

# One step beyond

phase 2

Rethink Athens, towards a new city Centre

EUROPEAN ARCHITECTURAL COMPETITION  
FOR THE CREATION OF A NEW CITY CENTRE IN ATHENS



**Challenges** – Changing the heart of Athens into a true contemporary metropolitan city centre requires transformation of the city triangle into a lively part of the city. Newly gained space, as a result of the major step towards a walkable city by reducing car traffic in this area, can be transformed into a vibrant, green and accessible heart of the city. We will take contemporary ideas on climate control, reduction of vehicular movement and programming public realm one step beyond: into an integrated proposal, creating a resilient, accessible and vibrant city, not just limited by its project borders, but linking this area to its adjacent areas and being a catalyst for the whole city.

**Resilient City** - Panepistimiou will be transformed into a green spine, central in a green network, providing shade and shelter. The resilient strategy includes specific attitudes towards reducing the urban heat and improving thermal comfort (natural cooling by greening and shading public realm, green roofs and facades, cool pavement), reducing air pollution, decreasing energy use and resolving water issues (storm water retention and irrigation). Turning the city triangle into a green framework, transforming its corners into green areas, and connecting this framework to the green hills around the city centre results in mitigation of urban heat not just limited to Panepistimiou but having its effects on the Metropolitan Centre. A greening strategy for Athens is combined with a water strategy, since a good condition of plantings is crucial to contribute to heat reduction. Capturing rainwater in underground basins, on top of roofs or elsewhere helps to keep the water in the area. Besides the technical solutions, water will be used in a poetical way, by referring to the underground Eridanos river.

**Accessible city** - The green framework will be treated as a coherent network of public realm in all directions and linking the adjacent neighbourhoods, having its highlight on Panepistimiou. Restoration of the continuities of the crossing streets creates continuity in the walking experience. By making the new tramline clear and present and part of the grandeur of the space it contributes to the aimed cohesion. In fact, Panepistimiou provides Shared space 2.0, a combination between 'flux' and 'relax'. The design has four characteristic places: Syntagma and Ommonia Square will become two green urban squares, with prominent lush water elements. Dikaiosynis Square will become a green urban room, combining installing a fountain house in an empty building linked to activities in a shaded forecourt. In the middle of Panepistimou Street, a green ensemble ties the university together into an urban park.

**Vibrant city** - Panepistimiou will change from 'street' to 'boulevard', by adding inviting spaces to stay to the linear space. Occupying and transforming ground floors, we introduce the concept of the theatre of 1000 rooms towards vacant buildings, organizing cultural events and shift focal points who will create a new vibrant atmosphere. Programs are related to Greek philosophy, science, drama and art. In public realm there will come small open-air podia for outdoor initiatives. An 'encroachment zone' will improve active frontages and create linkages between the built environment and public realm. On a smaller scale the architectural interventions of kiosks will not only focus on commercial space, but some will provide facilities such as 'waterkiosks' or a toy library. Interactive decorative light in public realm will give the right atmosphere during evening hours.

By doing this we believe that the project tackles the anonymous space in the heart of Athens and demonstrates that urban vibrancy can be combined with creating a green and pedestrian friendly spine, contributing to quality of life and living in Athens.



## Ένα βήμα παραπέρα

**Προκλήσεις** – Για να γίνει η καρδιά της Αθήνας ένα πραγματικό σύγχρονο κέντρο μητρόπολης, θα πρέπει το τρίγωνο της πόλης να μεταμορφωθεί σε ένα ζωντανό μέρος. Ο πρόσφατα αποκτημένος χώρος στην καρδιά της πόλης, αποτέλεσμα ενός ευρύτερου βήματος για μια πόλη που μπορεί να περπατηθεί χωρίς να κυκλοφορούν αυτοκίνητα στην περιοχή, μπορεί να μεταμορφωθεί σε έναν ζωντανό, πράσινο και προσβάσιμο χώρο. Θα πάμε ένα βήμα παραπέρα στις σύγχρονες ιδέες για τον έλεγχο των περιβαλλοντικών συνθηκών, στη μείωση της ροής της κυκλοφορίας των αυτοκινήτων και στον προγραμματισμό της δημόσιας περιοχής: θα μεταβούμε σε μια ολοκληρωμένη πρόταση, δημιουργώντας μια ανθεκτική, προσβάσιμη και πόλη που θα σφύζει από ζωντάνια, περιορισμένη όχι μόνο στα πλαίσια του έργου, αλλά ενώνοντας την περιοχή αυτή με τις γειτονικές της και δημιουργώντας έναν καταλύτη για ολόκληρη την πόλη.

**Ανθεκτική πόλη** – Η Πανεπιστημίου θα μεταμορφωθεί σε έναν πράσινο σπόνδυλο, κεντρικός σε ένα πράσινο δίκτυο, προσφέροντας σκιά και προστασία. Στην ανθεκτική αυτή στρατηγική συμπεριλαμβάνονται συγκεκριμένες στάσεις που έχουν να κάνουν με τη μείωση της αστικής θέρμανσης και τη βελτίωση της θερμοκρασιακής άνεσης (φυσική ψύξη με τη βοήθεια δημιουργίας πράσινου και σκιάς στις δημόσιες περιοχές, πράσινες ταράτσες και προσόψεις, δροσερά πεζοδρόμια), τη μείωση της ατμοσφαιρικής ρύπανσης, τη μείωση χρήσης της ενέργειας καθώς επίσης και την επίλυση των θεμάτων ύδρευσης (κατακράτηση νερών από καταιγίδες και άρδευση). Μετατρέποντας το τρίγωνο της πόλης σε ένα πράσινο πλαίσιο, μετατρέποντας τις γωνίες της σε πράσινες περιοχές και συνδέοντας αυτό το πλαίσιο με τους πράσινους λόφους γύρω από το κέντρο της πόλης, έχει ως αποτέλεσμα τον μετριασμό της αστικής θερμοκρασίας η οποία δεν θα περιορίζεται μόνο στην Πανεπιστημίου αλλά θα επιδρά σε όλο το Κέντρο της Μητρόπολης. Η στρατηγική πράσινου στην Αθήνα θα συνδυάζεται με μια στρατηγική ύδρευσης, εφόσον οι σωστές συνθήκες φύτευσης είναι αποφασιστικής σημασίας για τη συμβολή στη μείωση της θερμοκρασίας. Το βρόχινο νερό θα συλλέγεται σε υπόγειες δεξαμενές, σε σκεπές ή οπουδήποτε αλλού γίνεται να συλλεχθεί στην περιοχή. Το νερό εκτός από τη χρήση του για τις τεχνικές λύσεις, θα χρησιμοποιηθεί και με ποιητικό τρόπο, κάνοντας αναφορά στον υπόγειο ποταμό Ηριδανό.

**Προσβάσιμη πόλη** - Το πράσινο πλαίσιο θα χρησιμοποιηθεί ως ένα δίκτυο που θα ενώνει το δημόσιο χώρο προς όλες τις κατευθύνσεις και συνδέοντας τις παρακείμενες γειτονίες, με αποκορύφωμα την Πανεπιστημίου. Αποκαταστήνοντας τη συνέχεια των οδών που διασταυρώνονται θα επιτευχθεί και συνέχεια στην περιπατητική εμπειρία. Εάν η εικόνα της νέας γραμμής του τραμ είναι εμφανής και καθαρή και αποτελεί μέρος της αίγλης του χώρου θα συμβάλει στη συνοχή που σκοπεύουμε να επιτύχουμε. Στην πραγματικότητα, η Πανεπιστημίου παρέχει έναν Ενοποιημένο χώρο 2.0 (Shared space 2.0), έναν συνδυασμό “συνεχής μεταβολής” και “ανάπαυσης”. Η μελέτη αποτελείται από τέσσερις χαρακτηριστικούς τόπους: Το Σύνταγμα και η Πλατεία Ομονοίας θα γίνουν δύο πράσινες αστικές πλατείες, με περίβλεπτα άφθονα υδάτινα στοιχεία. Η πλατεία Δικαιοσύνης θα γίνει ένα πράσινο αστικό δωμάτιο, το οποίο θα συνδυάζει την τοποθέτηση ενός σκεπαστού συντριβανιού σε ένα άδειο κτίριο συνδέοντας το με δραστηριότητες σε ένα προαύλιο με σκέπαστρο. Στο μέσο της Πανεπιστημίου Οδού, μια πράσινη σύνθεση θα δένει το πανεπιστήμιο με ένα αστικό πάρκο.

**Πόλη που σφύζει από ζωντάνια** – Η Πανεπιστημίου θα αλλάξει από “οδός” σε “λεωφόρος”, προσθέτοντας ευπρόσδεκτους χώρους παραμένοντας στον γραμμικό χώρο. Καταλαμβάνοντας και μετατρέποντας ισόγεια, θα εισαγάγουμε την έννοια του θεάτρου των 1000 δωματίων προς τα κενά κτίρια, οργανώνοντας πολιτιστικά δρώμενα και μεταθέτοντας εστιακά σημεία τα οποία θα δημιουργήσουν μια νέα ζωντανή ατμόσφαιρα. Το πρόγραμμα των δραστηριοτήτων θα έχει σχέση με την ελληνική φιλοσοφία, επιστήμη, δράμα και τέχνη. Σε δημόσιους χώρους θα στηθούν μικρές υπαίθριες εξέδρες για υπαίθριες πρωτοβουλίες.



Μια ζώνη προσέλκυσης θα βελτιώσει τους ήδη υπάρχοντες γείτονες και θα δημιουργήσει συνδέσμους μεταξύ του δομημένου περιβάλλοντος και του δημόσιου χώρου. Σε μικρότερη κλίμακα οι αρχιτεκτονικές παρεμβάσεις δεν θα εστιάσουν μόνο στον εμπορικό χώρο, αλλά μερικές θα προσφέρουν διευκολύνσεις όπως η παρουσία 'περίπτερων για νερό' ή βιβλιοθήκης παιχνιδιών. Διαδραστικό διακοσμητικό φως στον δημόσιο υπαίθριο χώρο θα δώσει την κατάλληλη ατμόσφαιρα κατά τις βραδινές ώρες.

Κάνοντας το αυτό πιστεύουμε ότι το έργο καταπιάνεται με τον ανώνυμο χώρο στην καρδιά της Αθήνας και αποδεικνύει ότι ο αστικός παλμός μπορεί να συνδυαστεί με τη δημιουργία πράσινου και φιλικού προς τον πεζό σπόνδυλο, συμβάλλοντας στην ποιότητα ζωής στην Αθήνα.







# ONE STEP BEYOND

## Challenges

Changing the heart of Athens into a true contemporary metropolitan city centre requires transformation of the city triangle into a lively part of the city. Improvement of public realm as a catalyst for new economic activities can stop the decay of the area and increase its attractiveness. Athens Metropolitan Centre will regain its social, financial, political and symbolical importance, reflected in architecture by creating a green and vibrant heart. We are seeking for new inspirations towards a bright future of Athens Metropolitan Centre, becoming an inviting, comfortable and safe environment to present and future residents, commuters, and tourists.

Newly gained space, as a result of the first and major step towards a walkable city by reducing car traffic, will be reinvented. We will take contemporary ideas on climate control, reduction of vehicular movement and programming public realm one step beyond: into an integrated proposal: creating a resilient city, accessible city and vibrant city, not just limited by its project borders, but linking this area to its adjacent areas and being a true catalyst for the city heart.

## 1 RESILIENT CITY, BEYOND SUSTAINABILITY

What intrigues us is that through design we can find new solutions and adapt our contemporary cities and metropolises to resilient areas, where the cycles of water, of nutrients and of energy lead to more self-sufficiency and healthy environments. Aspirations on a healthy and welcoming city centre of Athens can be guided by making it green, by creating good pedestrian connections and linking the urban environment to the presence of larger green structures, such as the large hills at the East and the prominent hill of the Acropolis on the South. Panepistimou will be transformed into a green spine, central in a green network, providing shade and shelter. The green strategy includes specific attitudes towards:

- reducing the urban heat island effect (UHI) by greening the space and creating green linkages to areas that provide natural cooling (such as existing green parks), cool pavement, green roofs and vertical gardens.

- reducing air pollution (orientation towards carbon neutral interventions where carbon footprint and carbon offsetting are solved within the area by trees planting and other compensating measures).

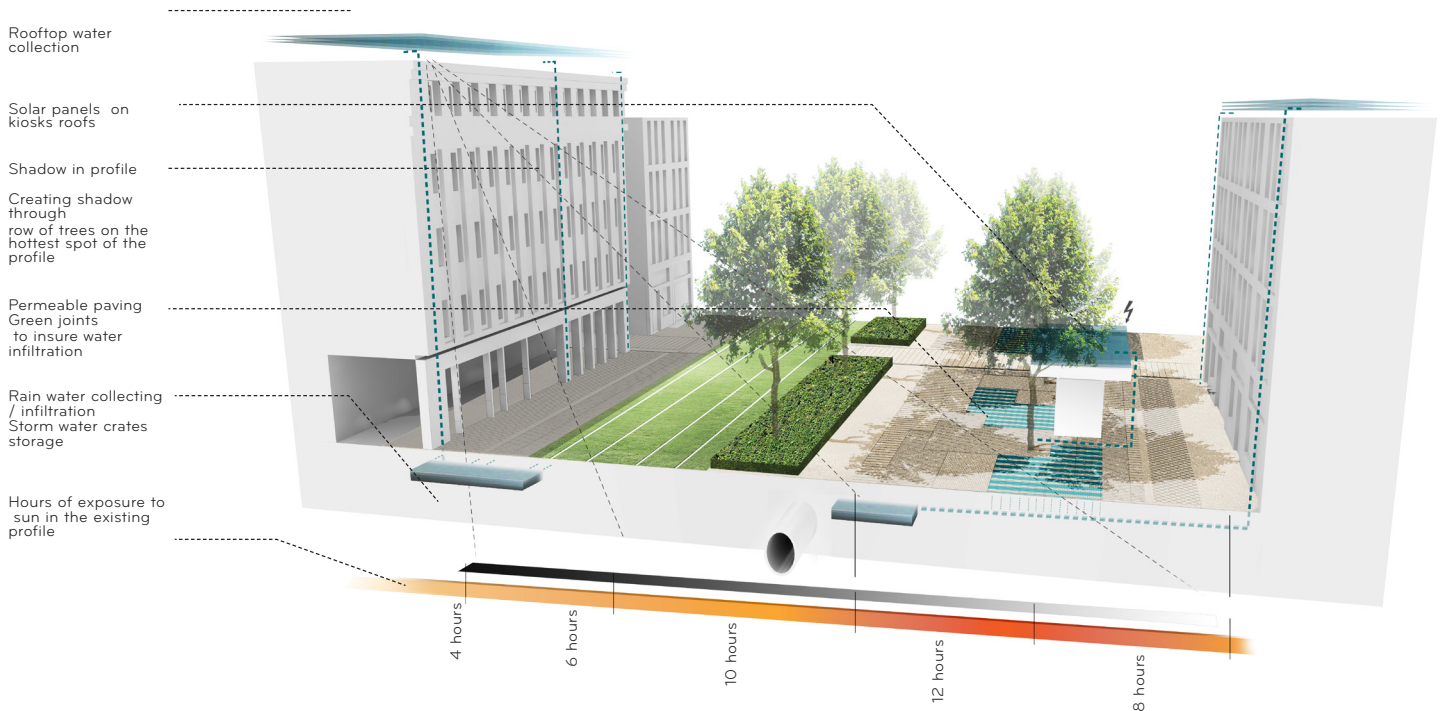
- positive attitude towards energy flow and consumption (energy producing elements related to traffic ramps, combinations of lighting and solar energy, integration of geothermal storage and possible linkage to positive energy buildings);

- resolving water issues (storm water retention and drainage, semi permeable surfaces, micro filtering, water storage for irrigation)



The green framework of Athens

## ONE STEP BEYOND SUSTAINABILITY

**Green connections on the city scale**

The best option for the city triangle is to link existing and new green places to the green fingers of the hills at the east side of Athens.

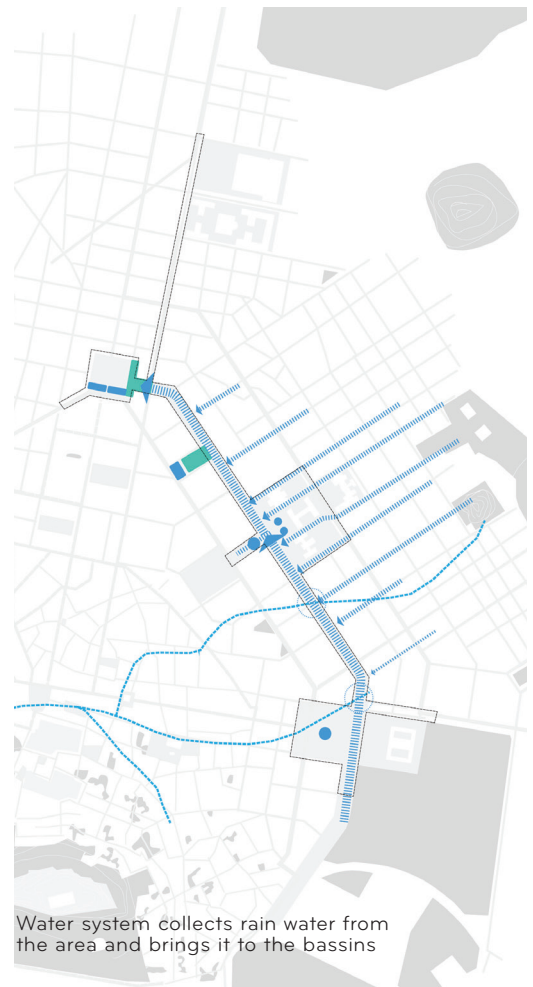
We turn the city triangle into a green framework and connect it to the green hills in and around the city. Like this, Panepistimiou will be the aimed green spine, central in a green framework of boulevards with a coherent tree planting framework. The corners of the triangle will be transformed into green areas, thus connecting the pedestrian area of Panepistimiou with the green hills. Since several small green places provide a better cooling effect than one larger area, creation of several small green areas is interesting. The result will be that mitigation of urban heat island effects is not limited to Panepistimiou but will have its effects on the Metropolitan Centre.

Such an integrated heat mitigation strategy, that exceeds project area limits is required since the position of Athens as a densely built metropolis at the sea, and surrounded by mountains up till 1000 metres (Egaleo at the east, Hymettus at the west, Pentelli and Parnitha at the north) defines highly the climate in the city. Most of the city is urbanized, although at the east of the city centre some hills and parks are present. Especially in areas where green is lacking, at the west side of the city, there are higher air-temperatures under summer weather conditions. Whist the area of Stadiou-Academias is situated in the most urbanized area of the city, having only a small amount of green areas, the area is relatively warm and suffers from smog. The effect of the Etesian wind, coming from the north is not that positive in this area during summertime, since the presence of the mountains have decreased wind speed and the wind is heated by travelling over the city.





Green structure of the project area related to the existing parks



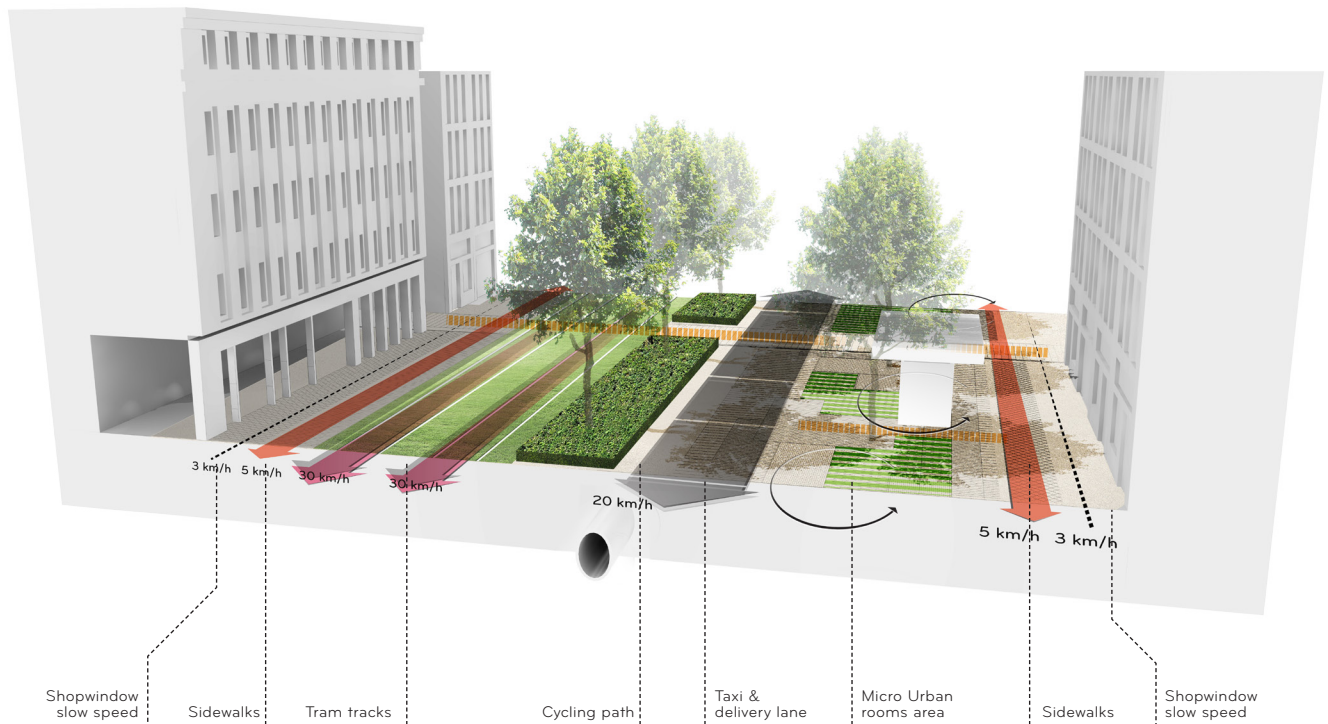
Water system collects rain water from the area and brings it to the basins

The greening strategy for Athens is combined with a water strategy, since good growing conditions of plants are crucial to enlarge heat reduction. Without infiltration of rainwater trees will not have sufficient water supplies and evapotranspiration of leaves is less. Therefore, rainwater facilities are integrated as standard elements. Provision of stormwater drainage is crucial, since short periods of heavy rains do occur in autumn and winter. Capturing rainwater in underground basins, on top of roofs or elsewhere helps to keep the water in the area. Besides the technical solutions, water will be used in a poetical way, by referring to the underground Eridanos river.

Reintroduction of water in Athens reflects the meaning of water in ancient Greek society. For centuries Athens' culture used to celebrate the water, not only for drinking and washing, but also in a religious way. Long time ago, many fountains and cisterns were present in the city and the rivers played a prominent role. People used to read, study, sport and socialize along the shady places along the water of the river Eridanos. Sometimes the river Eridanos can be seen or heard, like at Syntagma metro station, Monastiraki and the green area of Kerameikos. Today, hidden and tucked away, the presence of the small underground river will be made visible along special points, adding to its visibility in Metro stations. At the crossing points of Panepistimiou with Eridanos some special trees and small fountains will be placed, expressing the importance of the water.

On a smaller scale a strategy of green urban acupuncture is applied in Plaka and combine this strategy with use of water in public realm. Strategic positioning of water elements is part of our plan, to create inviting places to stay. Within the city triangle green places will be linked to the green framework, turning paved and stony squares into green areas.

## ONE STEP BEYOND ACCESSIBILITY



## 2 ACCESSIBLE CITY, BEYOND VEHICULAR MOVEMENT

For public space 'Access for all' is the key. The aim is to create a vivid and differentiated area, as a mixed development with mixed people (high and low income and a diversity of backgrounds), which can refer to the diversity of the metropolitan centre. Therefore we welcome the Masterplan's idea to create a pedestrianized spine. Providing new activities and giving a new quality to the space will turn Akademias from a traffic corridor into an attractive destination. In relation to the foreseen transformation to discourage through traffic the movement on Panepistimiou from Syntagma Square to Omonia will be limited to pedestrians, cyclists and the tramline connecting Syntagma to Patissia. Traffic traversing the center will be organized in loops; from Omonia to Syntagma vehicular movement is organized via Stadiou and vice versa via Akademias. This means that a shift from vehicular movement to other users, such as pedestrian, cyclists, and public transport will take place.

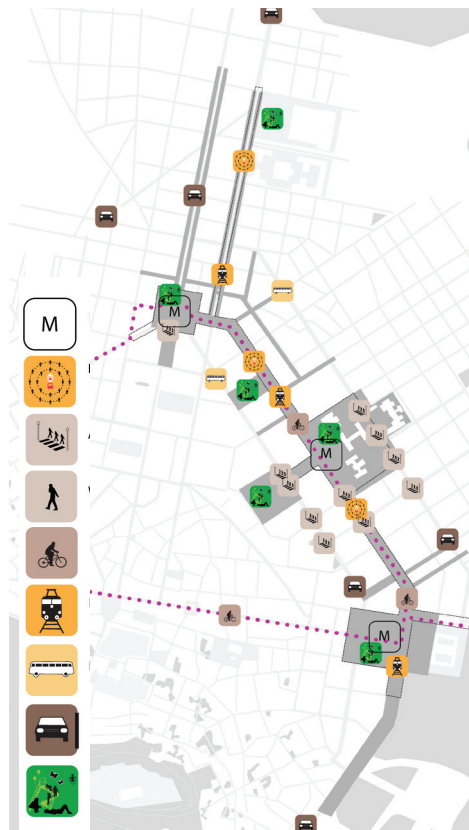
To implement 'Access for all' we examine how the scale of streets can contribute to transformation of 'fast traffic' to 'slow traffic'. This requires a balance between movement, by tram, by cyclists and by pedestrians and

inviting places to stay. Vibrant street life will be achieved by creating safe pedestrian movements as a key to connect spaces and generate coherent public realm. Cohesive links between social, cultural or educational facilities will be enhanced. Some of the interesting pedestrian movements are across these streets, if one wants to access from the University or from adjacent streets. Restoration of continuities of the crossing streets provides continuity in the walking experience. In order to create a coherent network of public realm for pedestrians we can take advantage of the urban morphology in this area. The grid will be treated as a coherent network of public realm in all directions and linking the adjacent neighbourhoods, having its highlight on Panepistimiou. In addition to improvements on Panepistimiou good pedestrian crossings on Stadiou and Akademias will be created. Public transport by bus, tram and access to the main hubs will be incorporated in a 'walkable' city. The citizens will use Athens' public space on Panepistimiou in a very flexible manner and the best way to organize this is to create a shared surface. Especially on Omonia square diversion of vehicular movement offers the opportunity to create better connections to the adjacent neighbourhoods. Our proposal is to design the area as a pedestrian square,





Accessible city,  
Car traffic reorganized at the scale of the  
city centre



Accessible city,  
beyond vehicular movement  
New modes



Creating continuity of walking experience

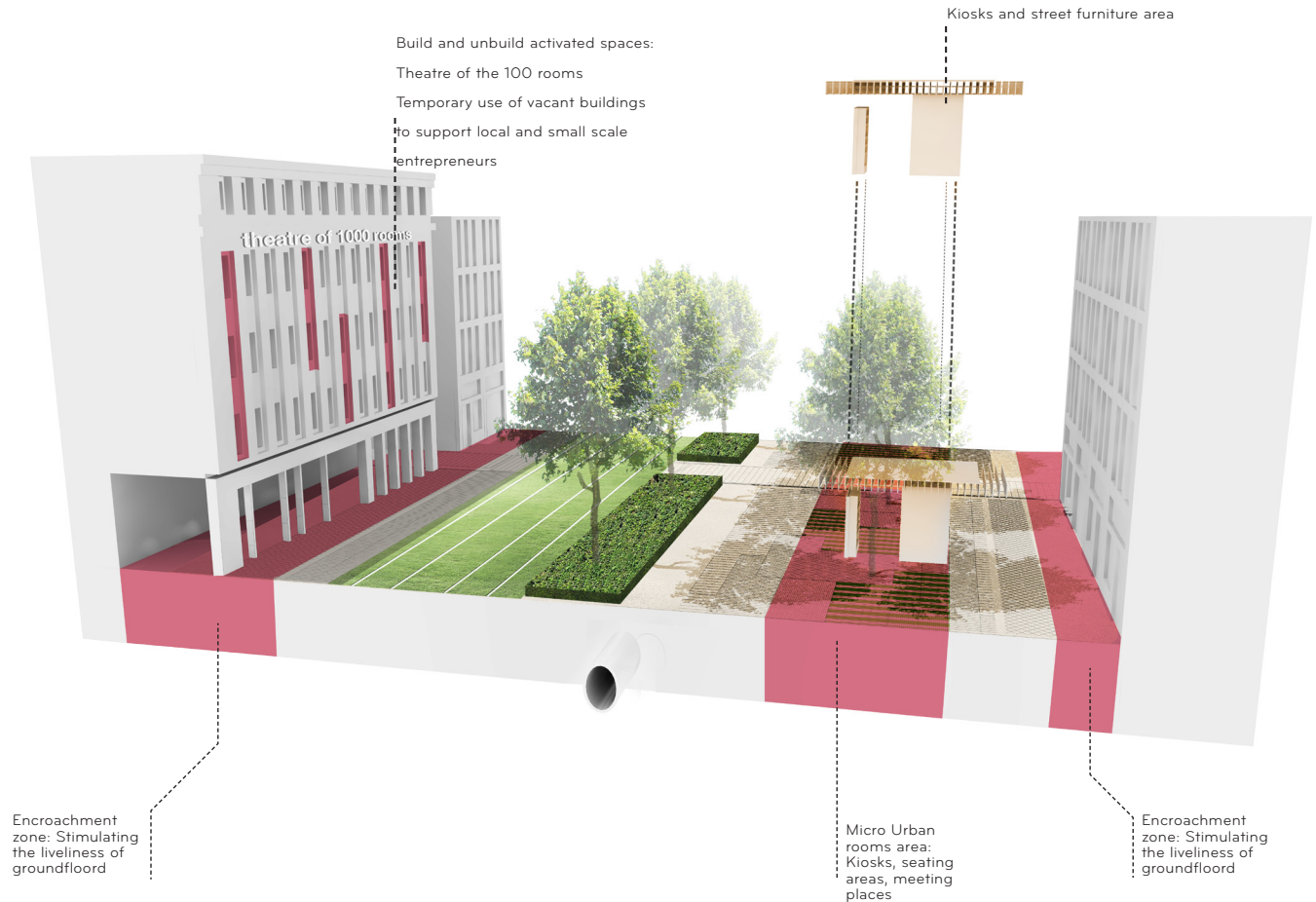
where motorized traffic is a guest. On the south side good at grade crossings allow pedestrians to enter Omonia Square from the south, thus contributing to link Athinas to Omonia and strengthen local economy.

The best solution is to create an attractive public space, a task involving more than just cosmetic surgery. These leads to the concept of 'Shared Space 2.0', which goes beyond mere surface treatment and embraces the natural ebb and flow of public spaces – those of flux and relax. The idea that, at certain times, spaces need to allow for more flows through, while at other times they want to allow for moments of pause and rest and that the design and programming of a space can reflect and enhance this reality. These rhythms can vary throughout the day, weekly, monthly, and yearly. The scenography of Athens' Metropolitan Centre public space emerges from its corporation of different uses at different times. Elements in the design are placed in a way that deliveries can take place without creating visual dominance. Creating attractive sidewalks and tree planting will enrich the urban network.

By making the new tramline clear and present and part of the grandeur of the space it contributes to the aimed cohesion and provides similar qualities as in several French

cities. In those cities, for example Bordeaux and Marseille, realization of the tram lines have contributed to enhancement of social structures, linking a wide range of urban areas to the city centre. Perfect positioning of tram stops plus bicycle stands is required. Tram stops will be covered with trees (10m zone). Accessibility also for people with handicap and/or visual imparity is considered.

In streetscape visual continuity in walking experience is provided, and street-crossings on Panepistimiou are integrated in the pedestrianized boulevard. Where the loops for delivery vehicles and local traffic cross the boulevard are required, spatial continuity of the boulevard is guaranteed, indicating that other traffic is guest on Panepistimiou. On crucial points at grade crossings on Stadiou and Akademias, are linking the pedestrian area of Panepistimiou. Providing good facilities to the long distance cycling route will incorporate the increase of safe cycling. Cycle stands will be located close by tram stops and metro connections. The cycling lane (covered with trees and/or in shade) is integrated in the design.



### 3 VIBRANT CITY, BEYOND PRODUCTIVE SPACE

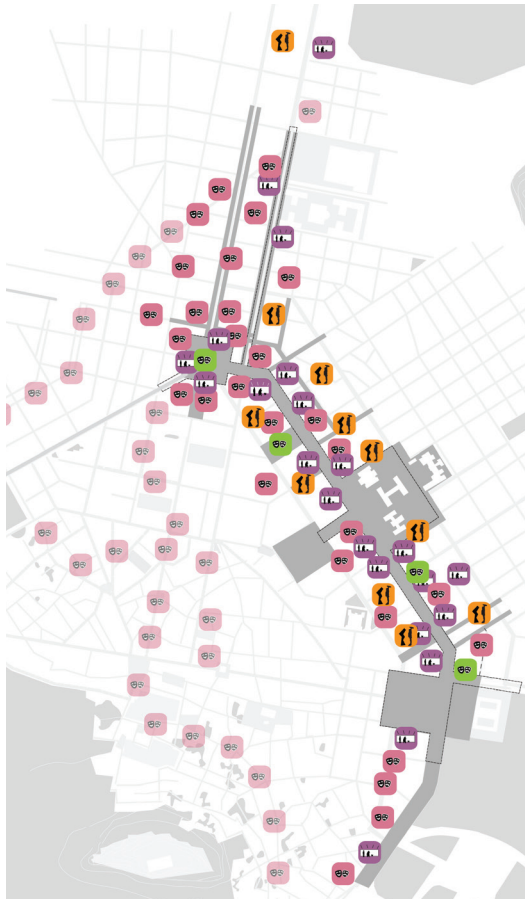
A successful development is based on a clear formulated identity. By giving the heart of Athens a lively quality that invites people to stay, meet and interact, in parallel with its transit function, Panepistimiou will become the focal point for social life of the area and a catalyst for new developments. Increasing safety during daytime and evening hours and re-organizing flows are required to provide a commercial and cultural boost. Public space must transform the city centre into a public domain that is essentially different in nature from a central shopping location with a number of scattered areas distributed around it. Therefore it must become a valued element of life of the neighbourhood and the city as a whole. The gravitational centre of the public space has undergone a shift away from productive space, i.e., the space for the sale of products, and for market and work places, to consumptive space: the space for shopping, entertainment and dwelling. During evening hours the mix of activities should gradually shift towards cultural activities, such as small theatres, expositions and uptown bars. Athens' public realm will be characterised by a progressive blurring of the border between working and leisure time and between public and private cohabitation, between elevated and popular culture. If new meaning is to be given to urban public spaces, antiquated public and private relationships must

undergo a thorough revamping. Our task is to make possible diversity in the urban experience, one that invites continuous reinterpretation, embedded in Athens' logic and history. For public realm this means to reinterpret historic qualities and to provide space for activities without pre-programming the space.

#### Activating built and unbuilt space

To improve Athens' city Centre it is crucial to create a public realm that supports a wide range of local economic and entrepreneurial activities, such as through the provision of (an attractive setting for) informal work and meeting spaces which encourage the exchange of ideas and information. This will be beneficial to a mix of users: today's inhabitants of the central district, new pioneers, entrepreneurs and tourists. Occupying and transforming ground floors, strategies towards vacant buildings, organizing events and shift focal points will create a new vibrant atmosphere. Most of these interventions will have their focal point on the Omonia square, Academia trilogy and Syntagma, in a way that buildings contribute to vibrancy and social security in public realm. Additionally, it is interesting to improve flexible uses of vacant buildings, thus providing temporary housing and invite 'urban pioneers' such as students, temporary works, artists and app builders. It is about linking the old economy to the new economy and to social networks; to connect city and interactive media. Development of workshops and workspaces for 'urban pioneers'

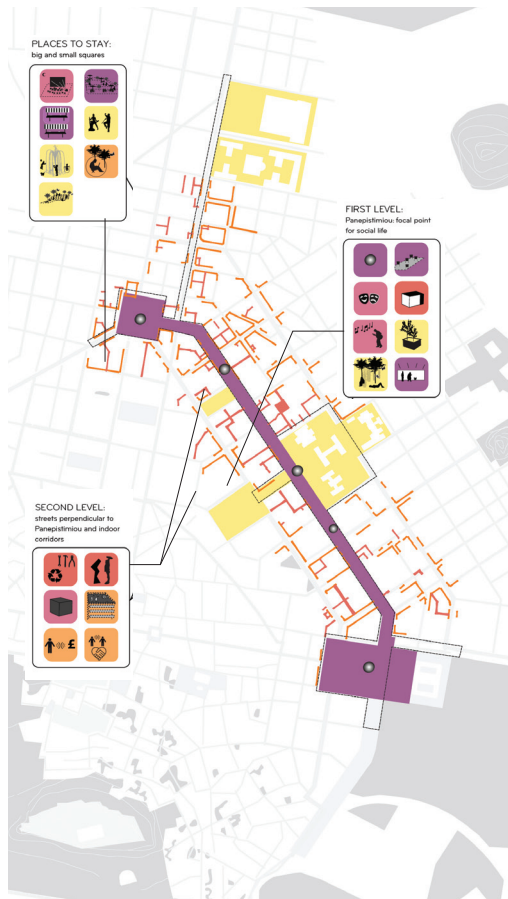




Activating built and unbuilt space

set the ground to regenerate the district. It would be helpful to install an organization focussed on being a creative district, combined with usual programmes such as housing, crafts and shopping. Since most of these uses are temporary activities, they may move, however they leave traces of change and give impulses for further development in the city.

Especially around Omonia Square temporary programming of buildings can operate effectively, combined with revival of public realm. To achieve this, Omonia Square will be turned into a lush green square and the series of kiosks will be moved to a strip in the centre of the square, thus activating the area. The area in and around Omonia Square will be suitable for animation, with several major events and outdoor celebrations, including innovative international performances, outdoor cinemas and fashion shows. These performances will work with local partners and attract thousands of spectators. On other days Omonia Square will present its human scale, suitable for daily use. Dynamic lighting will ensure safe space during evening hours. Meanwhile the classical buildings present themselves on the square, possibilities for active frontages enlarge, and the area around the buildings will be activated by an 'encroachment zone'. It is about to draw new visitors to the Omonia Square, to deliver economic benefits to local business including increased retail activity and footfall.



Activating the network of public space

Creating a contemporary avenue, related to the 19th century grandeur, Panepistimiou will be a central spine in the web, linking the archaeological sites with the major museums. In public realm life will be brought into the metropolitan centre by a series of interventions. On the larger scale a thematic approach on squares and the creation of a series of urban rooms, having programme related to the built programme will enhance activities in public realm. Panepistimiou will change from 'street' to 'boulevard', by adding inviting spaces to stay to the linear space. Occupying and transforming ground floors, strategies towards vacant buildings, organizing events and shift focal points will create a new vibrant atmosphere. We regard Panepistimiou as a crucial part of the network of public realm. In this aspect Panepistimiou mediates the squares with places of other activity. Creating attractive linkages to adjacent areas will contribute to Panepistimiou's position within the public realm grid. A green structure and an injection of new green spaces and courtyards close by will change the everyday living environment by leading to greater differentiation in public, semi-public and collective spaces, such as indoor gardens, roof gardens and vertical gardens. This is supported with improvement of informal network of indoor corridors and sheds. Also community and private initiatives will be generated and encouraged.



TRILOGY Shared space and green place making

### Activating the network of public realm

The area around Panepistimiou will be a catalyst to connect Kolonaki and Exarchia with Plaka and the ancient city. Special attention on these relationships will strengthen the metropolitan qualities within the triangle. Since the streets perpendicular to Panepistimiou form direct linkages between the vibrant old heart of Plaka and the central axis, the development on these blocks could have important positive impact on social-economic improvement of the town centre. Improvement of the block can bring an atmosphere of smaller scale, can create a good setting for housing, play space and small-scale office or workspace uses with associated cafe and small-scale retail. Due to the existing building typology and city council building regulations, each building block has to contain a light well in its inner core that will meet the ground floor level, where the ground floor can -and must- be faced as a public space. This can provide the opportunity to carefully merge the public and private realm, create a continuation to the already interesting network of arcades that exists in Athens.

Several important routes will get better physical connections, including access between the underground stations plus tram stops and the Stadiou-Academias area. Transformation of the urban fabric will bring diverse communities together to enjoy and connect with their Central District, providing a focus for community uses,

socializing and events through the creation of new public spaces. In these streets priority is to create active frontages along the most important routes in the pedestrian network of public realm. To maximize vibrant streets temporary use of ground floor spaces can be encouraged, as well as a shop-front design approach and a project of 'living shop fronts', where actors do the modelling. Community based spaces in public realm special will contribute to create local and small economy. In general, the area's streetscape will be rich and inspiring, having high quality well-defined public open spaces.

Strengthened pedestrian relations and activation of pedestrian routes will engage new development opportunities. A mixture of programs will provide a 24/7 activity on the main streets, creating an interaction between reactivated facades and public space. Creating an 'encroachment zone' will improve active frontages and to create linkages between the built environment and public realm. On the smaller scale the architectural interventions of kiosks will not only focus on commercial space, but some of these will provide facilities, such as small toy libraries or 'water-kiosks'. Interactive decorative light will be introduced in public realm leading to an increased feeling of comfort during evening hours. On the scale of the elements natural seating (such as 40 cm high planting elements and stairs having higher





PANEPISTIMIOU STREET Scenography of uses

elements) will be provided as well as an open air-arena. WIFI access in public realm and WIFI in empty buildings will make that these places will be well used. Creating small open-air podia, related to cultural programmes, will provide the 'hardware' for a cultural layer, the 'theatre of 1000 rooms'.

The cultural layer of the theatre of 1000 rooms offers Athens a unique opportunity to link urban activation to ancient Greek philosophy, science and drama, bringing a contemporary version of these powerful skills to the front. In most European cities artists are the pioneers of re-colonisation of neighbourhoods with more than average percentages of vacant buildings into the development towards trendy districts. Sometimes the artist 'find' the area themselves and start their workshops on these locations, more often a first step can be taken by programming temporary vacant buildings. For example in Moscow, the historic Sretenka district is developing into a trendy area, having their annual festival of arts, some artists events. A lot of new galleries came after the first conquering of this area by artists, followed by design shops and fashionable coffee bars.

The 'theatre of 1000 rooms' will be magic, and offers indoor and outdoor stages. In public realm these stages are just small areas, surrounded by natural seating. Well-positioned steps are the ingredients of temporary arenas.

Probably individual acts would hardly survive in the number of ongoing urban activities, however by bundling all these initiatives together in a cultural programme they become an interesting interplay of activities and mini-theatres in public realm and vacant buildings. By integrating the indoor facilities the stages are more than just London's Hyde Park's speakers corner. It is a programmed event, bringing cultural events in particular to Omonia Square, offering an impulse to the large amount of vacant buildings in this area. The indoor use as mini-theatres consists of a sprawl of temporary pieces, suitable to a small audience, flexible and removable.

Taking into consideration the fact that this part of Athens was created in the late 19th century, we realise the fast pace in which major changes have been happening in this city. By creating leisure spaces throughout the boulevard and returning some spaces to the citizens through the 1000 theatres movement, we give them the opportunity to get accustomed to their city again, and the ability to acknowledge the beauty of the contemporary city, as a sequence of ancient Athens.





#### 4. IMPLEMENTATION

##### **Green place making and the sequence of urban squares**

Green place making is our tool to implement an integrated approach on 'resilient city', 'accessible city' and 'vibrant city'. Adapting planting in rows and smaller elements will refine the green grid on Panepistimou and its adjacent streets. Use of different species will improve the image of the city and contributing to biodiversity. Within the green grid existing trees will be respected, and if trees have to move for the construction of the tramway they will be replanted within the same boulevard. A series of green spatial typologies is added in the boulevard; designed for flexible use, fitting in the concept of 'Shared Space 2.0'. The pillar of those typologies is making busy and quiet places with a clear focus on programmatic distinction.

Added to the green grid there is a thematic approach of the squares, turning them into vibrant green areas. Syntagma and Omonia Square will become two green urban squares, with prominent lush water elements.

On Omonia Square an urban leisure programme is situated under a grid of trees. The spatial organization requires decluttering and collecting the elements on the sides, positioning a string of kiosks. Under the tree cover a new façade of kiosks enhances an active edge on the square. It means introduction of new type of kiosks, where some food and drinks can be sold, combined with terraces. Under the trees, close to the refreshing water, people can have a view towards Acropolis. Reduction of the connections for vehicular movement offers the opportunity to connect the square to the city, to change the direction of the square from east-west, thus creating pedestrian space to stay. By creating these places to stay a possible decrease of people just hanging around can be foreseen. Omonia will have a focal point with a new water-element, a fog-fountain, bringing cool air towards the square and reduction of noise of cars.

Dikaiosynis Square will become a green urban room, in which activities in an empty building are linked to activities in public realm. It would be nice to have here a bathhouse plus adjacent shaded forecourt.

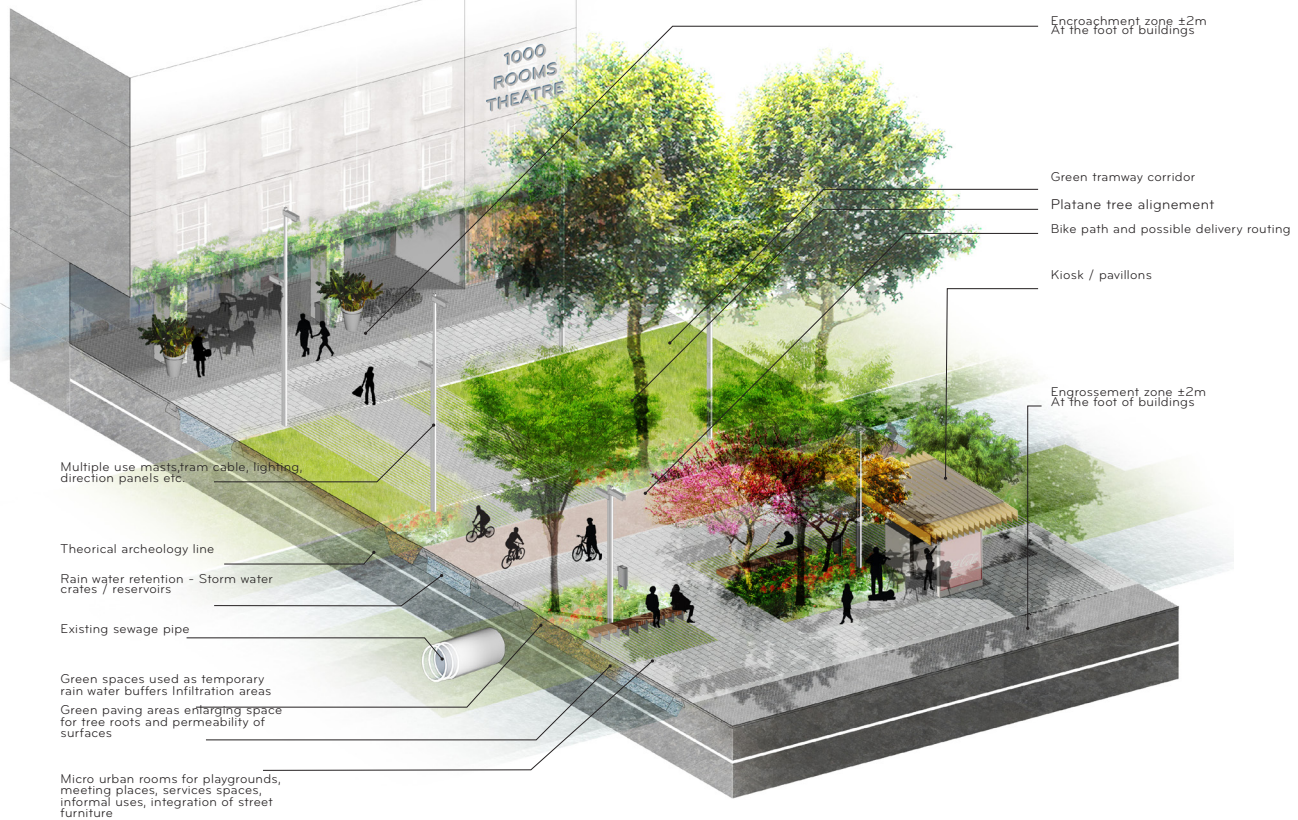


Furthermore a green ensemble will be created in the middle of Panepistimou, tying the space of the library, university and academy together. It will be an arboretum-like park linking a sequence of four green spaces from Solonos St. With Parnassou St again, historic elements will be combined with green, reflecting the classical composition of historic buildings en connecting them to public realm of Panepistimiou. The Academia Trilogy will be accentuated by a steep ramp going up to the building, keeping historical elements in front of buildings, since they are part of the monumental set up of the buildings. The green space is tied together on a continuous carpet around the buildings. The area is visually extended to Panepistimiou by having a green tramway in front of the square. Within this ensemble the Metro entrances are considered as two pavilions. Greening the area can be followed by public value on private land: green walls along the Trilogy would add to the quality of public realm.

Syntagma will be the prominent parliament square, emphasizing monumentality. The green space will be doubled, keeping the existing middle part that only a few years ago is realized and adding an extension of green with four new green elements on the other side. Retention of rainwater in the new green elements is crucial for growth of the proposed trees. Taking advantage of the levelling of the surface an underground basin for water storage on the lowest point of the square can be realized without digging more than half a meter.



STREETSCAPE details principle:  
vibrancy within vacant buildings, engrossement zone and green placemaking



## Heat mitigation Toolbox (see next page)

The heat mitigation toolbox provides appropriate urban design principles with (1) greenery, (2) cool material and (3) water measures that reduce the urban heat island effect and energy consumption in Athens. Our design principles are implemented in outdoor spaces and on surfaces of buildings. As confirmed by recent microclimatic measurement and simulation studies in Athens, implementation of greenery, cool material or water measures contribute to comfortable climatic conditions for citizens living or moving through the city.

Greenery, such as grass, hedges, climbing plants and especially trees mitigate heat through evapotranspiration and more substantially through shading. Leafs of plants reduce solar radiation that reaches hard surfaces, such as paved streets and squares or facades of buildings. The reduction of solar radiation has a twofold effect: the surface and air temperature as well as the nocturnal urban heat island effect is lower.

Trees with dense canopies, therefore, are planted on streets (in a row) and on squares (sprawl). Within narrow streets with a lack of space for two rows, triangular planting of trees will provide shade. If there is no space for trees at all, pergolas, shelters or constructions on facades with climbing plants will provide shade. Position and density of new street trees are chosen with caution depending on the amount

of traffic and the wind speed and -orientation in winter. In crowded streets, tree canopies are less dense to assure that car pollution will not stuck under the canopy and disturb comfort for pedestrians. In wintertime, sunlight and absence of cool wind are highly appreciated and increase use of outdoor spaces by Athens inhabitants. Tree positioning, therefore, assures comfortable use of open spaces year-round. Another measure from the toolbox is greening the tramlines with grass. It reduces paved surfaces within streets, reduces surface temperatures and enables natural infiltration in storm water events.

The benefit of using cool materials such as light asphalt, light concrete or light natural stones, is their high reflectivity and albedo. Cool materials guarantee less absorption of radiation and lower surface temperatures compared to other conventional materials. Through this reduction of heat storage in urban materials, the process of cooling down the ambient air temperature at night accelerates which moreover implies reduction of energy demand by air-conditioning at night.

Surfaces in and around Panepistimiou are 'cool' and also 'permeable' materials, providing a natural water infiltration and this way discharge the sewer system. In adjacent streets, such as Academias and Stadiou it will be interesting to think about application of light coloured concrete (for bus lanes) and/or photocatalytic asphalt.



## UNDERGROUND (NO DEEPER THAN 1 METER)



water retention, cool sink to store rainwater from heavy rainfall events which is used for irrigation during drought periods

## SURFACE



on neighbourhood scale: creation of several small green areas (several small ones providing a better cooling effect than one larger)



permeable materials providing water infiltration and decrease of surface temperature (such as grass, low vegetation, hedges or shrubs)



open pavement in the sidewalk and/ or adjacent parking pockets)



cool materials with a high reflectivity (albedo surface), high emissivity and low brightness



application of light coloured concrete (for bus lanes) and photocatalytic asphalt



water gutters (storm water drainage in open or glass covered gutters)



water in movement for cooling (bassin with running water, watersquare, waterclock, water elements as mist, sprouts, fountain)



cooling of road surface by spraying stored rainwater

## VERTICAL ELEMENTS



rows of trees with dense canopies (on streets) or sprawl of trees (on little squares) providing evapotranspiration and shadow. Shadow decreases surface temperature and "increase of temperature inside the canyon". Streets with cars get a wider plantscheme then streets without cars



small accents, indicating crossing points streets and underground river Eridanos (tree planting on streets, waterpump on boulevard)



triangular planting of trees (on narrow streets), providing extra shadow



greening of tram lines



provision for shade and shelter (tents, covers), elements that can be rotated or moved



use of thermochromic materials that are able to adjust their color and reflectivity to the ambient conditions

## ROOFS AND FACADES



green roofs, located specially where upper floors are used for housing or hotel rooms. To reduce temperature inside buildings and reduce air conditioning usage



vertical garden, and/ or green wall, preferable on the south facing side of apartments (highest radiation during day)



pergolas and/ or shelters with climbing plants (on narrow space for treeplanting insufficient)



photovoltaic panels (on roofs, bus stops), providing energy for street lighting and air conditioning



water buffer (on roofs)

## PROGRAM IN PUBLIC REALM



waterkiosk (collecting of water combined with selling point) public bathhouse and/ or fountainhouse

Water elements used above and beyond surfaces facilitate a resilient way to manage seasonal abundance and shortage of rainwater, to improve the urban microclimate and to create attractive outdoor spaces. Open or glass covered water gutters integrated in the street design operate as storm water drainage. The overrun of rainwater after a heavy storm event will partly be stored in underground water storage systems to be re-used for irrigations of greenery during drought periods. In drought periods, stored rainwater will furthermore be sprayed on road surfaces for cooling purposes. Moving or sprinkling water is also accommodated in public spaces where people stay and sojourn. Water elements, such as basins with running water or mist, water squares and fountains, improve air humidity and thermal comfort on hot summer days.

The large amounts of flat roofs in Athens offer additional possibilities to improve thermal comfort inside buildings and reduce the energy demand. If the structure of buildings allows, roofs could be equipped as green roofs, roof for water storage or photovoltaic panels, which all cover the roof and reduce heat absorption into the building. Especially in upper floors, often used for housing or hotel rooms, thermal comfort is improved and less energy for air-conditioning is needed. Green roofs might be combined with vertical gardens or green walls, which also effect the lower floors of buildings and - if low enough - even the street canyons.

As warm air is transported in between neighbouring areas, the choice is to not limit the toolbox measures to Panepistimou. Instead the cooling measures are spread over Panepistimou en its surrounding, so that improvement of thermal comfort is achieved on larger scale. The smaller streets adjusted to Panepistimou can contribute to a new conception of the public street, when attached to this green network and having a way to cover to protect the pedestrians with a semi permeable layer (canopy or membrane) in order to secure better living-environmental conditions against any case of weather.

To demonstrate the improvement of thermal comfort by implementing heat mitigation measures from the toolbox a simulation for the existing en new situation on Omonia square was made for a typical hot summer day (check the page 24).

In the next design stage, we will confirm de improvements on thermal comfort by using Envi-Met simulations. Simulations will help to test and adjust design options and define optimal design solutions for certain spatial circumstances.



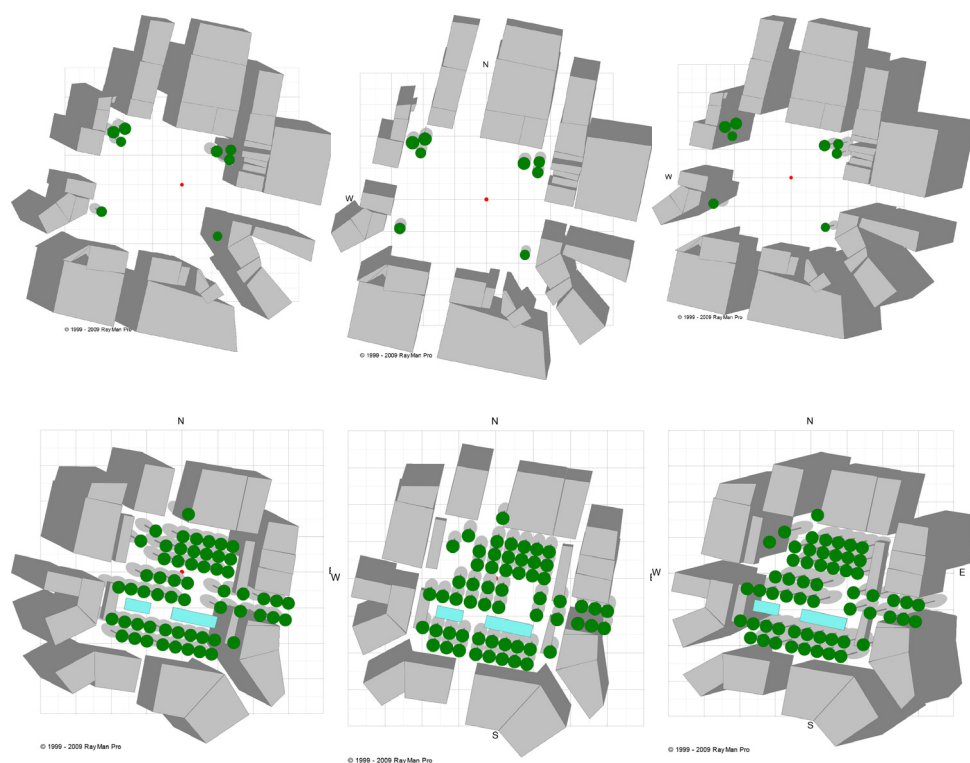


Figure 1: Shading patterns of the existing situation (top row) and future design (bottom row) for Omonia square (16 July, left to right at 3 moments during the day: 10, 13 and 16 h local time); Rayman .

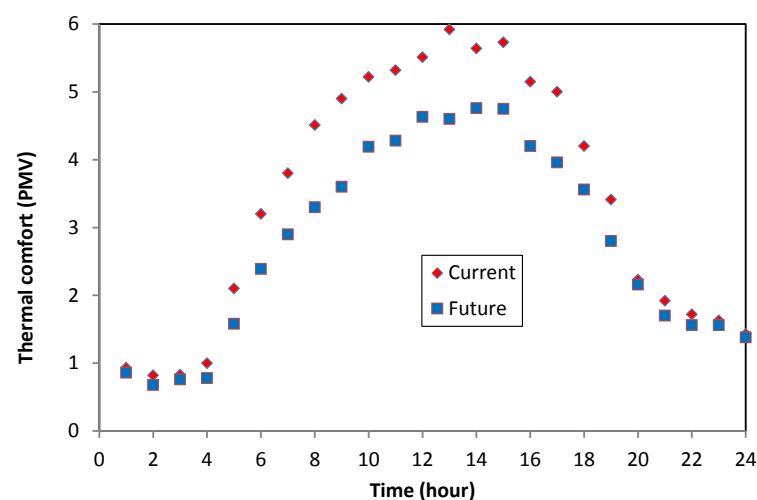


Figure 2: Omonia square average thermal comfort expressed as predicted mean vote (PMV, Fanger, 1972), simulated with Rayman .

### Human thermal comfort on Omonia Square

Human heat stress is affected by temperature, humidity, wind speed and radiation. Shading is very effective in reducing the human thermal heat load. As an example we simulated the human thermal comfort on 16 July 2012, which was an extreme hot summer day with the Rayman, software to simulate radiation fluxes. The human thermal comfort was calculated for the existing situation and for the future design (Fig. 2). The thermal comfort index PMV ranges from very cool (-4), neutral (0) to very hot (4). On this very hot day the daytime thermal stress levels reached "extreme heat stress" values. In the future design situation, heat stress is reduced through the reduction of radiation during daytime. For sunny weather with low wind speeds but lower temperatures a similar reduction in PMV can be expected.

The atmospheric humidity during summertime is relatively low and this means that evaporative cooling can be very effective. During 16 July 2012 air temperature peaked at 39°C and relative humidity was around 30%. In such conditions an evaporating surface would cool down to 23°C. The new design of Omonia features several evaporating elements such as trees and ponds. Trees for example evapotranspire if sufficient water is available and this results in a reduced leaf surface temperature (between 23 and 39°C).



Matzarakis A., Rutz, F., Mayer, H., 2008:  
Modelling radiation fluxes in simple and  
complex environments: basics of the RayMan  
model. Int J Biometeorol (2010) 54:131-139,  
DOI 10.1007/s00484-009-0261-0.

Matzarakis A., Rutz, F., Mayer, H., 2008:  
Modelling radiation fluxes in simple and  
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model. Int J Biometeorol (2010) 54:131-139,  
DOI 10.1007/s00484-009-0261-0.

Fanger, P.O., 1972: Thermal comfort. McGraw-  
Hill, New York





PANEPISTIMIOU STREET Shared space and green making

## 5 STEPS TOWARDS CONSTRUCTION

### Urban design guidelines

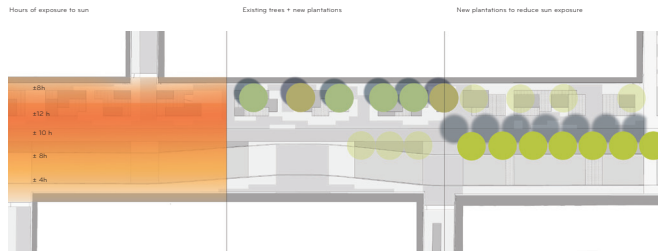
To ensure good practice in realizing the aspirations of a vibrant and green townscape it is imperative to liaise streetscape with underground infrastructure and archaeological restraints. Therefore, already during design stage technical design guidelines are incorporated in urban design guidelines. Key elements of the urban design guidelines are: Working with archaeological restraints on a monumental site, water in public realm, provisions for green infrastructure and adapted planting and streetscape related to tramline and ducting.

The first guideline is about linking with history, working on an archaeological site. Although the transformation of public realm in Athens' city centre will result in a major improvement, plans are respecting the archaeological site with a number of listed 19th and 20th century buildings. Proposals to transform public realm within Athens' city centre will be tested during the next design stages to meet planning regulations related to monumental structures and archaeological structures. The idea is to link the old structures around the buildings and the new layout of public space, especially in the proximity of the Trilogy, which is listed, and where courtyards and gardens are designed in continuity with their architecture.

The principle of 'no excavation more than 0.5 meter' to protect underground archaeological

structures is part of the urban design guidelines; all elements are designed in a way that deep excavation is avoided.

Guidelines about water in public realm are based on realization of water features without damaging underground structures. Since constructions should be limited to the first half metre below surface the basic idea is to design squares in a way that construction are placed on top of the surface. On top of the existing surface new basins will be constructed. These water elements are designed in a way that they will be features that give a great effect, but don't need a lot of water, such as sprinklers and a fog fountain. These facilities are less water consuming compared to traditional fountains and produces more cooling this solution ensures that there is no need for massive storage of water and large installations. The water elements of Syntagma Square and Dikeosinis Square are constructed, taking advantage of creating an artificial layer on top of the natural slope. On Omonia Square the same approach will be applied by lifting the central square to the top-level of the constructions of the underground station, since infrastructure of the underground station cannot be modified. Thus vertical installations, which reach surface such as the ventilation grid, will be respected.



PLANTATION PRINCIPLES IN RELATION TO CLIMATE MITIGATION  
Reduction of sun exposure in the profile of the street



TREE PALETTE FOR THE NEW CITY CENTRE

The lifted areas provide also the required underground space for tree planting without roots touching archaeology. Extra protection will be guaranteed by root protection canvas.

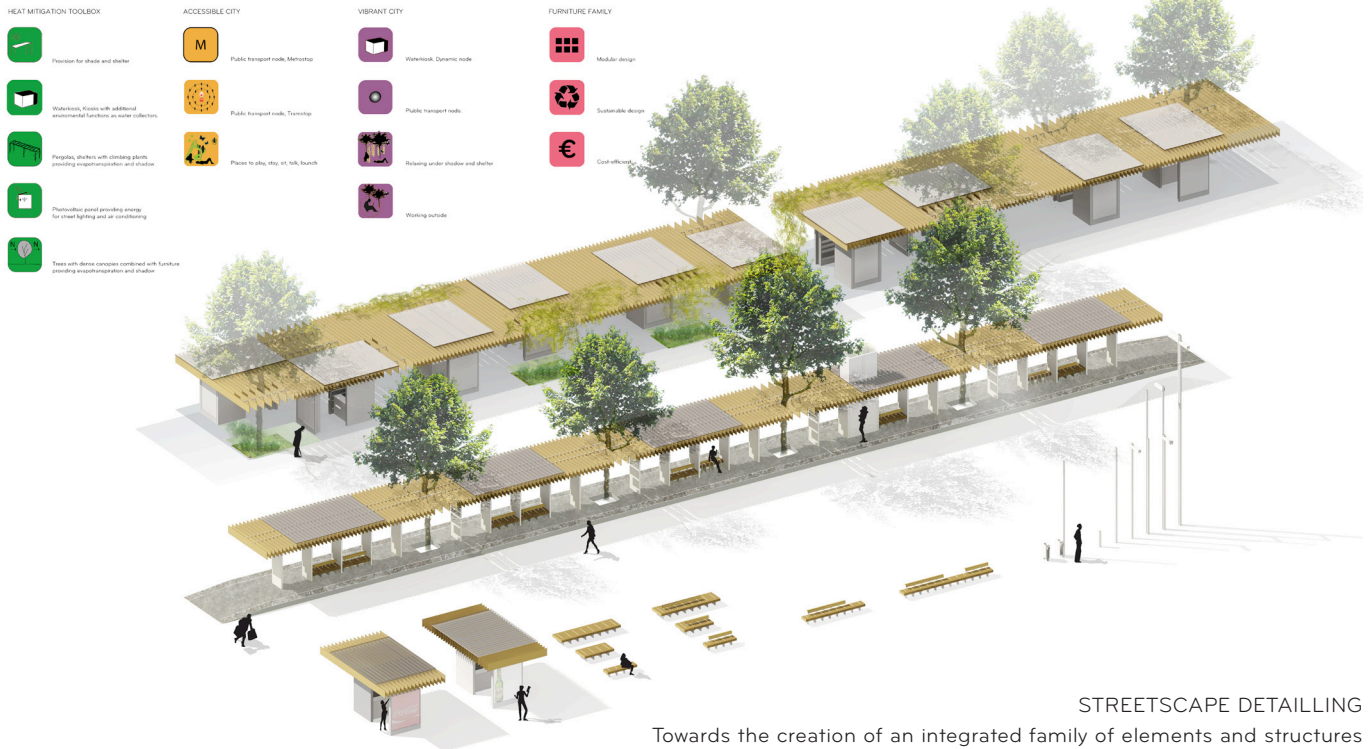
The guideline about green infrastructure and planting infrastructure must guarantee that trees will mature gracefully. Planting will be adapted to Athens' climate, based on drought resistant species and restricted rooting depth. Whenever possible regional cultivars of species will be applied. Sustainable planting conditions are required, in order that trees grow and diseases are avoided. Basic species will be planes, poplars and olives and water consuming species, such as palms are excluded. Selection of additional species for special effects will be related to the Climate Species Index. Creating a green infrastructure will be most effective if linked to water management. It will form a green and blue network by linking linear and grid structures of plantings. Water is diverted into planting beds, where it is absorbed into the soil or used by the plants. Any overflow will enter the sewer to eliminate the risk of standing water or flooding in the area. The green strips are specially detailed to handle the larger amounts of storm water during winter through specially designed soil and stone layers, connecting the individual tree pits into a system. This allows the system to move large volumes of water quickly while still holding on to some for the plants. On the other hand the system provides water for trees during a long period of the dry season, resulting in healthy

trees and less irrigation. It facilitates managing large volumes of storm water in a cost-effective manner.

Guidelines about streetscape related to tramline and ducting should ensure realization of a coherent streetscape. Layout of the streetscape of Panepistimou is strongly influenced by the position of the tramline. Since location of the tramline in some areas is related to underground infrastructure (being not on top of ducting) this implicates that in these areas close by the tramline there is limited space for planting as well. Since no trees should be placed on top or nearby main underground infrastructure the urban design guideline is to position delivery zone and cycle lane on top of ducting.

Furthermore tree planting is positioned that way that branches of mature trees are not conflicting with overhead line equipment of the tramway, including wires. Lighting is provided as an integral part of the streetscape, with special attention to all waiting areas and access routes, to the front edges of platforms, and to any identifiable hazard points, sufficient to provide safety and comfort. Use of motion sensors allows increased lighting levels when movement is sensed. In detailing of integrating of tramways in public realm special attention is given to platforms to make sure they are accessible by all users of the tram system. Ramps up to platform levels are designed as an integral part of the streetscape, avoiding trip hazards.





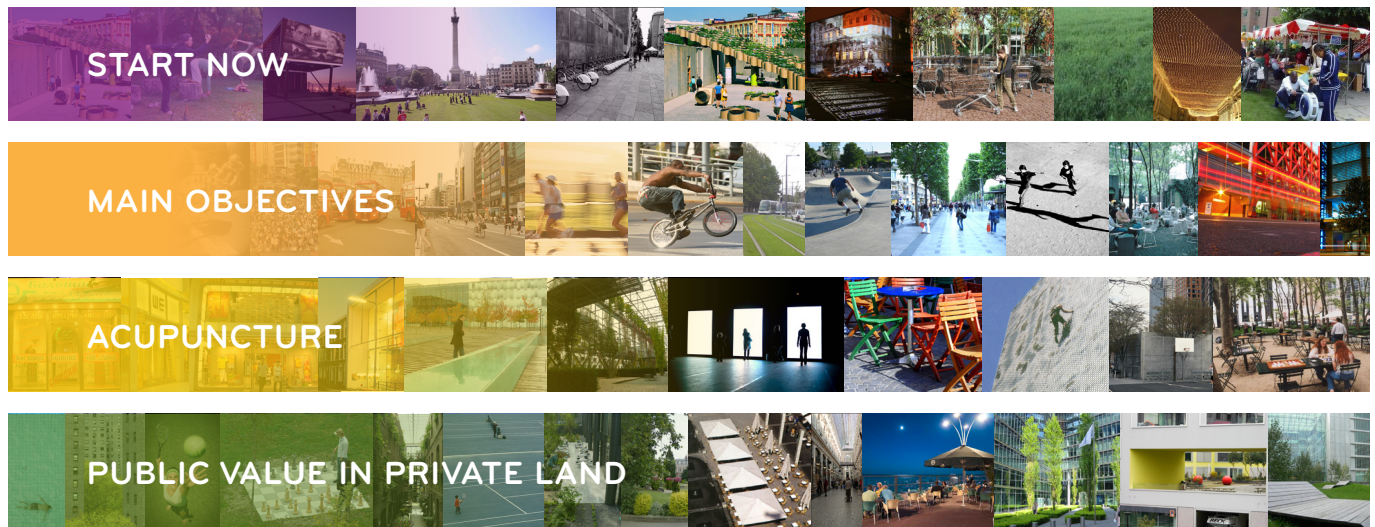
## Long life

A high quality appearance of the streetscape complements the new street profile. Decluttering by combining signs, traffic lights and streetlights and removal of obstacles will be matched by high-quality paving and recognisable, well-designed street furniture to create a distinct atmosphere along the entirety of the route. Within these, the design is tailored to the different situations along the street (such as existing and future building setbacks, sun conditions or particular adjacent users) to create enjoyable microclimates or special places, all of which inspire use and create a comfortable atmosphere where one wants to linger.

A beautiful design needs to be robust, easy to maintain and safe in order to be sustainable in the long term. Good basic maintenance quality will have an advantageous effect on users and on the overall cityscape – all research points to the fact that vandalism and littering are less prevalent when public space is well maintained and feels safe. Design and materialisation needs to facilitate this. To maintain these streetscape qualities it is imperative to think about a long life span and to apply materials that age gracefully. Starting from these principles, our strategy regarding operation and maintenance cost aims to:

- Use modular, robust and ecologically sustainable materials
- Reduce unnecessary clutter
- Provide dynamic operation of lighting
- Allow for a flexible maintenance programme enabling differentiated levels of maintenance from across public, private and third sector parties. The maintenance strategy covers paving and its management, street furniture and its management, the management of utilities and of course, management of parks and gardens. Integrating this aspect with the design of the objects will increase efficiency of maintenance. Therefore we make modules. These can be replaced apart from each other. To enable good maintenance the amount of models and parts/pieces are limited.
- The maintenance of the street furniture is efficient, cost-efficient and comprehensible
- The elements easy and quick to place and remove.
- The parts/piece are easily reachable and simple to be replaced.
- Damage can be repaired with relatively low effort.
- Implementing a robust and durable system.

Sustainable structures based on cost efficient design will guarantee value for money. Managing of costs will be guaranteed by implementation of long life cost calculations into all design stages.



### Strategic Components

The ideas for regeneration of the heart of Athens can be realized with an implementation strategy that recognizes strategic components of the plan. In the context of the current crisis, it is imperative to think of an intelligent timeline and process that will combine first economic steps, strategic wins, partnerships and association of public stakeholder such as the Onassis Foundation and the City of Athens, but also private landowners, investors, community and citizens initiatives. It will be interesting that the citizens themselves take over their city by making the city a place of their own, which requires them to engage physically and mentally, comprehend and apprehend all of its aspects (historical, social, cultural, political). Therefore our suggestion is to make citizens engage in any way with the city and form it anew, not simply inhabit the ghost of a former and glorious past. As the next decade will be an era of massive changes, new social and cultural sustainability challenge will offer new opportunities: social enterprise incubators, direct citizen involvement in public realm change, increased needs for recreational and sport etcetera.

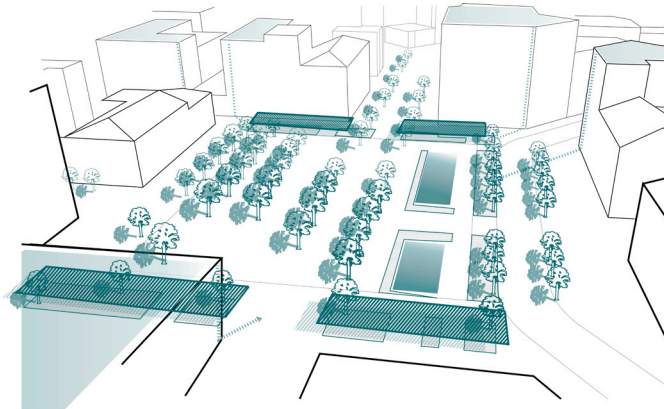
Step by step the project can turn into 'proof on the ground', gradually realized along four parallel strategic lines of work, lines that are both interdependent as well as independent.

- Starting now: an activity calendar and a series of temporary interventions that exploit quick wins and signify change, using redundant road and parking space and exploring and testing propositions with stakeholders and inhabitants of Athens.
- Solving the big obstacles: implement large-scale interventions to deal with the inherited road system and create conditions for a high quality pedestrian- and cycle friendly public realm, starting with demonstration projects. In fact, installing a tramway is a long term intervention, determining planning processes and phasing. Cost effective work will be possible when project parts are linked to this major investment project. During execution of the main project parts it will be interesting to re-think 'economy of temporary situations', in order to keep social and economic life going whilst the building process continues. In this respect it will be best to divide the project parts into those who are under influence of the tramway project and those who are not.
- Urban acupunctures: a series of smaller interventions that can take place across the public realm, in the broader area around Panepistimou, Academias and Stadiou.
- Public value in private places: Collaborations that create a 'secondary network' of public and semi-public space: a series of projects to be delivered together with private landowners.

By implementation of these strategic steps we believe that the project tackles the anonymous space in the heart of Athens and demonstrates that urban vibrancy can be combined with creating a green and pedestrian friendly spine, contributing to quality of life and living in Athens.



## OMONIA SQUARE

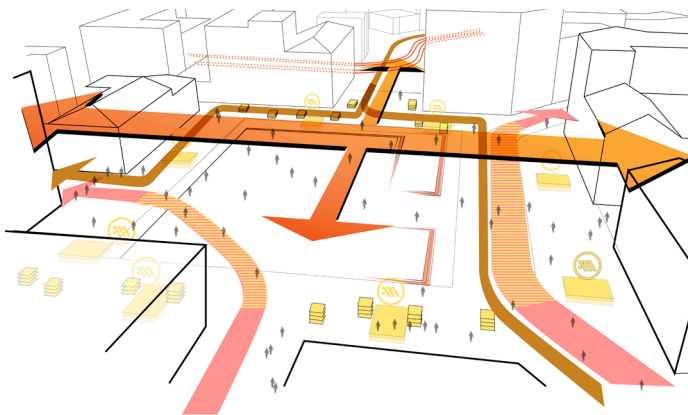


## RESILIENT OMOMOIA

The existing surface will be respected, to protect archaeological remains

The central square will be lifted to the toplevel of the constructions of the underground station, since infrastructure of the underground station cannot be modified.

A large water feature is constructed,



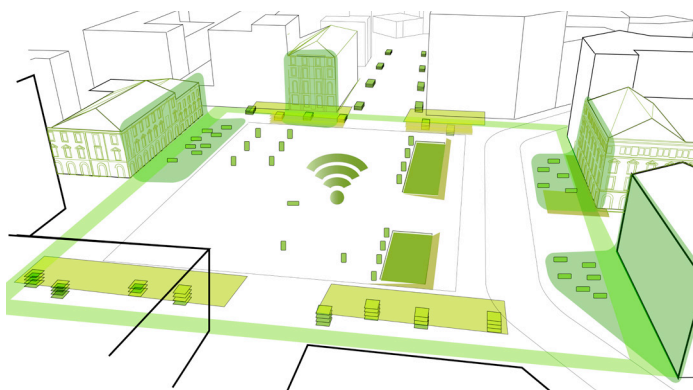
## ACCESSIBLE OMONOIA

Reduction of the connections for vehicular movement offers the opportunity to connect the square to the city, to change the direction of the square from east-west, thus creating pedestrian space to stay.

A pedestrian strip along the facades

An inner square will be the pedestrianized area,

Space is designed as shared space 2.0, where slow traffic By decluttering the space and removing the kiosks on the southern and northern side of the square, a better relation towards the city center will be achieved thus making Omonia square part of the centre again.



## VIBRANT OMOMOIA

Ommonia will have a focal point with a new water-element; On stairs, close to the refreshing water, people can have a view towards Acropolis.

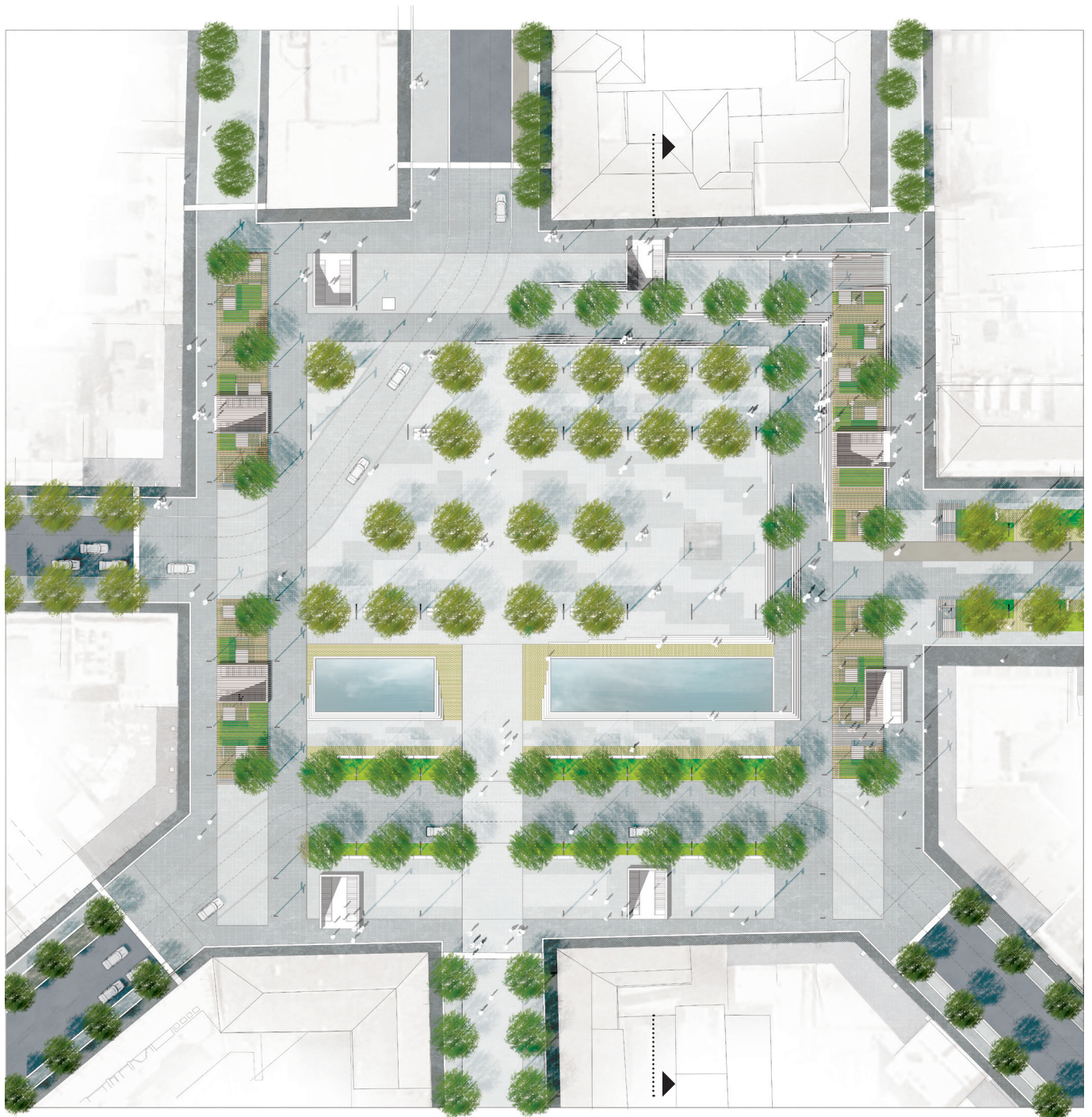
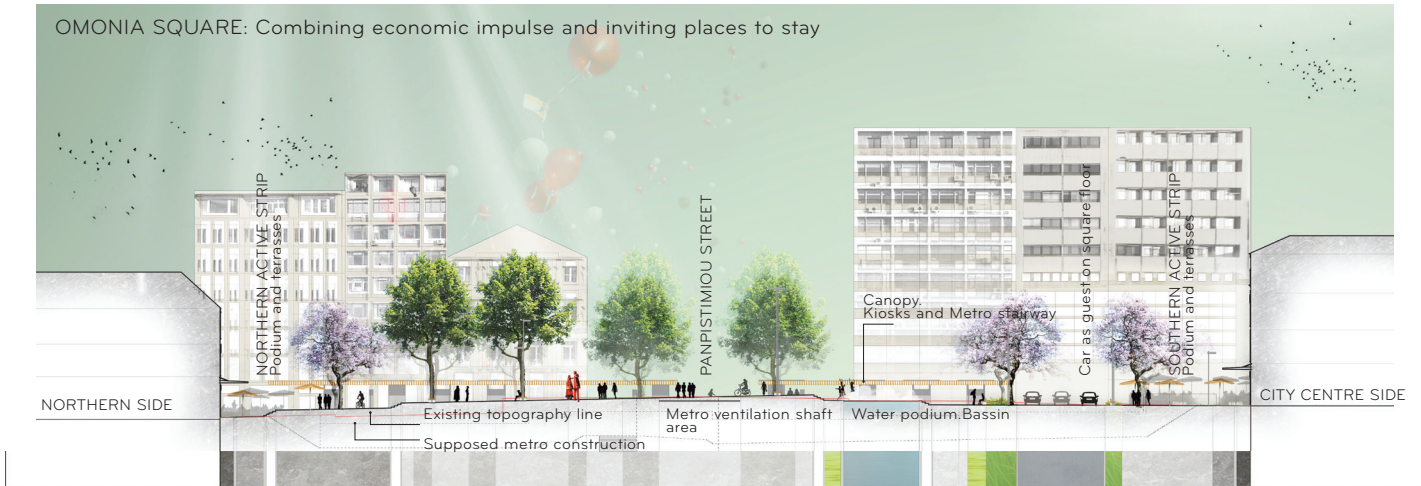
Opening up the northern and southern strips and activating the area. It means introduction of new type of kiosks, where some food and drinks can be sold, combined with terraces.

The northern and southern active strips, recover an active frontages, and the area around the buildings will be activated by an 'encroachment zone'

Temporary programming of buildings can operate effectively, combined with revival of public realm. On special days the area will be suitable for animation, with several major events and outdoor celebrations, including innovative international performances, outdoor cinemas and fashion shows. Dynamic lighting will ensure safe space during evening hours.

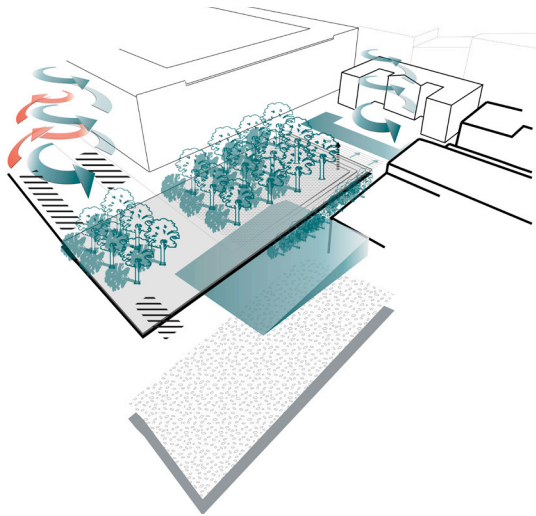


# OMONIA SQUARE: Combining economic impulse and inviting places to stay





## DYKAIOSYNIS SQUARE



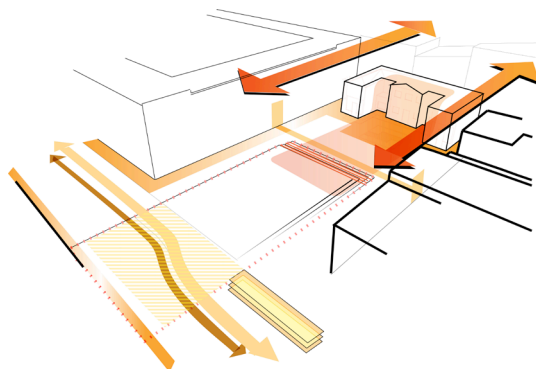
## RESILIENT DYKAIOSYNIS

The existing surface will be respected, to protect archaeological remains

The central square will be lifted,

The lifted areas provide also the required underground space underground storage of storm water drainage. Water from roofs can also be collected in this area.

The lifted areas provide also underground space for tree planting without roots touching archaeology. Extra protection will be guaranteed by root protection canvas.



## ACCESSIBLE DYKAIOSYNIS

The square will be transformed into movement areas on the outer side, one sunny, one shaded, and an area for relaxing and staying in the inner area.

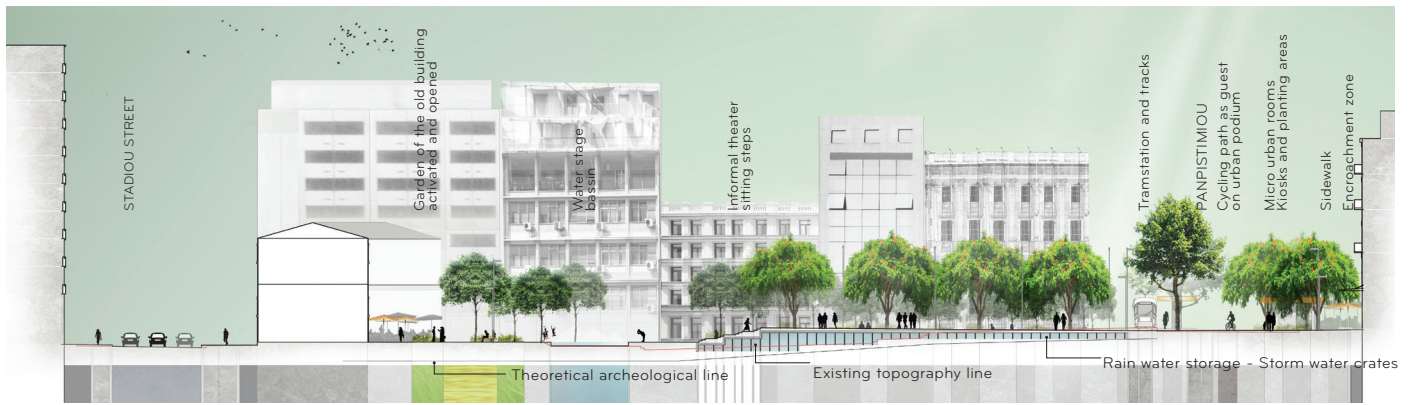
A pedestrian strip along the facades creates continuity in walking experience. Below the podium, in the southern direction, a series of steps create a informal theater with the old building as a screen and the water basin as a stage. Inner passages from the western and eastern blocks connect at this level thus allowing for an easy and comfortable walking experience across the informal network of public space of the district.



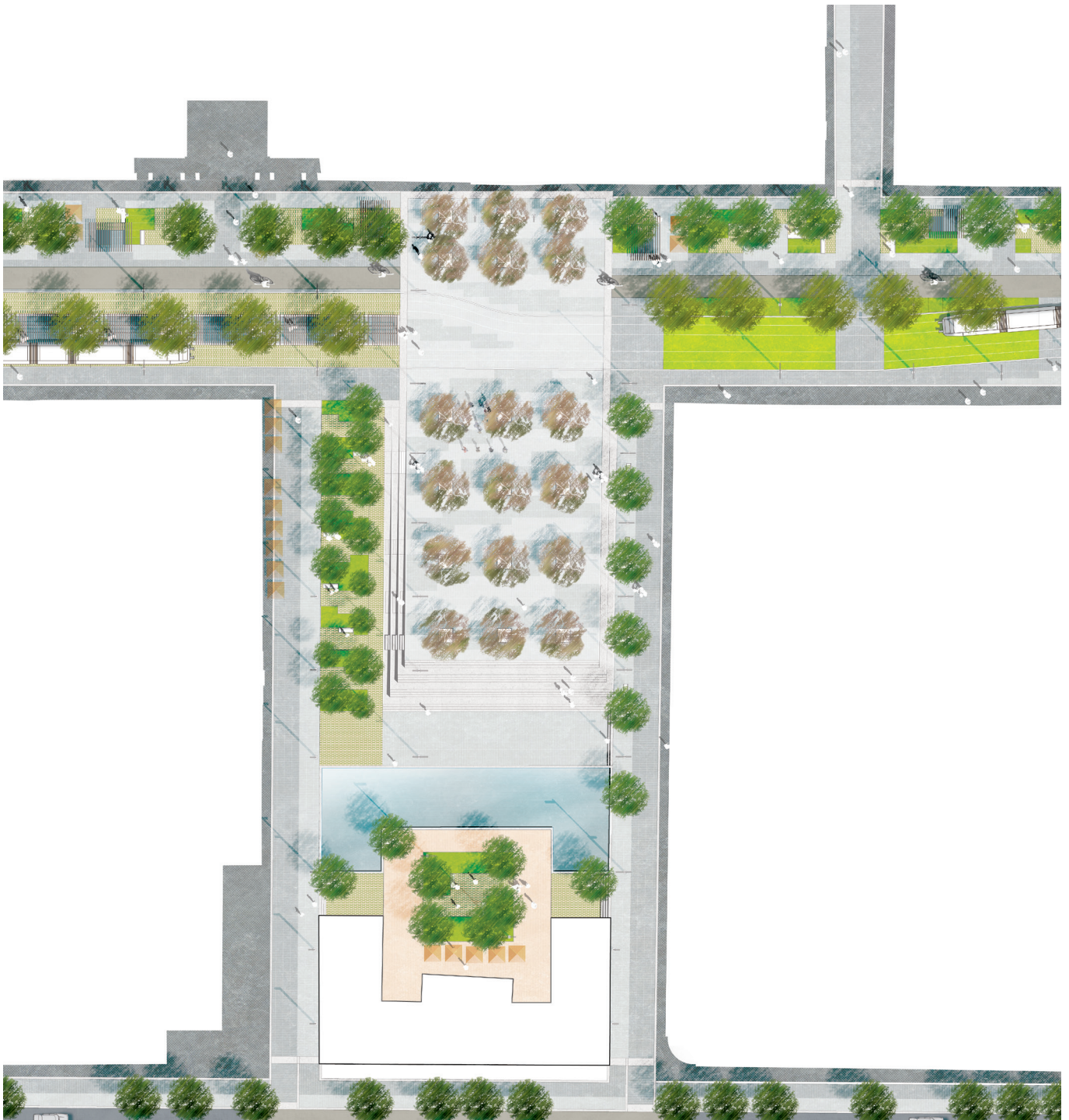
## VIBRANT DYKAIOSYNIS

Dikaio Synis Square will become a green urban room, in which activities in an empty building are linked to activities in public realm. Natural seating on steps and other elements will make the square an inviting place to stay. Creating small open-air podia, related to a cultural programme, will provide the 'hardware' for a cultural layer, the 'theatre of 1000 rooms'.

.WIFI access in public realm and WIFI in empty buildings will make that these places will be well used.

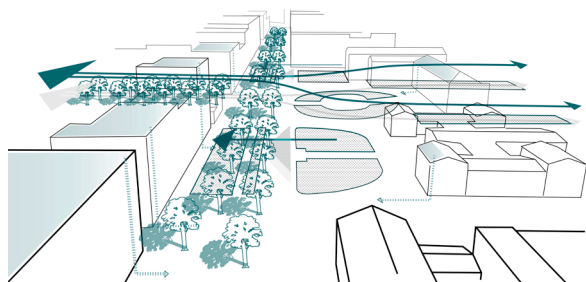


DYKAIOSYNIS SQUARE  
Plan and longitudinal section





## THE TRILOGY &amp; KORAI STREET



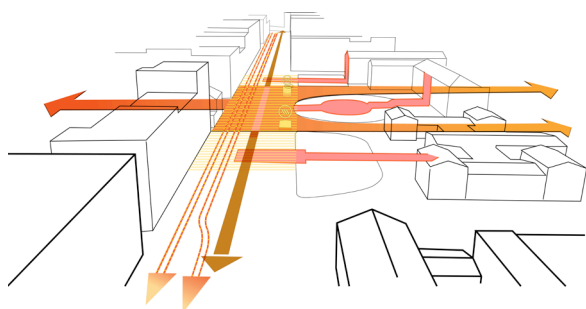
## RESILIENT TRILOGY

At close proximity to important protected monument, the existing surfaces and topography will be respected. National Library and Academie front spaces receive a complement of green spaces.

Panepistimiou street double row of platane will provide shade on the monumental central space.

The streets between the three monuments will serve as possible rain water collectors and buffers.

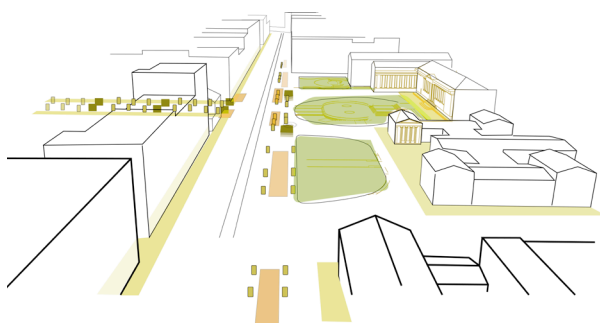
The Trilogy will be an arboretum-like park linking a sequence of four green spaces from Solonos St. with Parnassou St again.



## ACCESSIBLE TRILOGY

The green line of the tramway along Panepistimiou is interrupted at Korai street. A large mineral stone carpet flows down the hills towards the city centre. It connects the streets between the three monuments, the central square area and Korai street.

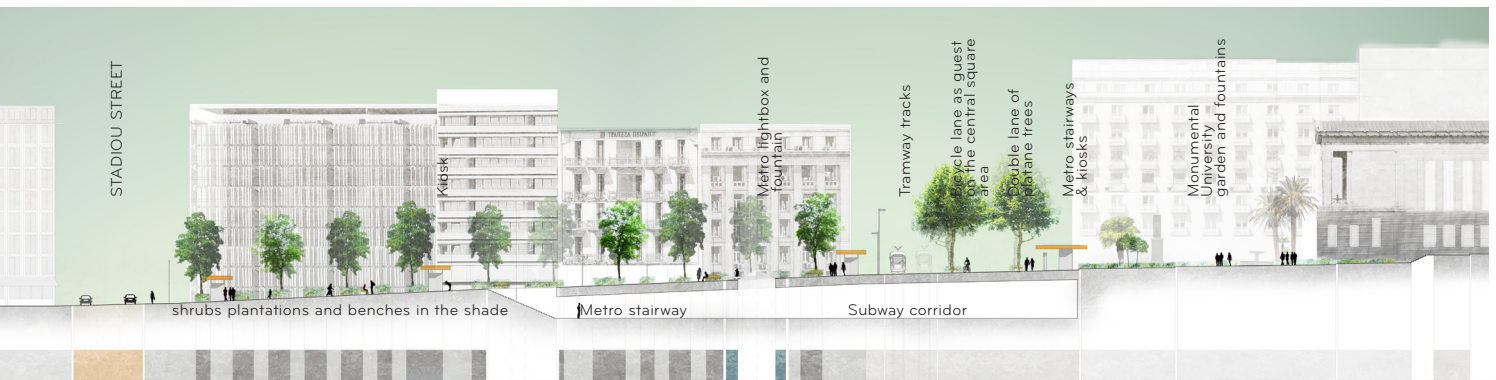
Bicycle paths that run along the streets are virtually interrupted when meeting the Trilogy. The entire space is declined as a shared space providing enough space and visibility to accommodate the slow speed movement of bikes, deliveries evt. taxis.



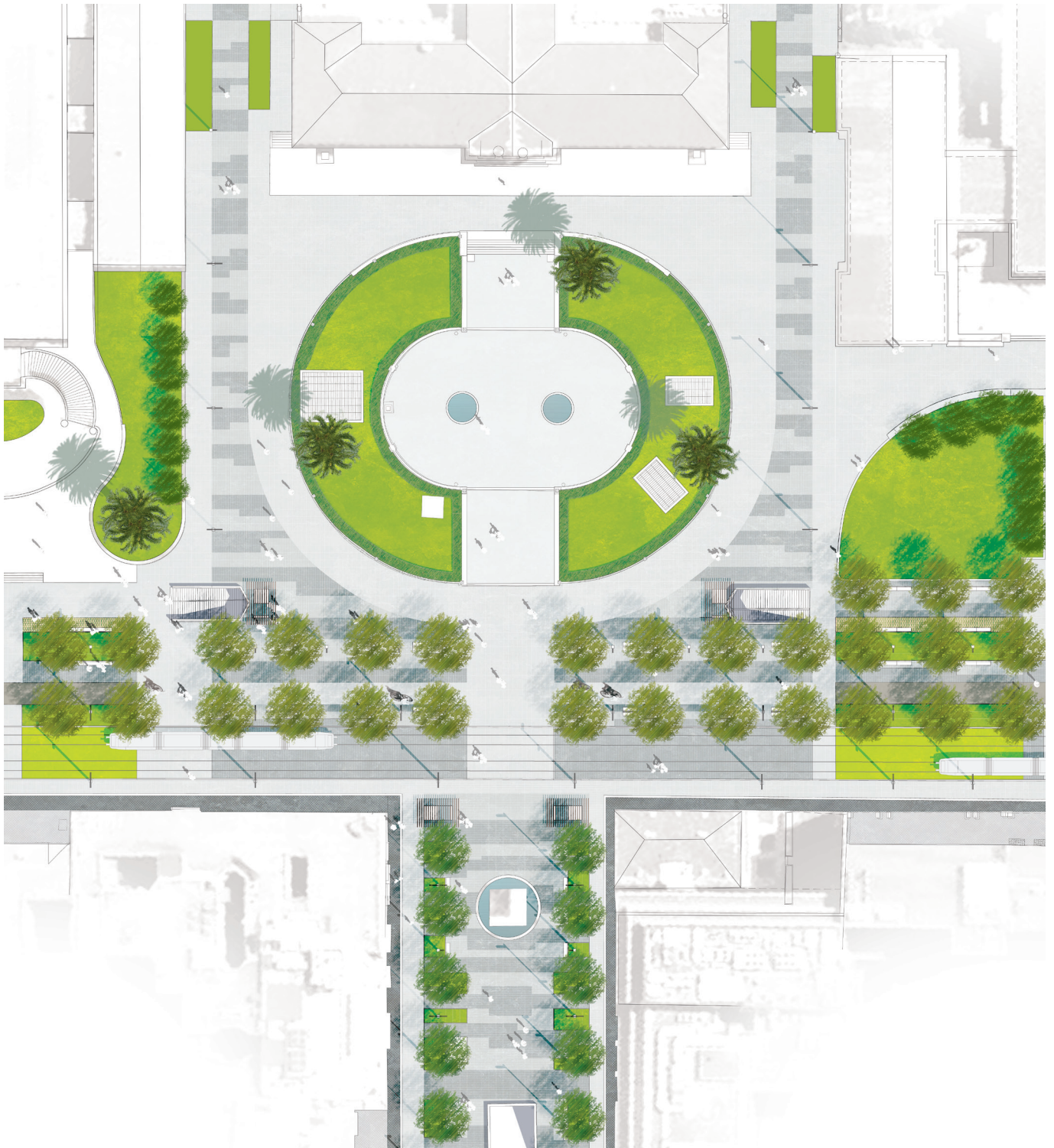
## VIBRANT TRILOGY

The elimination of car traffic will provide an occasion to relink the spaces of the three monuments with the city life. Around the Trilogy -respecting courtyards and gardens designed in continuity with their architecture but providing new places to meet, relax and enjoy streetscape under the shade of the trees.

The Southern façade of Panepistimiou and the two sides of Korai street will receive an encroachment zone. It consists of a narrow strip of space along the ground floor of the buildings and is meant to intensify and stimulate the activity and the liveliness of the plinths of buildings.



AKADEMIA TRILOGY SQUARE  
plan and cross section





OMONIA SQUARE:  
a lush and vibrant square



DIKAIOSYNIS SQUARE:  
welcoming urban room providing shade and shelter around water feature





## THE TRILOGY

Korai street meets Panepistimiou street



PANEPSTIMIOU & THE TRILOGY:  
a vibrant streetscape accessible to all





# One step beyond

phase 2

Rethink Athens, towards a new city Centre

EUROPEAN ARCHITECTURAL COMPETITION  
FOR THE CREATION OF A NEW CITY CENTRE IN ATHENS