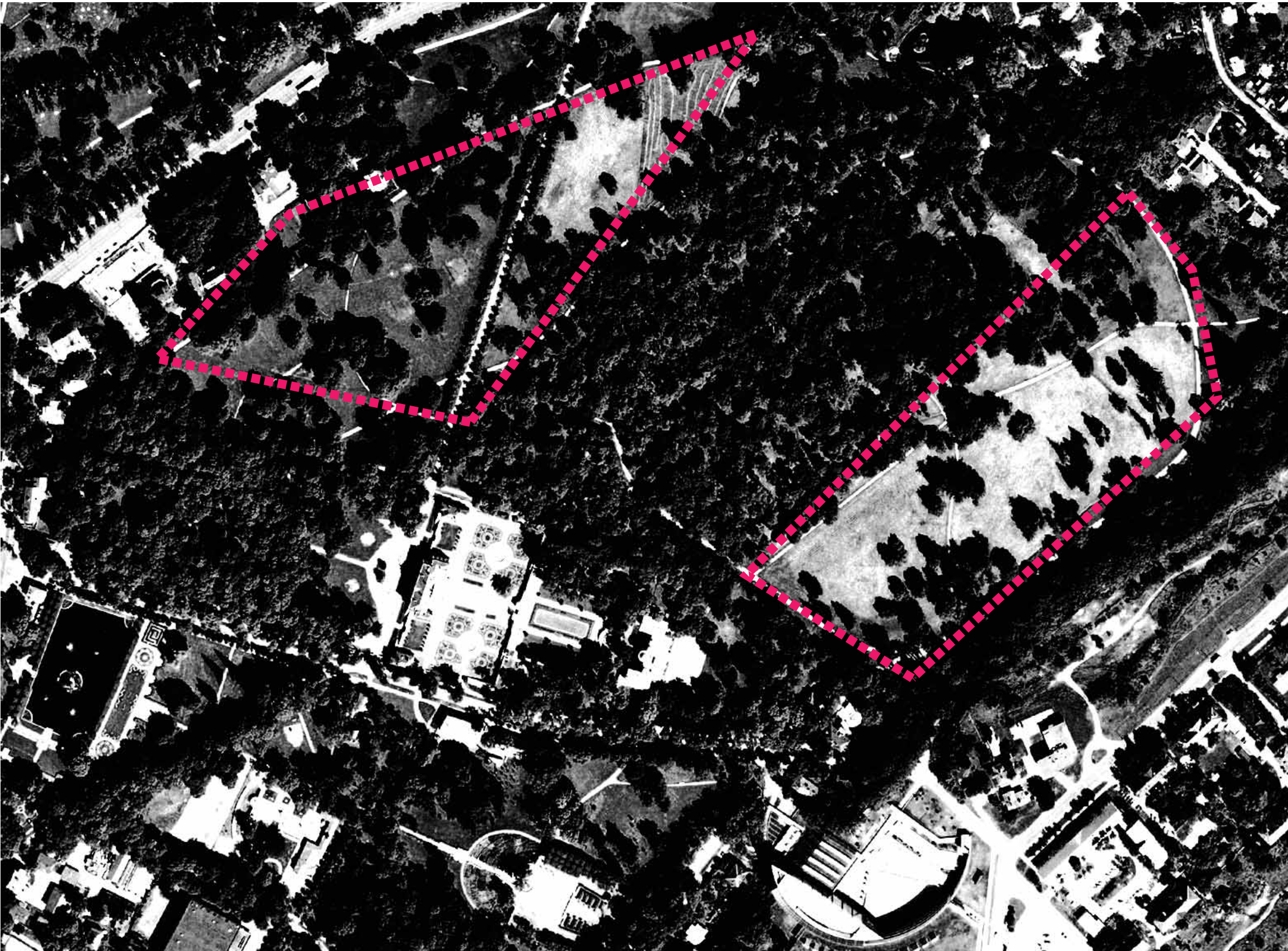


Scheme shows our finalized locations for new squares. SUDDEN SQUARES were considered as spaces to be created with minimal use of natural material, and with the change of vegetation periods (like blooming of flowers) will be visible. TEMPORARY SQUARES were meant to be created with more artificial materials that could be taken down and rearranged again somewhere else.

NUCLEUS SQUARE had potential to form around a single tree in centre. It has a path-way near by and also quite good size for compact space. CLOSED SQUARE 1 and 2 had potential because they both were centres of pathway crossings and had enough space to play with. Potential for GROUPED SQUARE was discovered near three pathway crossing. They were just enough together to have possibility grasping them almost in one sight. DOMINANT SQUARE was long time our favorite and it had great potential to be formed as permanent square since nice administrative building that is residence for the President of Estonia. AMORPHOUS SQUARE was mapped because of its placement on branch of pathways and had possibility to be formed into really dynamic and turbid node.

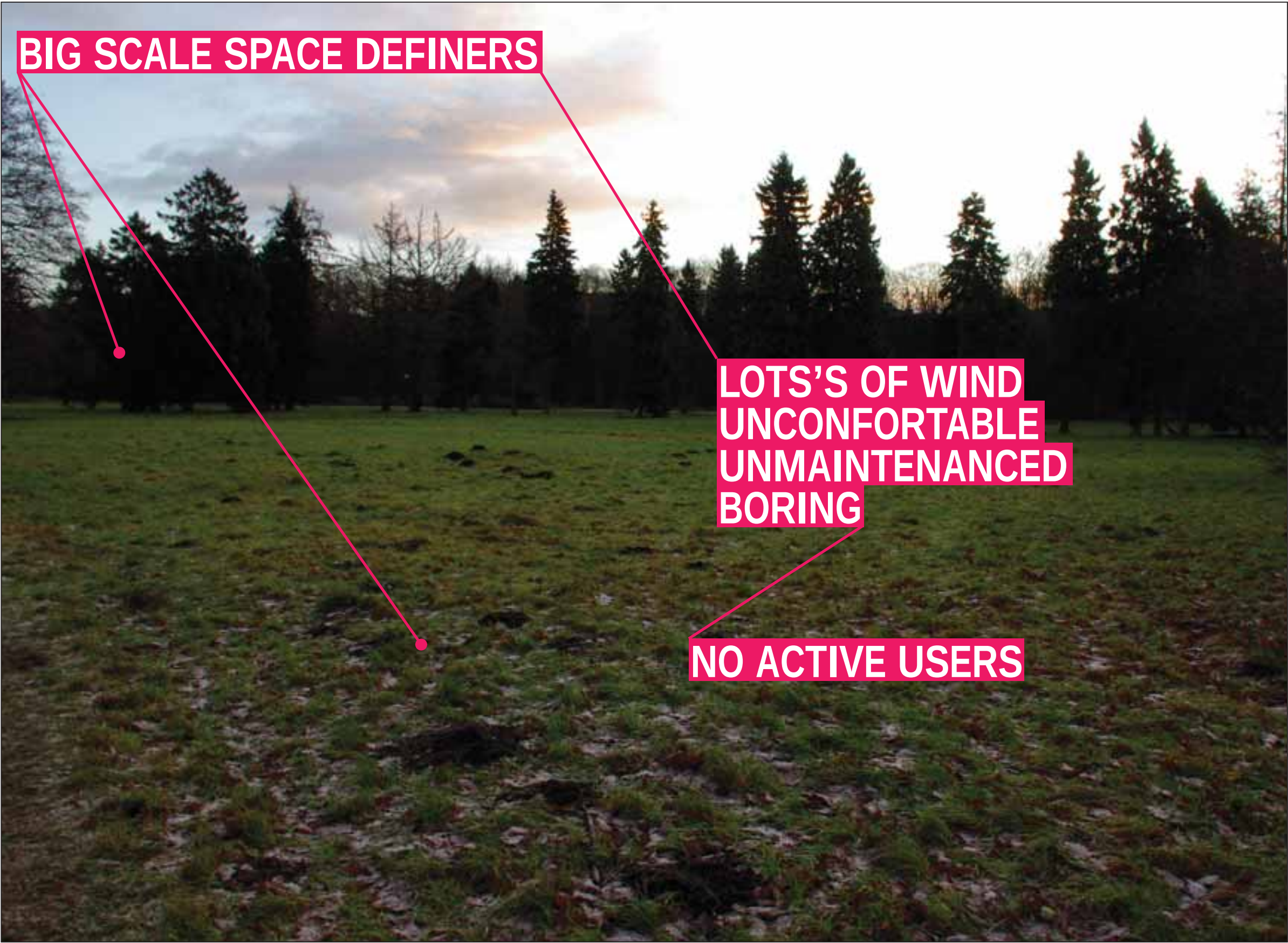
-  SUDDEN SQUARE
-  TEMPORARY SQUARE

AFFECTED AREAS



Scheme shows our so called project areas, there we will apply our toolbox and test it in real action.

PROBLEMS // CONTEXTUALIZED



BIG SCALE SPACE DEFINERS

**LOTS'S OF WIND
UNCOMFORTABLE
UNMAINTENANCED
BORING**

NO ACTIVE USERS

On this cheme we mapped few main problems towards we will guide our new spaces. Mapping is named contextualized, since taking this landscape park as a whole and as English style park, it is actually almost as it should be- grouped trees and calm vistas, etc. However our goal is still break this space into smaller and more actively usable units.

GUIDELINES

KADRIORU PARK



LANDSCAPE PARKS



SITE



INPUT

SQUARES DEFINED BY VEGETATION



ACTIVE USE



Before we started to design our squares some GUIDELINES had to be set. Our primary goals where mentioned before- to form more usable spaces in landscape park using our previously compiled Toolbox for Squares, but we shouldn't forget the sense of the place, its historical and cultural worthiness.

Scheme shows four main aspects we took into consideration to „get away with murder“:

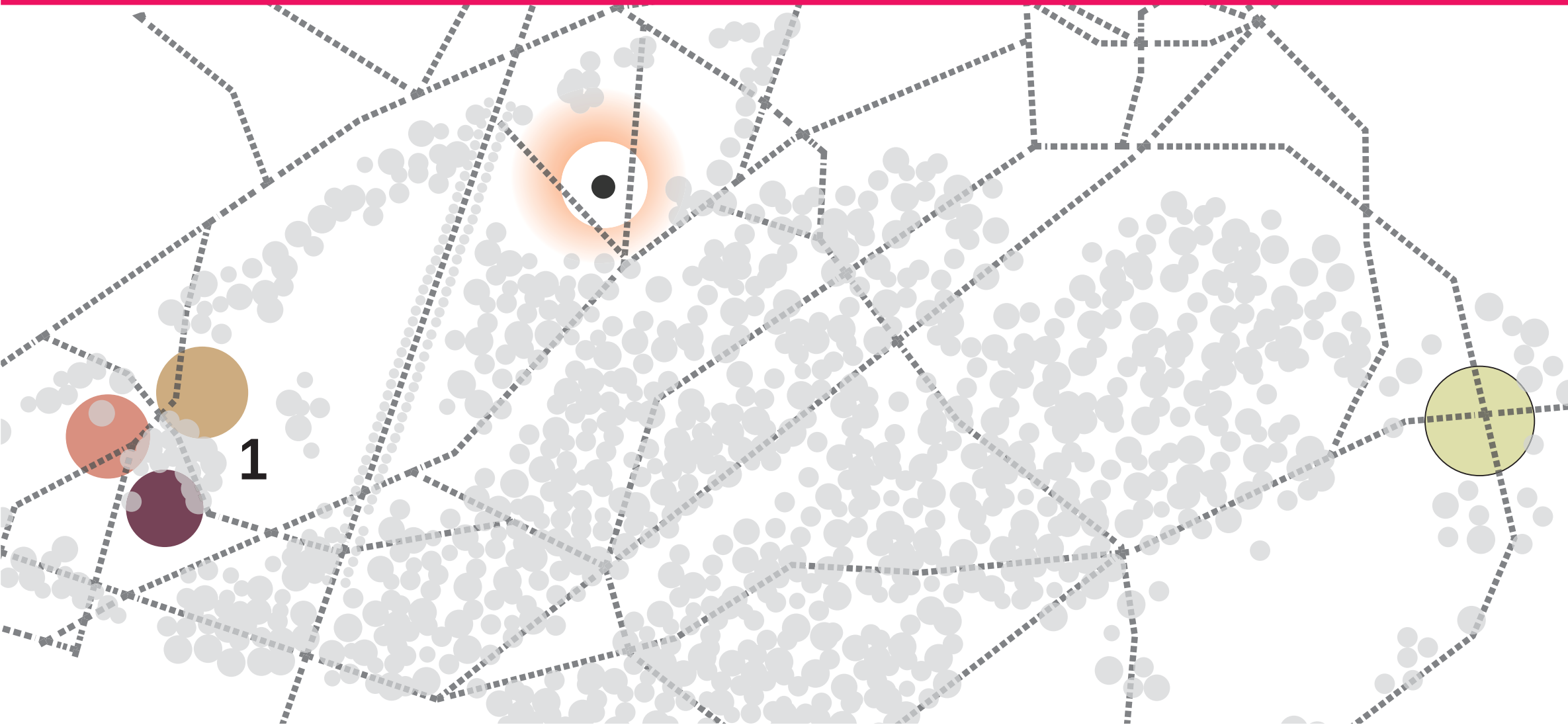
We balanced between Kadriorg Palace and its Neobaroqueish style- trying to add some elements from that era, but in modest almost unrecognizable way.

Using historical typology of squares „above history“, because many of the types were created through many historical eras.

Adding a bit presence to landscape park design. We realized that we must confront one of ideas of „usage“ of landscape park. What previously was meant to be for walking and watching picturesque scenery's and enjoying the park as a painting, had to change into actively used space.

PROPOSAL PLAN 1

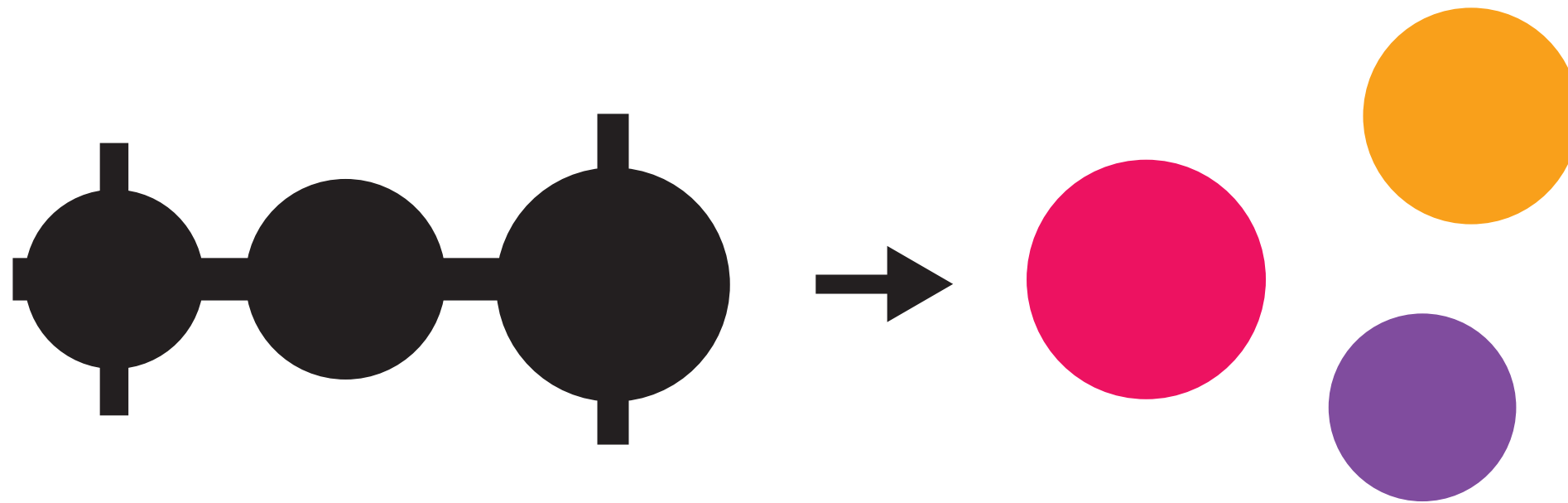
PROPOSAL PLAN 1 deals with GROUPED SQUARE which was meant to be as a sudden square.



1. SPRING FLOWERS

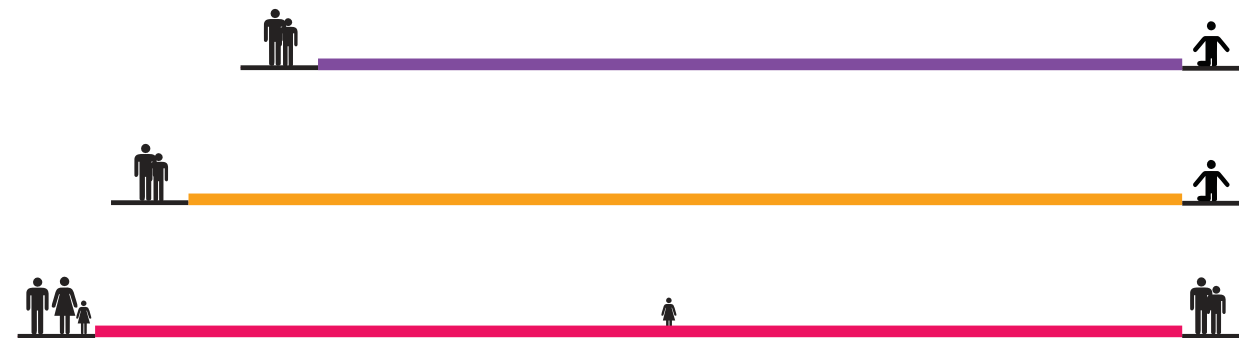


TRANSFORMATIONS // GROUPED SQUARE



The scheme shows how we tried to give this type a sense of today and this specific place. The purest form of GROUPED SQUARE was a sequence of geometrically ideal squares on one axe. In our minds Our equivalent for that aesthetics was to use geometrically perfect forms (circles) which were achieved by blooming of spring flowers. Each square of three is coloured differently. They are just enough big, that can be grasped together from nearby pathways. They are mix of perfect parterres and today's minimalism. Borders for the square is achieved by ground cover, that will reveal suddenly only in springs.

DEFINED SPACES
CHANGE OF AESTHETICS



GROUPED SQUARE

BASE ELEMENTS



SPACE

SEQUENCE



BOUNDARY

VEGETATION



SPRING LOWERS



CONNECTION

PATHWAY



FLOOR

FLAT



ADDITIONAL ELEMENTS



CONTRASTS



GUERRILLA



PAST

FORMULA

GS = $+ \left(\square + \text{CONTRASTS} + \text{BOUNDARY} + \right) + \left(\text{CONNECTION} + \square \right) + \text{PAST}$

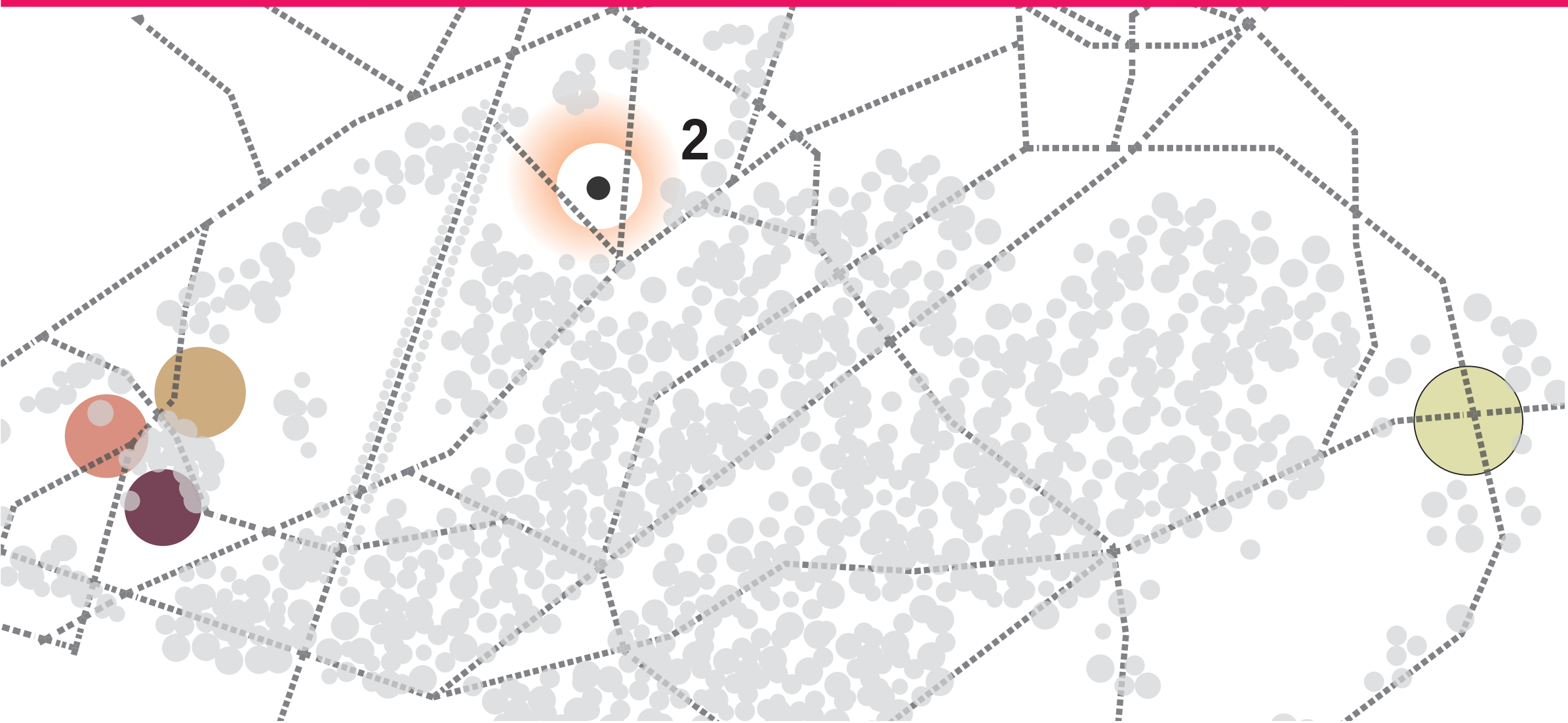
TOOLBOX is derived from Toolbox for Squares. Same base elements is used, but sub elements are picked considering actual place.

THEN & NOW collage shows transformation in real life. Vegetation period is about to start, but spring flowers already denote new spaces in park. ▼





PROPOSAL PLAN 2

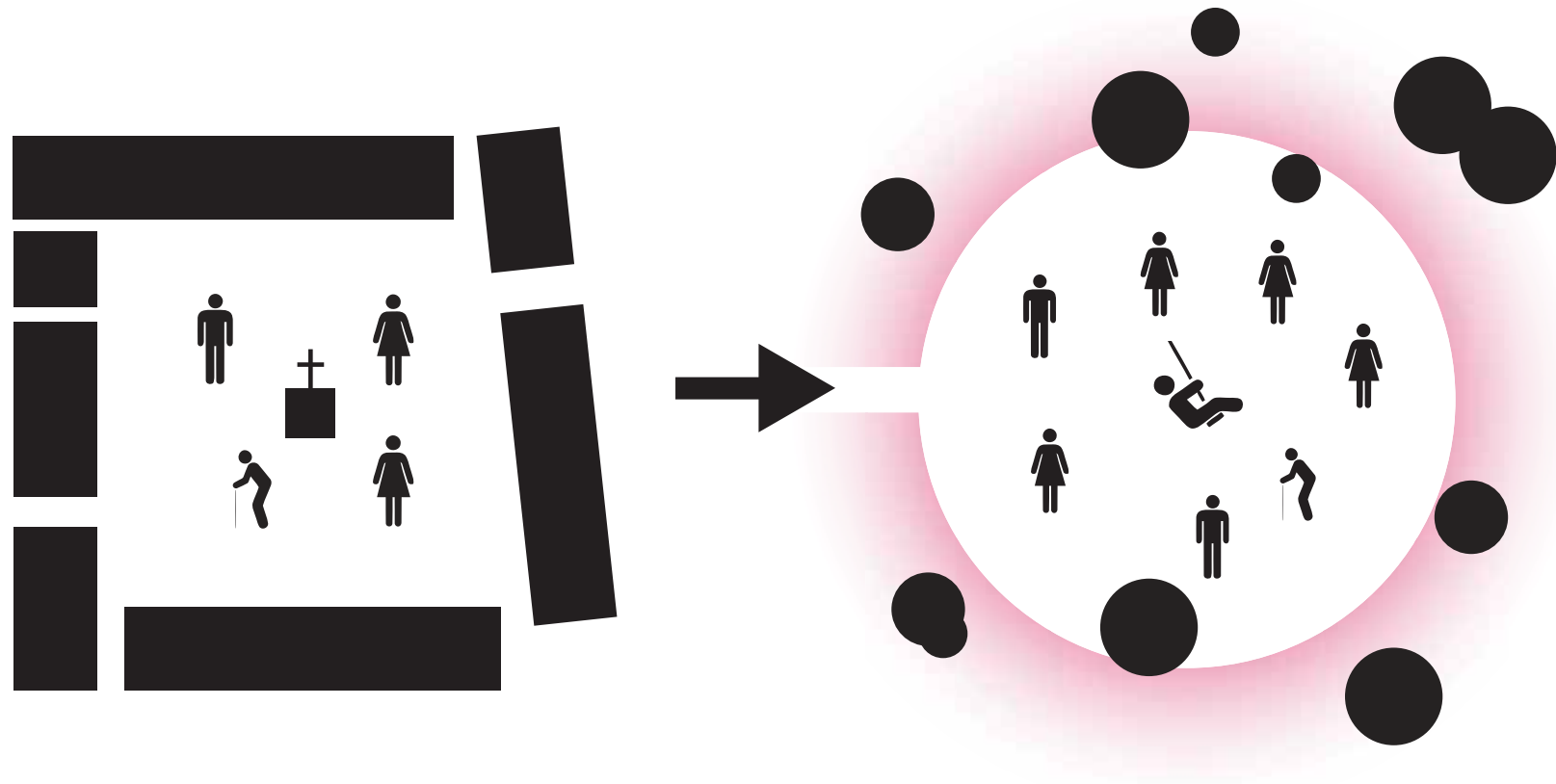


PROPOSAL PLAN 2 handles new NUCLEAR SQUARE. As previously introduced, this new space is considered as a sudden square. Focal element of this square is existing tree, that could be nucleus of the whole. As seen on PLAN, TOOLBOX and THEN& NOW collage boundary of the square is defined again with blooming flowers, but this time they are summer flowers. The reason for that was to give whole park more dynamics and different spaces in different times. Also the nucleus for the space is in contrast to historical standard activity centre. Centre element of NUCLEAR SQUARE historically used to have some kind of sublime building or statue in the middle. Usually it was tied to religion.

2. MEADOW/ SWING TREE / Z-MODULE RUINS



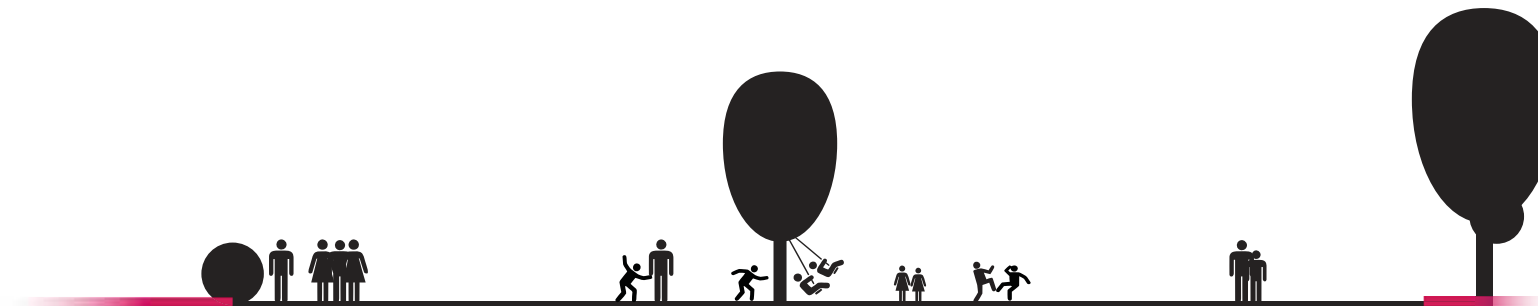
TRANSFORMATIONS // NUCLEAR SQUARE



Scheme shows our interpretation of the typology. In our minds often children play-grounds work as a nuclear spaces- Children are playing in the centre and parents are gathered around and watching. Since the best time to play outside is summer, flowers of that time period was chosen. As this square is meant to be actively in use flowers are planted outside the square, defining the inside boundaries and gradually scatter into park. Also existing Trees are used as space definers. To give place more flexibility to involve children few module „pocket parks“ are introduced.

Design awarded Z-module modules are used to quickly build small terraces and wind-blocking walls or today's pavilions or grottos. Again GUERRILLA-style construction is possible- Flowers can be planted as seeds, Swings to central tree is easily attached and z-modules can be linked into construction with ease.

CENTRE ROUTED SPACE
CHANGE OF ATTRACTOR



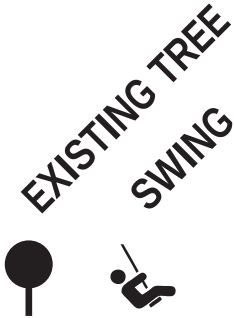
NUCLEAR SQUARE

Toolbox with elements used construction nuclear square.

BASE ELEMENTS



NUCLEUS



EXISTING TREE
SWING



BOUNDARY



VEGETATION
BENCH

SUMMER FLOWERS



FLOOR



FLAT

ADDITIONAL ELEMENTS



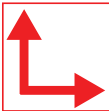
VISUAL MAGNETISM



GUERRILLA



PAST



HEIGHT & WITH RELATIONS

FORMULA

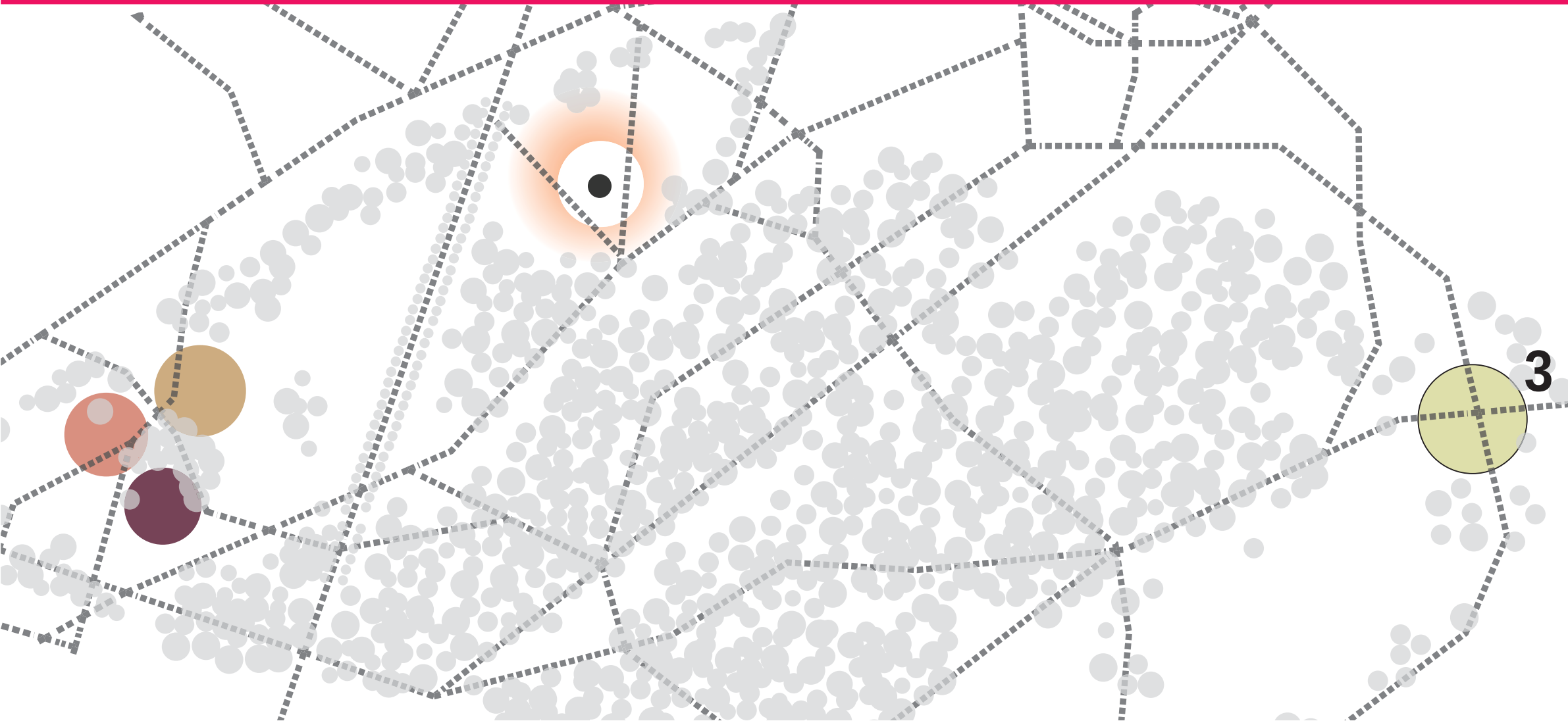
$$NS = \left(\text{Nucleus} + \text{Height \& With Relations} + \text{Floor} \right) + \left(\text{Visual Magnetism} + \text{Guerilla} \right) + \text{Boundary} + \text{Past}$$

THEN & NOW collage shows transformation in real life. ▼





PROPOSAL PLAN 3

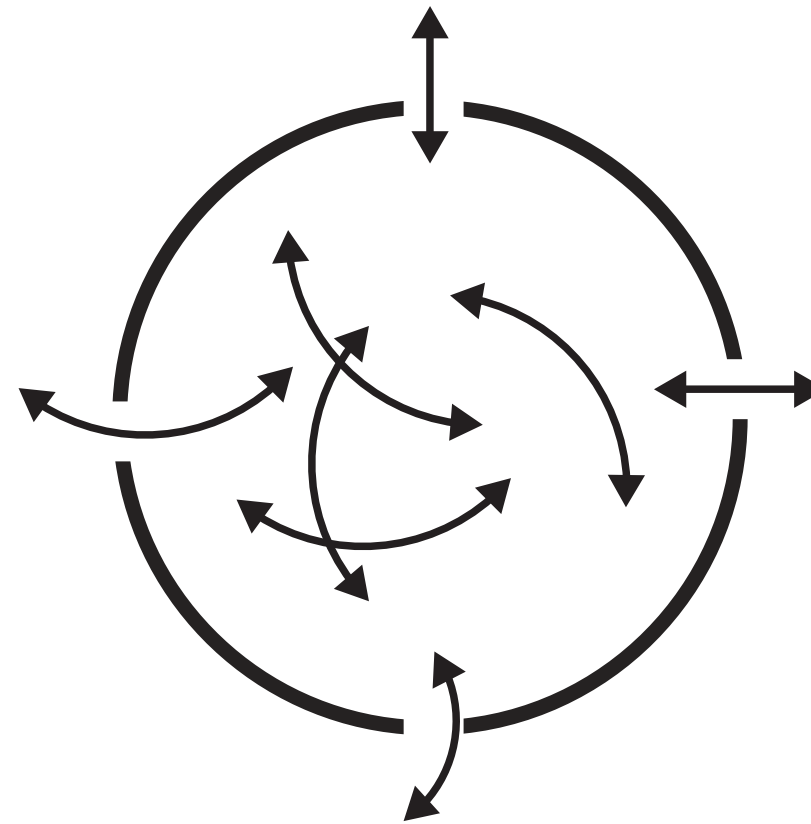
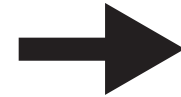
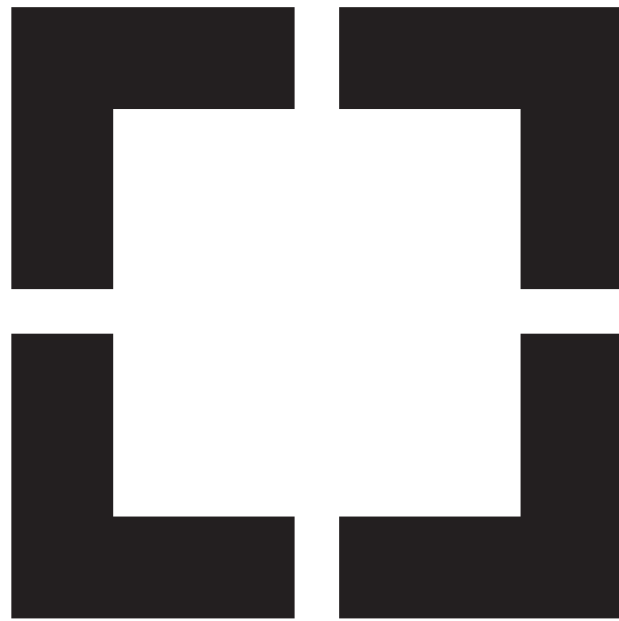


PLAN 3 provides new CLOSED SQUARE. This square is created using artificial materials such as GRASS CARPET and PRINTED TEXTURE. Square is formed on crossing of pathways and it uses elements of same historical square type.

3. GRASS CARPET/ ILLUSION WALL



TRANSFORMATIONS // CLOSED SQUARE



SPACE IS SELF CONTAINED
STATIC SPACE INTO DYNAMIC



Scheme shows translation of this type from historical to presence. Geometrically perfect layout of square used to be self contained and static. Regular borders had usually monotonous facade and that killed any constructed movement of space.

Our version keeps its old formal layout and static, but adds very dynamic content. Floor of the square is covered with steady grass carpet, which is easily installed and de-installed.

Boarders for space are constructed with fabrics. It has people printed on both side. When visitors approach to the square they see backs of people watch something in square.

CLOSED SQUARE

Toolbox for closed square.

BASE ELEMENTS

 BOUNDARY

PRINTED FABRICS

 FLOOR

FLAT

GRASS CARPET

ADDITIONAL ELEMENTS

 GEOMETRICAL REGULARITY

 HEIGHT & WIDTH RELATIONS

 GUERRILLA

 CONTRASTS

 ILLUSION

 PERFORMANCE

 PAST

FORMULA

 $= \left(\img alt="Dashed red square icon" data-bbox="108 775 145 825"/> + \img alt="Red vertical bar icon" data-bbox="171 775 207 825"/> + \img alt="Red floral icon" data-bbox="233 775 268 825"/> \right) + \left(\img alt="Red square icon" data-bbox="333 775 368 825"/> + \img alt="Red triangle in a circle icon" data-bbox="396 775 432 825"/> \right) + \left(\img alt="Red L-shaped arrow icon" data-bbox="485 775 520 825"/> + \img alt="Red running person icon" data-bbox="548 775 583 825"/> + \img alt="Red floral icon" data-bbox="609 775 644 825"/> \right) + \img alt="Red clock icon" data-bbox="688 775 724 825"/>$

Inside the CLOSED SQUARE printed people look towards inside. It gives effect, that you are surrounded with lots of people who are staring at you. This kind of place id ideal for young artists who want to try out their new moves in front of the audience who never gives them a bad rating.

Collage of THEN & NOW gives fast preview for possible solution. This kind of square can easily transformed from circle to square, etc or moved to new location. ▼





CONCLUSION

As mentioned before, it was quite hard task to complete without ruining Kadriorg's historical park. Our goal was to test out Toolbox for Squares and give this place really something it needs. Altogether we are quite pleased with the outcome.

Compiled toolbox really helps to create new spaces. It is obvious that no toolbox gives you 100% right answers, but it helps you to get going. This is very good starting point and leads you step by step to seek new knowledge. Also it must be considered, that timeline for the course was quite short and toolbox that was compiled is really basic and consists only physical aspects for creating spaces. But we all know it takes lots of social or urban elements to form a space or place, but physical space still is first step towards it. Even though our toolbox was based on squares that is basically urban attribute, it was somewhat usable even in Kadriorg- completely non urban environment.

Every proposed square got its dose of classical elements from historical typologies, its transformation for today's world and meanings and its touch of historical Kadriorg- neo-baroque and English landscape park.