



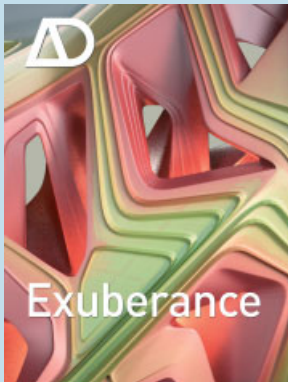
GUEST-EDITED BY
HÜLYA ERTAŞ,
MICHAEL HENSEL AND
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JAN/FEB 2010
PROFILE NO. 203

Turkey

At the Threshold

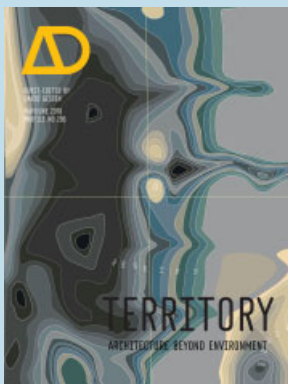
Δ Architectural Design **Forthcoming Titles**



March/April 2010 Profile No 204
Exuberance in Architecture
Guest-edited by Marjan Colletti

This title of *AD* heralds a new era of exuberance in digital design. Having overcome the alienation and otherness of the cyber, having mastered the virtual qualities and protocols of the parametric, having achieved the intricacy and elegance of the digital, and having fully embraced the potential of 3-D computer software and CAD/CAM manufacturing technologies, it is now time for architects to show off! Conjure up the extravagance of furniture design, the abundance of CGI in Hollywood, the profuseness of bio-techno ornamentation or the lavishness of Middle-Eastern and Asian super-urbanism. *Exuberance* not only celebrates new Baroque theatricality, formal sophistication and digital virtuosity; it also debates a plethora of joyful and intelligent ways in which experimental architecture manages to cope with the contemporary turmoil in global politics, economics and ecology.

- Includes the work of seminal figures such as Peter Cook and Wolf D Prix
- Features Hernan Diaz Alonso, CJ Lim, Ali Rahim, Neil Spiller, Kjetil Thorsen and Tom Wiscombe.



May/June 2010 Profile No 205
Territory: Architecture Beyond Environment
Guest-edited by David Gissen

Advancing a new relationship between architecture and nature, *Territory* emphasises the simultaneous production of architectural objects and the environment surrounding them. Conceptualised within a framework that draws from physical and human geographical thought, this title of *AD* examines the possibility of an architecture that actively produces its external, ecological conditions. The architecture here scans and modifies atmospheres, arboreal zones, geothermal exchange, magnetic fields, habitats and toxicities – enabling new and intense geographical patterns, effects, and sensations within architectural and urban experience. *Territory* charts out a space, a territory, for architecture beyond conceptualisations of context or environment, understood as that stable setting which pre-exists the production of new things. Ultimately, it suggests a role for architecture as a strategy of environmental tinkering versus one of accommodation or balance with an external natural world.

- Features architects: Patrick Blanc, Gilles Ebersolt, Nicholas de Monchaux, Future Cities Lab, Fritz Haeg, Iwamoto Scott, Kuth/Ranieri, The Living, R&Sie(n) and WEATHERS.
- Cross-disciplinary contributions come from geographers, historians and theorists Ila Berman, Javier Arbona, Ben Campkin, Edward Eigen, Matthew Gandy, Antoine Picon and Mitchell Schwarzer.



July/August 2010 Profile No 206
The New Structuralism: Design, Engineering and Architectural Technologies
Guest-edited by Rivka and Robert Oxman

Today the convergence of design, engineering and architectural technologies are breeding a new material practice in experimental architecture. The significant emphasis on the structuring logic of tectonics is resulting in a 'new structuralism' in design. In this pioneering publication, this important shift is fully defined as a highly dynamic synthesis of emerging principles of spatial, structural and material ordering integrated through the application of materialisation and fabrication technologies. Providing the foundations for a new theory of structuring in architecture, *The New Structuralism* has broad implications for the way we both conceive and undertake architectural design, as its impact starts to emanate not only across education internationally, but also through architectural research and practice.

- Features exemplary work by research and experimental design-oriented structural engineering practices: Bollinger + Grohmann, Buro Happold, Hanif Kara (AKT) and Werner Sobek.
- Theoretical contributions from: David Chilton, Holzer and Downing, Neri Oxman, Helmut Pottmann, Nina Rappaport and Yves Weinand.
- Focuses on new design and fabrication technologies in the recent work of Barkow and Leibinger, EMBT (Enric Miralles and Benedetta Tagliabue), Gramazio and Kohler, and Fabian Scheurer (Designtoproduction).

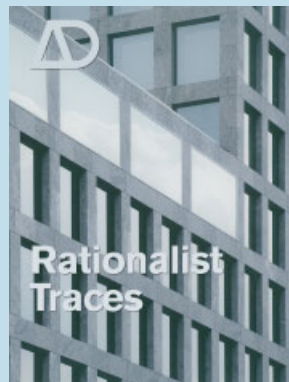
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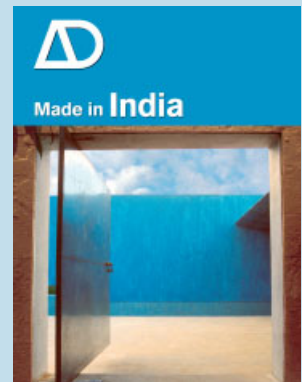
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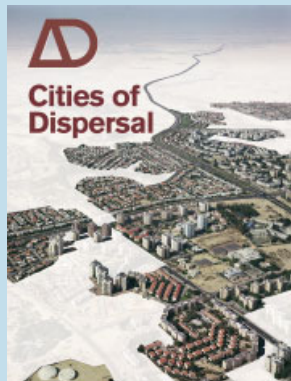
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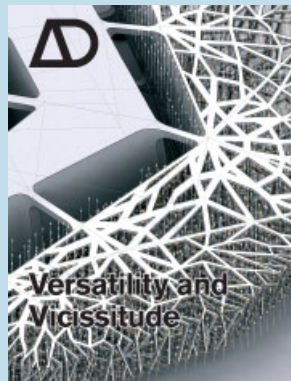
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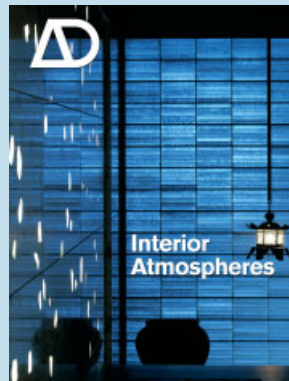
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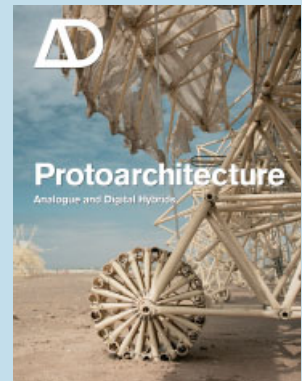
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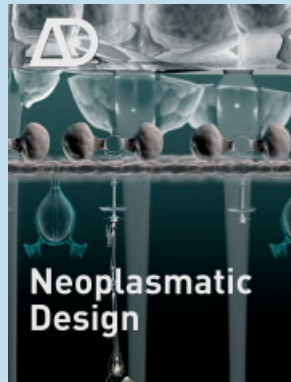
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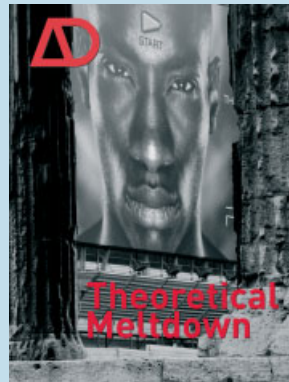
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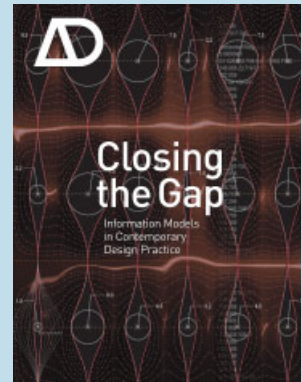
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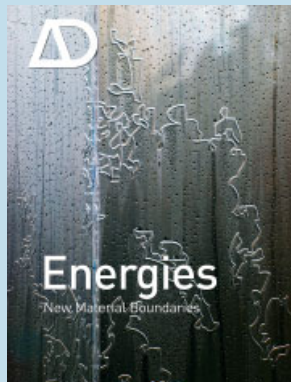
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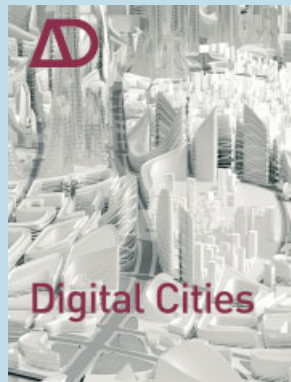
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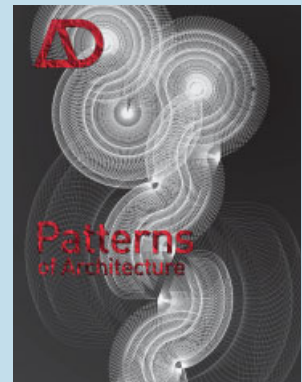
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Architectural Design
January/February 2010

Turkey

At the Threshold

Guest-edited by Hülya Ertaş, Michael Hensel and Defne Sunguroğlu Hensel

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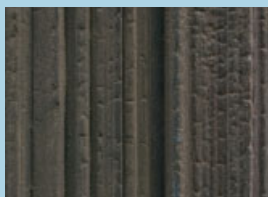
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Front cover: Istanbul and the Golden Horn, with the Galata Bridge spanning the Bosphorus River.
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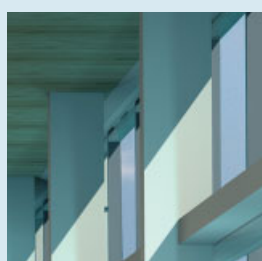
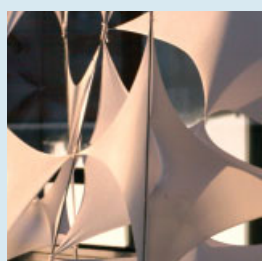
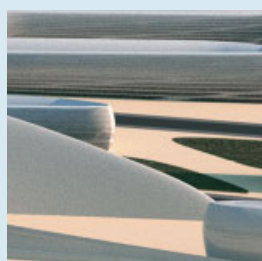
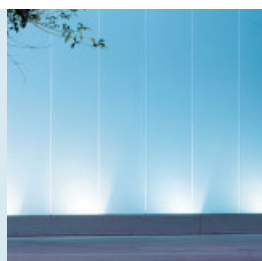
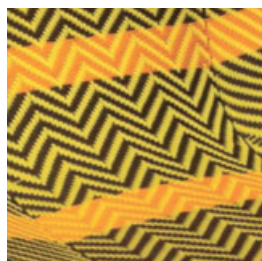
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When dedicating an issue of *AD* to a specific country or geographical region, it is always with the intention of transcending national boundaries and providing valuable universal insights. Turkey is, in this respect, the consummate example. A transcontinental country, straddling Europe and Asia, it has been of great strategic importance since classical times, providing a significant axis for empires and trade routes bridging East and West: Istanbul's position at the head of the Bosphorus Straits gave it unique control over the Black Sea, while Anatolia's position at the southern end of the Silk Road to China made it pivotal in the medieval period for the silk and spice trade. The result of this was that when Constantinople fell in the mid-15th century, the full force of its economic impact was felt right across Europe with the maritime Venetian Republic never quite regaining its mercantile supremacy. Bordered today by eight countries – Bulgaria, Greece, Georgia, Armenia, Azerbaijan, Iran, Iraq and Syria – Turkey is over three times the size of the UK with a land mass of over 300,000 square

miles (776,997 square kilometres) and a population of almost 75 million. It encompasses a large number of minority ethnic groups, including Kurds, Circassians, Bosniaks, Albanians, Laz, Georgians, Arabs, Roma, Pomaks, Jews, Greeks and Hemshins; in 2009, it was also visited by approximately 25 million tourists. This all results in a nation which is aptly described by the guest-editors in their introduction as appearing highly 'heterogeneous' from the outside, 'if not at times outrightly contradictory'. It has a predominantly Muslim population and president, but an overtly secular republican constitution. The tug of modernisation and the West seems to be constantly vying with cultural hegemony and tradition. Nowhere is this more the case than in the built environment. For this reason, the guest-editors have centred much of the issue on the question of identity, which is so much at the fore in this expansive country, whether it is focused on the pervasiveness of Orientalism, urban development or architecture. This theme of identity has a great deal of resonance elsewhere in the world where the constant tug of globalisation pitches the local and the vernacular against standardisation and the pressure to roll out a built environment that is often executed economically but of a low quality. What emerges, here, is a country that is not only economically, geographically and culturally 'at the threshold', but also at the point of assuming a new level of architectural confidence, looking beyond the polemics of tradition and Modernism and understanding its built heritage as a repository of received knowledge that might provide the keys to a more sustainable future. **AD**

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Aerial view of the Grand Bazaar, Istanbul, opened in 1461

Istanbul's important historic status as a trading centre at the crossroads between East and West is reflected by the size of the Grand Bazaar, one of the oldest and most extensive covered markets in the world. It incorporates more than 58 covered streets and over 1,200 shops.

Introduction

By Hülya Ertaş, Michael Hensel
and Defne Sunguroğlu Hensel

**Tabanlıoğlu Architects, Levent Loft,
Maslak, Istanbul, 2008**

In this renovation of an old factory building (which was never completed), the boxes extending from the facade are intended to add aesthetic value to function. Housing luxurious accommodation, meeting rooms, cafés and restaurants, Levent Loft attempts to call back to the city centre the upper-middle classes who have moved to the suburbs over the last decade.



Turkey

At the Threshold





There are a thousand beauties ... But they are never sold, never seen.

Nejâtî¹

Displayed above is a truly remarkable carpet that originates from eastern Anatolia. It featured in a book on early Turkish carpets authored by Christopher Alexander,² who most generously and enthusiastically granted us permission to show it here. In his book, Alexander describes this carpet as follows:

Most striking in the design are the bands of yellow, with small purple zigzags, and the animals which are repeated throughout the field. The smaller animals are apparently fishes. The larger animals – the long yellow bands, with dragon-like heads – are certainly dragons. In addition, the manner of the carpet, with its long dragon-like tendrils, is reminiscent of medieval Norwegian carvings. Josef Strzygowski has shown how the trade route from Norway to Armenia, along the Danube, brought many motifs from Norway to Armenia and the Middle East, during the first millennium³ ... The

linear dragon motif, that also appears in this carpet, is extraordinarily ancient. It does not only appear again and again on 12th and 13th century Norwegian stave church carvings from the Middle Ages, it appears in illuminations from the 7th century. It also appears in virtually the same form, in a prehistoric Chinese carving from the 8th century BC.⁴

Alexander's analysis of the pattern of the carpet is less surprising than it may initially seem. The Vikings did indeed have contact with the Byzantine Empire and Istanbul, which they knew as Miklagarðr or Miklagård, meaning 'big city'. To the east, the southern route of the Silk Road connected China, via India, Turkestan and Mesopotamia, to Anatolia. Likewise, the Persian Royal Road, part of the silk routes, connected Susa to Smyrna (today's İzmir), on the Aegean Sea. The Greek, Roman, Persian, Byzantine and Ottoman empires engaged here with great intensity. From these significant historical aspects one may begin to sense that the region that today is Turkey has been a vital crossroads and cultural amalgam over the ages, where closer yet also far more distant cultures engaged, interacted and left their marks and traces. The cultural variety that resulted from these connections and interaction was, and is, very rich indeed.

Today Turkey is unquestionably an economic and political regional power. It occupies an important strategic role in Central Asian and

Middle Eastern relations, and is at the doorstep of the European Union, though it has met with resistance to its ascendance from a group of European countries. Turkey is a NATO member, yet not part of the Schengen area (the 25 European countries that have abolished border controls between each other). Instead, its border with the EU is part of an area of sharpened border controls that shuts off eastern countries from the EU. Several of its neighbours are engaged in conflicts, and Turkey's conflict with Greece over Cyprus is far from resolved. Yet an increasing number of tourists love holidaying in Turkey. Taking the scope of foreign affairs and outside views of the country into consideration, the resulting image is indeed very heterogeneous, if not at times outright contradictory.

Likewise, Turkey's internal affairs and views oscillate between secularism and Islam, between modernisation and nostalgia for a traditional narrative, in large parts directed towards some version of Ottoman Orientalism. While the latter indicates a lack of recognition or appreciation of other historical or current cultural

references, opposite tendencies also begin to indicate a heightened awareness of a contemporary local heterogeneous culture in the making. The Turkish director Fatih Akın, for instance, celebrated the broad and fast-evolving local musical scene of Istanbul in his documentary from 2005: 'Crossing the Bridge: The Sounds of Istanbul'. Simultaneously globalisation forces its generic appearances strongly on to Turkey's culture, economy, development and also the built fabric, further fuelling the struggle for the search of either profit or identity.

In the face of all this diversity, the question arises as to what content one might select for a themed journal focusing on Turkey. What are the criteria for selecting content and contributions? Which stories should be told and which omitted? In the preparation of this issue, it quickly became clear that a somewhat comprehensive portrayal of Turkey's cultural heritage, built environment and architecture is neither realistic nor feasible. The aim could neither be an art-historical synopsis nor an architectural encyclopaedia. This had been done by others at great length, depth and detail. Instead, the strategy was to embrace the diversity of views and aspects related to Turkish culture and its built environment as a challenge. This challenge was met by utilising the multiplicitous readings of the notion of the threshold as



above left: There are still some last remnants of nomads in Anatolia. However, Turkey has not ratified the Indigenous and Tribal Peoples Convention of 1989 and the older Indigenous and Tribal Population Convention of 1957, and does little to protect and promote this key aspect of its cultural roots. The ongoing, forced permanent settling of these nomads adheres unfortunately to a singular state-driven identity of a gentrified population. Now is probably the last opportunity for Turkey to embrace differences and to incorporate these into a robust cultural diversity from which many new impulses for a sustainable cultural, social and architectural future may arise.

Emre Arolat Architects (EAA), Milas Golf Hotel, Muğla, 2008

above right: The design of EAA's Milas Golf Hotel is based on the practice's research on the conventional urban pattern of the area. Following this pattern, they suggest a road-backyard-house hierarchy and organised common, semiprivate and private areas accordingly. Using stone and wood for the buildings' facades, the complex does not distort the form of the hill it is situated on, and indeed takes advantage of it to create underground spaces.



opposite: This early medieval eastern Anatolian carpet shows an astonishing pattern of yellow dragon-like motifs that resonate with the dragon motif of Viking culture. Given the actual exchange between the Byzantium Empire and the Viking kingdoms it is, however, less surprising that such motifs might have been exchanged between cultures. Given the extent of cultural and economic networks over the course of history one might begin to think of threshold conditions in a rather different way: the coexistence of differences and exchanges over time that is characterised simultaneously by both gradients and hard divisions. Turkey's cultural diversity can then be thought of in light of this alternative understanding of a threshold as a continuous unfolding and differentiation, rather than a singular narrative outside of an Ottoman nostalgia or a homogeneous nation-state profile.



**Çinici Architecture and DB Architecture,
Fibaline Housing, Istanbul, 2006**

top: The architects here began by creating a stacking logic for the houses that provided a design method that does not resist the anonymous housing typologies of today, and instead plays on this to create a more dynamic environment. With the housing units as macro-form components, the design can also respond to the continuously changing demands of clients.

Boran Ekinci Architecture, Kemer 50 Houses, Istanbul 2008

above: These two apartment blocks have open corridors, and units open directly to the fresh air, giving residents a feeling of villa living. The double-height balconies and warm wood cladding of the facade encourage residents to spend time on their balconies rather than indoors.

impeding change, as accelerated difference, as latent tendencies and potentials that in their extensive multiplicity could offer a first feel of the conditions and dynamics that have established the key attributes of Turkey over the ages and also today. These differences are not easily resolved in the dichotomies of East and West, Orient and Occident, globalisation and the locale, modernisation and tradition. Together all these aspects and many more may well accelerate cultural diversification. In consequence, the conclusion was to introduce multiple selected traits, arguments and debates revolving around questions of Turkish architectural identity, practice and discourse in a critical manner and to supplement this discussion with a projective reflection of potentials embedded within historical architectures and contemporary design experiments, with the intention to open up new avenues for debate. These discussions are chiefly organised into three sections: the past, present and future. Reflections on the past intend to unlock potential for the future. Reflections on the present introduce specific urban discourses and developments that have

arisen over time until today. And finally, reflections on the future highlight promising traits that emerge from specific contemporary efforts in practice, research and education in Turkey today.

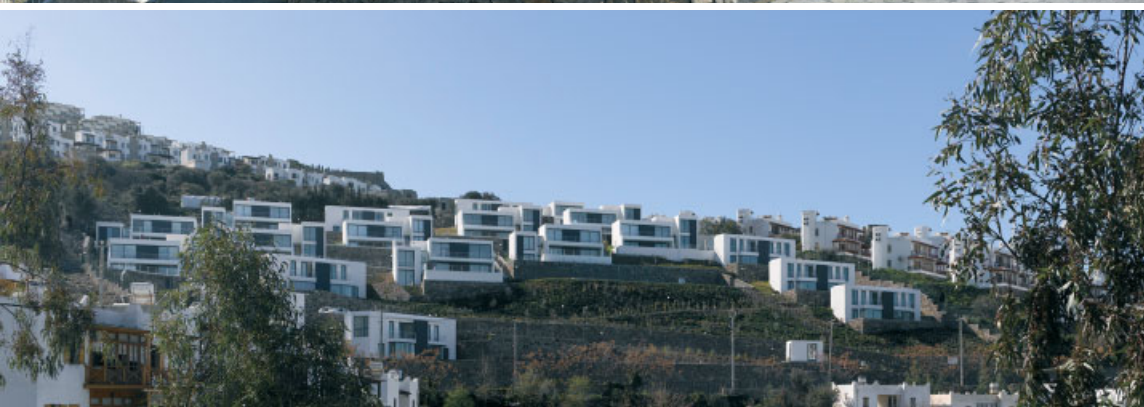
‘Extended Thresholds I: Nomadism, Settlements and the Defiance of Figure-Ground’ (Michael Hensel and Defne Sunguroğlu Hensel – see pp 14–19) pursues an analysis of ancient forms of inhabiting land as an antidote to the strict figure-ground organisation of global and Turkish developer architectures and its related problems. Taking the analysis of threshold conditions to the scale of the discrete building, ‘Extended Thresholds II: The Articulated Envelope’ (pp 20–25) examines selected historical buildings with the aim of extracting an integral relationship between spatial articulation and passive environmental modulation strategies. In the following article, Edhem Eldem discusses the background and make-up of ‘Ottoman and Turkish Orientalism’ (pp 26–31), concluding the chapters on the past.

‘The Story of Istanbul’s Modernisation’ by İlhan Tekeli (pp 32–39) opens the chapters on the present with an account of the development of Istanbul from a large city towards a metropolitan region. This is followed by Zeynep Kezer’s account of ‘The Making of Early Republican Ankara’ (pp 40–45), which reflects on the development of Turkey’s capital city. Contrasting the prior discussion of Turkey’s two foremost



Teget Architecture, Novron Azur Houses, Yalıtıkcavak, Muğla, 2008

Like many of the housing projects in the region, the Novron Azur Houses sit on a very steep hillside. But unlike the many previous housing settlements, which were composed of identical buildings constructed on linear slate walls, the Novron Azur Houses take advantage of the topography to melt the buildings into the existing context and maximise the views.





Mutlu Çilingiroğlu Architecture, Refiye Soyak Mosque, Istanbul, 2004

With its simple forms, the Refiye Soyak Mosque was designed to represent the inner purity of prayer. It does not rely on classical or conventional mosque typologies; it is a new building for worship that allows in daylight from openings at the upper parts of the walls to create a holy atmosphere inside. The mosque is sited in a generic non-place, surrounded by parking lots, streets and nondescript high-rise typologies. It markedly closes itself off from its context, which is in stark contrast to the vibrantly populated urban space of Istanbul's centre.



cities, Banu Tomruk offers a reflection on 'Medium-Scale Anatolian Cities: Conceptual and Physical Routes of Urban Transformation' (pp 46–51). Subsequently, Hülya Ertaş returns to a discussion of Istanbul, with a focus on 'The Potential of Istanbul's Unprogrammed Public Spaces' (pp 52–57). Tolga İslam follows with a description of 'Current Urban Discourse, Urban Transformation and Gentrification in Istanbul' (pp 58–63). Tevfik Balcioglu and Gülsüm Baydar conclude this section with a discussion on 'Developing Cities with Design' (pp 64–69) and the possibilities arising from this.

The final section, on the future, begins with an elaboration of the aims and activities of 'Istanbul 2010', by Hülya Ertaş in conversation with Korhan Gümüş, Director of Urban and Architectural Projects for the Istanbul 2010 European Capital of Culture Agency

Working on this issue of AD on Turkey has yielded many interesting insights for the authors, but, more importantly, it has raised an increasing number of captivating questions to be further investigated.

(pp 70–75). This is followed by Michael Hensel and Defne Sunguroğlu Hensel's 'Extended Thresholds III: Auxiliary Architectures' (pp 76–83), a discussion of the performative capacity of supplementary architectures and a related report on a research by design workshop at the İzmir University of Technology. In her article 'Transforming Turkey: Eight Emerging Practices' (pp 84–95), Hülya Ertaş introduces the work of a series of up-and-coming practices. The final article by Ugur Tanyeli returns to the question of 'To Integrate or Not to Integrate?' (pp 96–103) and reflects on this question based on a series of selected projects.

Working on this issue of *AD* on Turkey has yielded many interesting insights for the authors, but, more importantly, it has raised an increasing number of captivating questions to be further investigated. Invariably the feeling was that much more should be, and should have been, researched. The authors thus remain positively poised at the threshold, much as their subject of interest, Turkey, does. The hope is that it has been possible here to share some of the excitement that accompanied the work on this issue. In the process of developing the project, many critical discussions took place and difficult decisions in selecting and composing the content for the journal had to be made. In some cases it was not possible to gain access to, and permission for, items we would have liked to include, with bureaucracy operating on a geological timescale. But hey.

We offer our heartfelt gratitude to Helen Castle, our enthusiastic Editor, to Hasan Fırat Diker, Michael Young, Simge Sunguroğlu, Kuyaş Örs and all those others who have passionately helped us in this effort.

Çok teşekkürler! **Δ**

Notes

1. GA Walter, N Black and M Kalpakli, *Ottoman Lyric Poetry – An Anthology*, expanded edition, University of Washington Press (Seattle, WA), 2006, p 41.
2. C Alexander, *A Foreshadowing of 21st Century Art: The Color and Geometry of Very Early Turkish Carpets*, Oxford University Press (Oxford), 1993.
3. J Strzygowski, *Origins of Christian Church Art*, Oxford, 1923.
4. Alexander, op cit, pp 138–40.

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Extended Thresholds I

Nomadism, Settlements and the Defiance of Figure-Ground

Since the onset of cartography in the 18th century, the fixed datum line and the figure-ground have become the predominant means of measuring and planning the built environment. In the first of three articles on the subject of extended thresholds, **Michael Hensel and Defne Sunguroğlu Hensel** challenge this reductionist convention. By taking Deleuze and his reading of nomadic 'smooth' space as a starting point, they look at alternative models provided by historic settlements in Turkey. These include: the neolithic settlement at Çatalhöyük in southern Anatolia; the medieval hillside town of Mardin in southern Turkey on the Syrian border; the carved spaces and cities of Cappadocia, such as Göreme; and underground cities such as Derinkuyu, also in central Turkey.



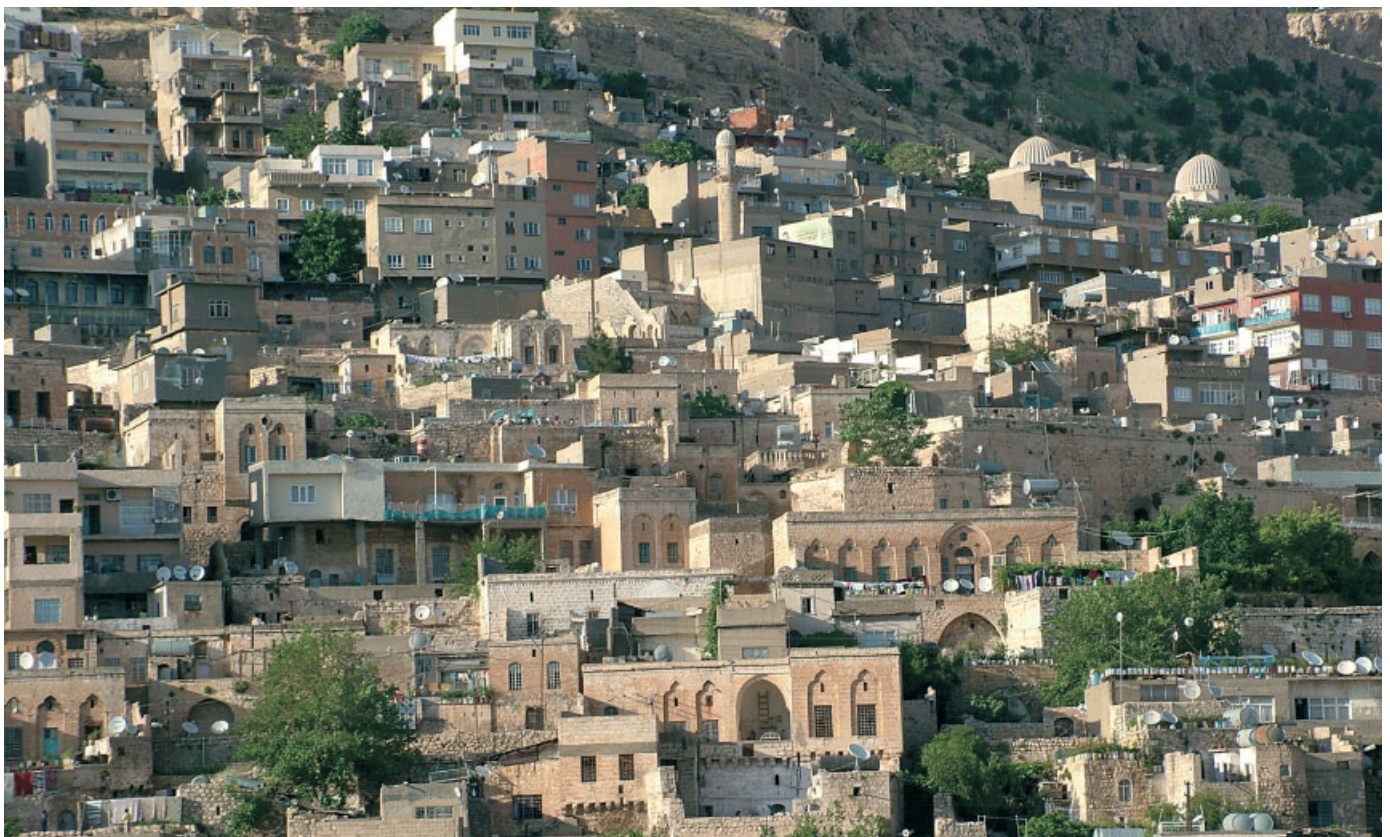
A line ... drawn in the soil, marking a limit not to be transgressed or else! Such lines deliver distinction and division. They are used to draw up maps (contours provisionally excluded) to gain distance from the close range that precludes the discernment of the overall. For this a fixed datum, a canvas as it were, is required and the features that inhabit the datum are distinguished against it. Thus what exists (map) or what is projected (plan) is visualised and communicated, distinguishing the figure from the ground. Giambattista Nolli (1701–56) used this technique for his map of Rome, the 'Nolli Map' of 1748. Together with other maps of this type, but as perhaps the most famous of its kind, it ushered in a still ongoing tradition of surveying and planning the built environment. Its different versions have become the preferred means of planning not only for architects and urban designers, but for developers who increasingly take planning into their hands wherever a void of municipal or governmental control permits, and wherever money rules and short-term profit is plentiful. Fast profit invariably precludes the search for alternative ways of organising urban fabric, above and beyond the ubiquitous figure-ground and its associated problems: rampant sprawl, lack of long-term thinking and of cultural, social or environmental relevance, let alone sustainability. This, too, happens in Turkey: rapid land parcellation together

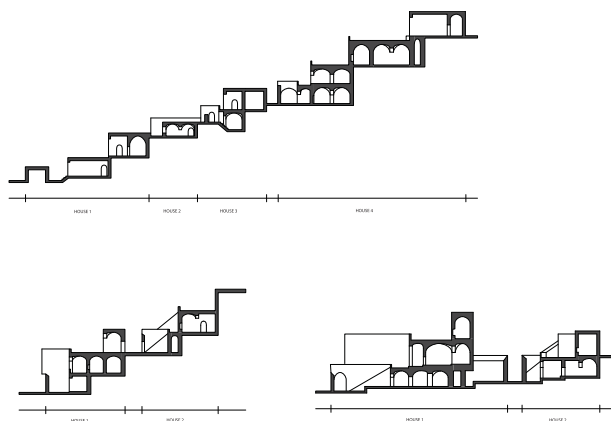


above: The planar arrangement of dwellings in Mardin shows the adaptation of the modular arrangement according to plot size, slope inclination and neighbouring buildings. These plans also show that the roof terraces set out a second datum.

opposite: The few remaining remnants of nomadism in Anatolia are worth protecting from a cultural point of view, as well as being a potent starting point for restructurising modes and organisation of settlements.

below: View of Mardin.





with short-sighted profit thinking and nondescript architecture accelerates the suburban sprawl, alongside the evolving shantytowns.

A line ... 'of variable direction that describes no contour and delimits no form'¹ fundamentally defies the figure and its relation to the datum. Deleuze and Guattari posited 'a nomadic absolute, as a local integration moving from part to part and constituting smooth space in an infinite succession of linkages and changes in direction ... here the absolute is local, precisely because space is not limited', while 'the desert, sky or sea, the Ocean, the Unlimited, first plays the role of an encompassing element, and tends to become horizon: the earth is thus surrounded, globalised, "grounded" by this element, which holds it in an immobile equilibrium and makes form possible.'² If grounding is inevitable in order for form to arise, are then also the consolidation of figure-ground and its related consequences inevitable? Perhaps this is so. But more importantly, one may ask whether the line of variable direction can coexist and at the same time subvert the immobile equilibrium of the horizon and the datum, which also facilitates the local. Deleuze and Guattari stated this condition as the perpetual interplay between the 'smooth' and the 'striated'. It is thus in the nomadic condition and its interaction with the striated that a first trait for the intended analysis can be found: 'Never believe that a smooth space will suffice to save us'.³

Nomadism has a rich history in Turkey. Nomadic tribes dwelled in Anatolia from the time the first agricultural use of land occurred and Turkey was occupied in many waves by nomadic Turks from Central Asia. Given these roots, it is astonishing that Turkey seems to do little to protect its nomadic remnants,⁴ let alone foster them as its potential inroad to prevent the fatal homogenisation of its built

	1/A TYPE	2/A TYPE	2/B1 TYPE	2/B2 TYPE	2/B3 TYPE	3/A TYPE
BANK MODULE			x	x	x	
BANK MODULE WITHIN BANK						
BANK MODULE WITH ROOF	x		x	x	x	
BANK MODULE WITH ROOF	x	x		x	x	x

environment. At the same time Turkey's history is rich in examples that are characterised by a different relationship to the datum, its different relationship to spatial organisation and built fabric, the way it may provide for habitation and for projective cultural and social arrangements. In order to commence such an analysis, it is not sufficient to simply replicate an art-historical or anthropological narrative. Instead, it may be useful to extract specific arrangements that defy the prevailing figure-ground so as to yield effective diagrams that may be enriched by contemporary spatial thought and actualised through contemporary design methods. Several starting points for such an inquiry are examined here: the neolithic settlement of Çatalhöyük and the hillside town of Mardin that multiply the ground, and the carved cities of Cappadocia, such as Göreme, and underground cities such as Derinkuyu, as examples that subvert the datum in a different way.

Çatalhöyük, the largest neolithic settlement ever found, dates from around 6500 to 5500 bc, and is located in the Konya plain in central Anatolia. Estimates of its population vary from 5,000 up to 8,000. This density of population brought with it dramatic 'developments in town planning, architecture, agriculture ..., technology and religion', as Charles Gates has explained.⁵ He describes such settlement as follows: 'The houses clustered together, their walls touching those of their neighbours. Although small courtyards connected by streets lined the edges of the excavated area, within the cluster courts existed but streets did not. People entered houses from the flat rooftops, descending to the floor by means of ladders. Since the town lay on sloping ground, the height of the roofs varied.'⁶ This settlement was characterised by a duplication of the datum on which the buildings were erected. In duplicating the datum and the free movement facilitated by it, the provisional datum of the nomadic tradition was re-enabled, yet tamed by the control of the elevated perimeter of the settlement. Descending within the cluster from the second datum implied entry into an enclosed space, the interior of the house or, alternatively, a protected court. The dense fabric of the settlement was therefore neither disassociated into discrete figures, nor did it reduce

1	SQUARE LIVING UNIT		RECTANGULAR LIVING UNIT		SQUARE + RECTANGULAR LIVING UNIT	L SHAPE LIVING UNIT	L + RECTANGULAR LIVING UNIT
	1 ROOM	2 ROOMS	1 ROOM	2 ROOMS			
SOUTH FACING IWAN	1 MODULE						
	2 MODULES						
	3 MODULES						
EAST FACING IWAN	1 MODULE						
WEST FACING IWAN	1 MODULE						

above: This generalised combinatory chart of the underlying modular logic of Mardin strongly resonates with contemporary methods of parametric modelling and algorithmic processes, such as are used in evolutionary design methods. Terrain form, environmental data and so on can serve as drivers of a computational method the same way as they do in the evolution of an actual settlement over time. If a computational approach was built around this logic it would certainly be interesting to involve some form of economic variable that addresses, for instance, the availability of resources (materials etc), which in turn could modify the size and arrangement of modules. Eventually this could lead to a very different way of ‘designing’ settlements that incorporate key characteristics of evolving settlements and could make such undertakings more robust and sustainable.

opposite left: The sectional arrangement of dwellings in Mardin utilised the slope of the terrain to double up the datum through the use of roof terraces. On the less inclined slope the roof terraces often provide a more continuous datum, while the more steeply inclined slopes result in a more clearly terraced arrangement.

opposite right: This chart shows how the combination of basic modules results in different types of spatial arrangement for dwellings. Taxonomising the different units of the built fabric does not only shed light on the logic of arrangement of the settlement pattern and organisation, but may also serve as a way of strategising a much denser form of contemporary settlement.

the ground to a singular datum. Instead, a much more intricate relationship is established, in which the trapped courtyards are intimate and associated with different degrees of enclosure of which the interiors of the houses are the extreme. Through this sectional articulation, inner perimeters are defined on the duplicated datum wherever roof surfaces are absent. Speculations suggest different reasons for the sectional organisation. Whatever may have been the case, it seems fruitful for a projective outlook to assume an integral reasoning that incorporates social arrangements and spatial formation, the provisions embodied in the doubled datum in connection with the pocket-like spaces enfolded within the lower and upper datum, all facilitated by the interplay of the two lines of fundamentally different character, one striating and the other smoothing.

The city of Mardin is located in southeastern Anatolia, on a south-facing mountain slope that overlooks the plateau and the northern Syrian plains. The beginnings of this settlement date back to the 3rd century AD. Over time, Mardin benefited from its strategic location relative to the trade routes, and in particular one of the silk routes. The city is most famous for its dense terraced fabric of Arabic-style buildings, which are modular in their layout. The layout of both the

The carved tuff pinnacles are continuous with the datum and the landscape in an amalgam of landscape features, thus figure and ground cannot be distinguished from one another, whereas the underground cities cannot be thought of as ensembles of figures reading against a datum.



A group of carved tuff pinnacles in Göreme, Cappadocia.

introverted, mostly two-storey buildings and the compact settlement adhere to the topography of the steeply sloped hill, as well as to local climatic conditions. The former determined the orientation of buildings, while the latter determined the density of the built fabric and the more detailed layout of the dwellings, due to the Anatolian plateau experiencing sharp differences between hot dry summers and very cold winters. The inner streets of the city are narrow and cater for pedestrian circulation. In many instances buildings bridge over these narrow streets. The circulation system is labyrinthine in nature, with staggered roof terraces sometimes a part of the circulation, sometimes connected or entirely disconnected, some serving as a datum for the building above. The figure-ground arrangement is defied through the doubled datum of these roof terraces, yet not quite like in Çatalhöyük, where the new datum is more continuous.

Mardin's labyrinthine circulation that partly interrupts and partly integrates the doubled datum to a degree has the character of a burrowed organisation wherever it is roofed over by other buildings. Another distinctive feature of the circulation is that it both divides the built volumes in specific locations, but also reconnects it in other locations. The quasi-modular character of the circulation together with the modular character of the buildings makes this kind of fabric particularly suited to parametric and associative modelling methods driven by algorithmic procedures. It is indeed remarkable to what an extent the organisation of the settlement pattern of Mardin resonates with such contemporary design methods.

Cappadocia is a region on the central Anatolian plateau. Its unique landscape is characterised by sedimentary rocks and volcanic deposits, consisting of tuff, a rock of consolidated volcanic ash that has eroded into astonishing formations of pinnacle-like forms, such as the 'fairy chimney' formations of Göreme. The softness of the volcanic deposit enabled the locals to carve inhabitable spaces into the rock since ancient times. In the case of the tuff pinnacles, this entailed carving above ground, reaching in some instances up to 16 floors.⁷ Paul Oliver explains that 'carving out dwellings is an excavating, hollowing procedure, essentially sculptural, except that the carver works around himself, turning solid into void, rock mass into room. To do this requires a mental map of the section of the rock pinnacle so that the sides are not breached, and the position and number of steps in a flight of stairs, as well as an awareness of the necessary thickness of floors that must be left above the room below. There is no latitude for mistakes.'⁸ Regarding the organisation of the dwellings, Oliver continues to elaborate that 'most families carve out their rooms on the south or southeast face of the Cappadocian pinnacles, to get the benefit of any sun in the hard and cold plateau winters. Three or more rooms may be carved, with short inter-linking passages and balconied access to the outer faces.'⁹ Other carved spaces of Göreme include spectacular monasteries and churches that feature magnificent Byzantine frescoes.

Carving into freestanding or clustered tuff pinnacles is a different project to that of carving downwards into the ground. In the Nevşehir province, over 200 underground cities of remarkable size and depth have been discovered, with living quarters, refectories, chapels, stables, storage rooms, wine and oil presses, spaces for metallurgic works, ventilation shafts, wells and tunnels for circulation. The largest underground city of the region is Derinkuyu. Construction commenced possibly as early as the 8th century BC, but its main expansion took



A carved tuff pinnacle that once housed a monastery, located in the Göreme Open Air Museum, Cappadocia.

place between the 5th and 10th centuries AD. The city was organised over eight to eleven floors, although a number of floors have not yet been excavated, and a depth of about 85 metres (279 feet). Large millstone-like stone doors weighing up to 500 kilograms (1,102 pounds) were used to close the entry points to prevent raids by Arab tribes commencing from the 7th century. In addition, Derinkuyu was connected to other similar underground settlements through tunnels. Other large complexes include Kaymaklı and Özkonak. The latter was organised over 10 floors and a depth of about 40 metres (131 feet). It is estimated that Özkonak could house up to 60,000 people over several months. Each room had secured ventilation even when all entry points were closed to prevent raids.

The carved tuff pinnacles are continuous with the datum and the landscape in an amalgam of landscape features, thus figure and ground cannot be distinguished from one another, whereas the underground cities cannot be thought of as ensembles of figures reading against a datum. Instead these constitute burrowed space that escapes the dominance of the horizontal datum entirely. Greg Lynn posited that 'labyrinthine organisations such as the burrow are light because they are essentially ungrounded, or rather they are not grounded by the single gravitational force of the earth's horizon. Because these structures are both mounded and subterranean, gravity's influence in the organisation of the burrow does not mandate any single or essential plane of organisation' and 'within the labyrinth, vertical and horizontal

movements are separated by degrees of gravitational forces rather than by right angles. In this way there are as many gravities and grounds for such structure as there are potential orientations and vectors of movement.'¹⁰ The latter can play themselves out in 'a local integration moving from part to part and constituting smooth space in a succession of linkages and changes in direction',¹¹ albeit more constrained by the material perimeter. In this way the arrangement inverts Deleuze and Guattari's argument that the nomadic absolute is 'local, precisely because space is not delimited'.¹² The labyrinthine carved space is obviously physically delimited by the material threshold that surrounds it everywhere, yet the multiplicity of movement vectors prevails.

While it is not feasible today to literally carve dwellings due to the increasing demand for space, labour costs and lack of suitable context, it is nevertheless interesting to speculate what kind of design process may be extracted from this. The 'mental map' that Paul Oliver alludes to above with reference to the act of carving, has little to do with the spatial and organisational reductivism of figure-ground relations. Instead, the interdependency between material and spatial organisation is at stake. To this should be added that spatial organisation and connectivity is not simply a question of connecting rooms or circulation of people, but also of ventilation, the simultaneously constrained and free flow of air or, in a broader sense, the necessary environmental modulation of deep space. This first article on the extended threshold can be preliminarily concluded with the realisation that potent (historical) examples exist that can inform alternative design strategies in the service of rethinking reductive threshold conditions and impoverished spatial organisations. **Δ**

Notes

1. G Deleuze and F Guattari (1988), 'The smooth and the striated – the aesthetic model: nomadic art', *A Thousand Plateaus – Capitalism and Schizophrenia*, Athlone (London), 1988, p 499.
2. Ibid, p 494.
3. Ibid, p 500.
4. Turkey has to date not ratified the Indigenous and Tribal Peoples Convention of 1989 and the older Indigenous and Tribal Population Convention of 1957 set into motion by the International Labour Standards Department of the International Labour Office (ILO) in Geneva. See www.ilo.org/normes.
5. C Gates, *Ancient Cities: The Archaeology of Urban Life in the Ancient Near East and Egypt, Greece and Rome*, Routledge (London), 2003, p 24.
6. Ibid.
7. B Rudofsky, *Architecture without Architects: A short Introduction to Non-pedigreed Architecture*, University of New Mexico Press (Albuquerque, NM), 1987 [1964], p 23.
8. P Oliver, *Dwellings*, Phaidon (London and New York), 2003, p 89.
9. Ibid.
10. G Lynn, 'Differential gravities', *Folds, Bodies and Blobs*, La Lettre Volée (Brussels), 1988 [1994], pp 95–6.
11. Deleuze and Guattari, op cit, p 494.
12. Ibid.

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Extended Thresholds II

The Articulated Envelope

Yerevan Kiosk (Revan Kōşkū), 1635–6

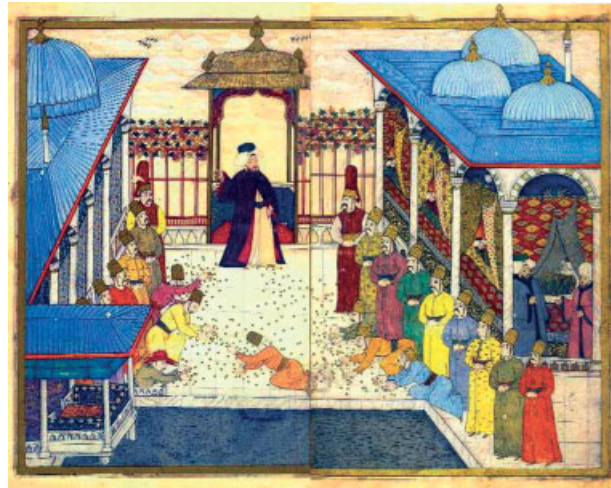
opposite: Interior view of the Yerevan Kiosk showing one of the three apses with a diwan. The openings in the exterior wall have both an outer window and inner timber shutters. The upper windows follow the box-window principle: two single-layer glass windows with a space between them.

below: Southeast elevation as seen from the garden level. The lower garden level, the large roof overhang, the meandering facade and the balcony with its baldachin roof all contribute to the passive environmental control of the building and its adjacent spaces.

Previous to the widespread adoption of air conditioning in the 20th century, which introduced a distinct differentiation between controlled interior space and the external environment, 'a wealth of strategies' were developed in Turkey to moderate the transition between inside and outside. There is much to learn from these no-energy and low-energy solutions to climate control. Here, **Michael Hensel and Defne Sunguroğlu Hensel** describe the original research and special study they undertook of external vertical thresholds in an extended envelope when they gained special access to the 17th-century Yerevan Kiosk and Baghdad Kiosk in the Topkapı Palace in Istanbul.



Miniature of the Fourth Courtyard (Sofa-i Hümâyûn: the Imperial Sofa) of Topkapı Palace with the gilded iftar Kiosk in the centre background and the fountain and water pool in the foreground. Arcaded kiosks flank the space to the left and right. On the right the arcaded space displays hanging carpets as temporal thresholds.



With an area of some 780,000 square kilometres (301,159 square miles) Turkey plays host to a wide variety of climates, ranging from coastal (Mediterranean and Black Seas) to continental (Anatolian plateau). While the former is characterised by hot and often humid summers and relatively mild and wet winters, the latter features strongly pronounced seasons with exceptionally cold winters. In addressing such extremes of climate traditional regional architectures, whether representative or vernacular, exhibit a wealth of spatial strategies to moderate the transitions between inside and out that maximise user comfort and passively control temperature within and adjacent to buildings.

Despite this rich heritage, however, like many other countries Turkey embraced electricity-powered air conditioning and central heating as status symbols. As a result, today the vast majority of the country's buildings resemble tightly sealed envelopes with a hard threshold between the fully climate-controlled interior and the fully exposed exterior. New buildings that utilise both artificial temperature control and transitional spaces are in the minority. In large part, such architectural interventions as recesses, protrusions and spatial pockets in the envelope, layered thresholds and intermediary devices including arcades, porches and loggias, as well as protruding elements such as balustrades and canopies have all but disappeared from the built environment. It is therefore interesting to revisit historical examples of much more articulated, varied and sometimes multiplied envelopes and spatial organisations. It has proved far more difficult, however, to choose examples from among the broad range of available building types on which to focus the discussion here.

The type selected was the Ottoman kiosk. The word kiosk (kuşk) is of Persian origin, meaning 'offering shade' and initially indicating a type of more or less open

garden pavilion. Kiosks became widespread in Persia, India, Pakistan and the Ottoman Empire from the 13th century onwards. Introduced by the Seljuks the kiosk has also come to exemplify Ottoman architecture perhaps, as has been suggested, because it was the first stationary interpretation of the Seljuk nomadic tent embodied in a building type that endured over the centuries. Prime examples of Ottoman kiosks can be found in Topkapı Palace in Istanbul, the official residence of the Ottoman sultans from 1465 to 1853 and the most important complex of Ottoman architecture featuring styles from every period of the four centuries during which the palace served as a residence. Kiosks have often been described as Turkish, Persian and Arabic influenced and a direct connection between the historical garden pavilions of Persia and the Seljuk and later Ottoman kiosks has often been postulated. As it seems, however, most scholars now dismiss the theory of the kiosk as an eclectic architectural collage, favouring instead the view that such buildings represent a distinct and integrated synthesis of Ottoman, Persian and Mameluk influences.

The following focuses on two kiosks that are part of the Fourth Courtyard (Sofa-i Hümâyûn: the Imperial Sofa) of Topkapı Palace: the Yerevan Kiosk (Revan Köşkü) of 1635–6, and the Baghdad Kiosk (Bağdad Köşkü) of 1638–9, assumed to have been constructed by the royal architect Hasan Ağa under Sultan Murat IV. The Yerevan and Baghdad kiosks served different purposes over time ranging from leisure as summer houses, to celebratory, to turban storage (Yerevan Kiosk) and to library (both). The use of the basements has not been established beyond doubt. The kiosks are quite similar in their design. Both are double-storey buildings, with the lower floor accessed from the lower-level garden with the upper-level access provided by the raised level of the Fourth Courtyard. Further, both kiosks are organised on an octagonal footprint with four of their faces recessed, a plan which would normally result in a symmetrical arrangement. In both cases, however, the symmetry is broken. One of the protruding faces of the Yerevan Kiosk is shorter than the other three and contains the fireplace. In the case of the Baghdad Kiosk, a space has been added to one recessed section and extends beyond the flanking protruding corners, housing an additional, but separated room.

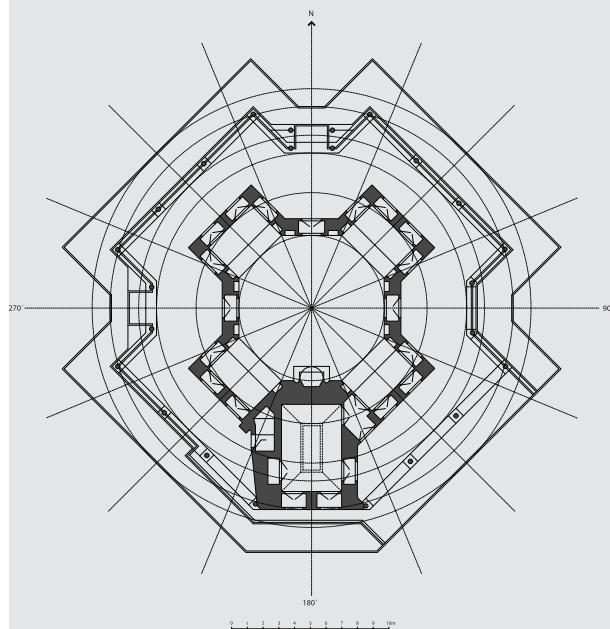
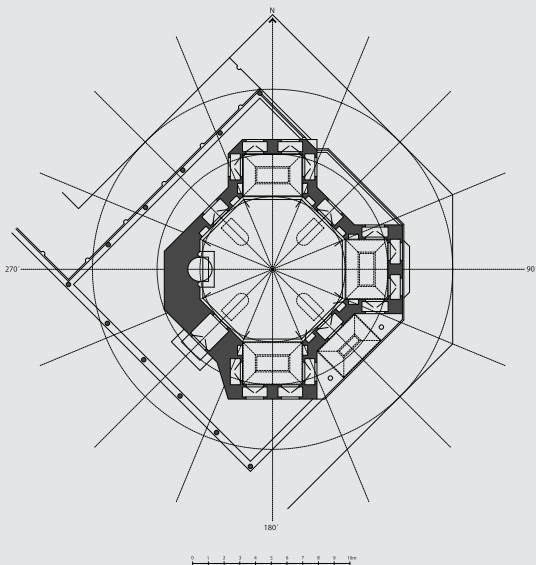


Yerevan Kiosk (Revan Kōşkū), 1635–6
Northeast elevation of the kiosk as seen from the garden level.



Northwest elevation with the water pool and fountain in the foreground.

The floor plans of the Yerevan Kiosk (top) and the Baghdad Kiosk (bottom) demonstrate the use of the articulated envelope as a spatial device. The meandering envelopes of both kiosks result in a succession of adjacent exterior and interior spaces that are differentially oriented towards and exposed to the sun path and airflow direction over time. This organisation and modulation of a heterogeneous space enables the migration of activities according to choice and preference of the inhabitants.



The meandering outline of the envelope of the pavilion organises the interior into four apses. In the Yerevan Kiosk three apses are occupied by diwans (rooms originally reserved for drinking or smoking) directly adjacent to the windows with the fourth apse occupied by the fireplace. In the Baghdad Kiosk all four apses are occupied by diwans, resulting in a much more symmetrical interior and the possibility of utilising all four apses. The glass elements of the windows can be opened and closed. In addition there are opaque timber shutters in the interior that can be opened and shut, regulating the amount of light and the internal temperature. While the Yerevan Kiosk features windows set within its doubled-layered dome, the Baghdad Kiosk does not. It displays instead a more continuous row of windows along its exterior walls, resulting in a much brighter interior than that of the Yerevan Kiosk. Also, around the Yerevan pavilion, the upper-level terrace and circulation is not continuous, while terrace and circulation are continuous around the Baghdad pavilion, with the exception of the protruding room, thus offering greater choice in the use of spaces created by the articulated meandering envelope.

For both kiosks the irregular outline of the exterior creates different spaces that are set back and shaded by the protruding roof overhang, as well as positioning the windows in the protruding corners in a more exposed location to allow light to penetrate the interior. The differentiated, meandering profile of the envelope thus produces pockets that differ markedly in their climatic exposure, both on the exterior of the envelope and in the interior of the kiosk. Interestingly, the two kiosks are not oriented in the same direction. The Yerevan Kiosk is oriented with its protruding corners along the north-south and east-west axes, whereas the Baghdad Kiosk is rotated 45 degrees so that its protruding corners face northeast to southwest and northwest to southeast. The kiosks ought therefore to be seen as variations on a theme that delivers greater variety in orientation and environmental adaptation. While they are clearly intimately connected by virtue of the variation of this shared organisational theme, their relation must be elaborated with regard to their spatial connection and their relation to the ground datum.

At first-floor level some of the several kiosks of the Fourth Courtyard are linked by an arcade and grouped around a water basin with a fountain, a detail that greatly contributes to the cooling of the interior space of the arcades. Together they form a complex that elevates the importance of the outer spaces. In the past, the arcades were either fully exposed or covered with carpets and textile drapings, transforming the upper level into a more open or, alternatively, more private zone. This strategy served to multiply and distribute the various vertical thresholds that organise the space while simultaneously modulating the environment through the presence or absence of the provisional textile screens. However, these screens should not be viewed as auxiliary architectures after the manner of those discussed in 'Extended Thresholds III' (see pp 76–83), since the latter are an addition to the built environment that was not originally part of the design, while these textile screens are integral to the design of the complex, serving to modify its



spatial organisation relative to user needs. In addition, a series of gardens and open spaces surrounds the complex at the lower level, which contributes to the careful maintenance of climate control in the Fourth Courtyard.

Topkapı Palace was built over an extended period in an accumulative manner and did not have an underlying masterplan. Unlike most other great palaces, Topkapı evolved over time much as did the various settlements discussed in 'Extended Thresholds I' (see pp 14–19), yet with much greater emphasis on and control over the evolving ensemble and its coordinated appearance and performance. Where the first essay challenged the horizontal datum and examples of settlement organisations were discussed that rendered this datum provisional by multiplying it or subverting it, in this essay it is the singular vertical threshold that is under scrutiny. The temporal or permanent multiplication of the vertical threshold leads to a richly heterogeneous spatial organisation with a series of spaces that at times constitute a more gradual transition from inside to outside and offer differing degrees of exposure to the weather. Moreover, the Fourth Courtyard example also shows a distinct strategy of treating the datum as varied and working hand in hand with the spatial and environmental strategies of the buildings, treating the latter not as discrete entities, but rather as interdependent elements of the built fabric. Much can be learned from the sensitive treatment of this architecture of the extended threshold. Further research is currently taking place in collaboration with FFI – the Norwegian Defence Research Establishment, which focuses on the specific airflow and thermal performance of the two kiosks. **Δ**

We extend our warm gratitude to Hasan Frat Diker at the Directorate General for Cultural Heritage and Museums, Istanbul Directorate of Surveying and Monuments, for his unwavering assistance, for making his personal research available¹ and for his support of the article's preparation.

Note

1. HF Diker, 'Topkapı Sarayında – Revan ve Bağdad Köşkleri', Masters dissertation, Istanbul Technical University, 2000.

Text © 2010 John Wiley & Sons Ltd. Images: pp 20-1, 25(b) © Michael Hensel and Defne Sunguroğlu Hensel; p 23(t) © Ahmet Günel; pp 23(b), 25(t&c) © Ilgın Külekçi; p 24 © Drawn after SH Eldem (1986). *Türk Evi Osmanlı Dönemi - Turkish Houses Ottoman Period Vol. II. Türkiye Anıt Çevre Turizm Değerlerini Koruma Vakfı*

Baghdad Kiosk (Bagdad Köşkü), 1638–9

top: Southeast elevation as seen from the garden level.

centre: East elevation as seen from the garden level.

left: Interior view showing one of the four apses with a diwan. The exterior wall openings have both an outer window and inner timber shutters. The storage spaces set within the wall had different functions over time.

Ottoman and Turkish Orientalism



Cover of Feridun Fazıl Tülbentçi, *Sultanların Aşkı* (The Love of the Sultans) Istanbul, 1968

left: A typical cover for a prolific writer of popular historical novels glorifying the sultans as statesmen and lovers.

Osman Hamdi Bey posing in Oriental garb, Fritz Luckhardt photograph studio, Vienna, c 1873
opposite: Osman Hamdi Bey was appointed commissary to the Ottoman section at the Vienna Universal Exposition of 1873.

Since the early decades of the 19th century, Turkey has undergone successive programmes of modernisation that have closely identified reform with Westernisation and its implied European 'success and superiority' over Turkish culture. Here Edhem Eldem reveals both the external and internal dynamic of Turkish Orientalism, which has proved such a complex multilayered process with an enduring influence on how Turkish society and elites view themselves today.



The Ottomans were a target and an object of Orientalism, out of curiosity and as a Western intellectual construct of essentialist otherisation.¹ Yet they also accommodated Orientalism as part of the Westernisation programme they embarked upon, sometimes appropriating or internalising it, sometimes deflecting or projecting it, sometimes opposing or subverting it, sometimes simply accepting and consuming it. Excellent scholarship has already pointed to the existence of an Ottoman Orientalism that ganged up on the 'Oriental within' — generally the Arab, the Kurd, the Bedouin — in an attempt to emulate and deflect Western Orientalism while at the same time exerting a form of colonial pressure on certain ethnic or religious groups.² Others have stressed the aesthetic and cultural reception of Orientalism, from a noted tendency of the Ottomans to display themselves in Orientalist ways to Western audiences, to the adoption of Orientalist forms, especially in architecture, in their own environment.³

My research has mostly been concerned with one particular Ottoman Orientalist, Osman Hamdi Bey, the first Western-trained Muslim painter, and founding father of Ottoman archaeology, and with mapping the mental and cultural continuum of Ottoman, and later Turkish, Orientalism within the broader perspective of 'everyday' or popular Orientalism.⁴ The aim here is to show that from the mid-19th century to the end of the 20th, Ottoman and Turkish Orientalism have formed a complex, long-term, multilayered and multifaceted process that still informs much of the way in which Turkish society and elites view themselves and the world around them.

Oxymoronic as it may sound, Ottoman Orientalism has a very strong logic behind it. From the moment Ottoman elites decided that Westernisation was the only or most efficient way to catch up with Western material success — a phenomenon that can be dated back to the early decades of the 19th century and which gained momentum after the Tanzimat (Reorganisation) Decree of 1839 — they had implicitly agreed to one of the most basic tenets of Orientalism: that the East was essentially different from the West, that it was essentially stagnant and lacked the capacity to change without an exogenous stimulus. In this sense, as long as modernisation was conflated with Westernisation, a latent or overt admission of Orientalist tropes was practically inevitable. Westernising reform was an implicit recognition of Ottoman failure and inferiority, a mirror image of European success and superiority.

A disturbing corollary of this is that Ottoman Orientalism is inevitably linked to a complex of inferiority, which explains why relations with the West have always swung back and forth between love and hate, admiration and execration. Western Orientalism was partly responsible for this, since it kept sending demeaning and often mixed messages: Ottomans were barbarians who had to civilise (Renan),⁵ but their aping of the West meant the destruction of their exotic and somewhat noble self (Loti).⁶ Damned if you do, damned if you don't; either way they were incapable of really pleasing the West.

The Ottoman elites had several options in order to manage the rather heavy burden of this awkward situation. At one extreme, the desire to prove Orientalism wrong could take the form of rebellion against the West and Westernising reforms, by either reviving some idealised Islamic past, or by finding a non-Western path to modernity. At the other extreme, total submission to the West could develop into self-loathing and a desire to 'convert' to a Western identity. For most of the elite, however, there was a middle ground that allowed for



'Le visage turc' (Turkish faces), from *La Turquie Kamaliste*, 19, June 1937

A typical example of the urge to convince the Western audience targeted by this magazine that Turks have a 'European' physiognomy.

Due to the political changes of the 1950s, popular culture could start responding to the frustrated need to glorify a historical narrative that made more sense than the invented notions of Central Asian, Hittite or Sumerian ancestry.

as possible, catch up with western culture, to which they decidedly belong'.⁷ Western Orientalist literature came under heavy criticism; previously hailed for his support of the Ottomans, Pierre Loti was now reviled for depicting the Turks as Orientals. In fact, the Kemalist establishment agreed with every point of Western Orientalism, as long as it concerned the Arabs, the Kurds, the Ottomans; in short, anybody but the Turks. In its desire to integrate with the Western world through modernity, the Turkish Republic had become an Orientalist project, albeit tainted with Occidentalism, considering that the West was to a large extent turned into an essentialist representation of what it was supposed to stand for.

This was the heyday of cultural authoritarianism, when local forms of art were standardised (and often banned) in order to be controlled, while Western artistic norms were systematically imposed on the population, with the rather naive expectation of a deep cultural transformation. Acclaimed by the West for its 'civilising mission', the republic had to use all sorts of tactics to keep its image of success alive. One of these was to use censorship and bans on elements deemed incompatible with 'modernity', ranging from music to

the Arabic alphabet, or from Ottoman Turkish to the veil; another was to maintain the illusion of success through camouflage and staging, presenting, for example, the veiled peasant woman in such a way as to avoid possible Islamic references.

By the 1950s, this situation came under attack from outside and from within. The main external challenge took the form of tourism and its expectation of an Oriental appeal rather than a show of peripheral modernity. The Turkish state eventually played along and started using images that flirted with an Oriental vision of the country, still under some kind of 'Mediterranean' camouflage, or even went the whole way and used 'good old' Orientalism to market its Ottoman past. At a domestic and popular level, it was more of a backlash against the suppression of the Ottoman past and of Islamic identity. Due to the political changes of the 1950s, popular culture could start responding to the frustrated need to glorify a historical narrative that made more sense than the invented notions of Central Asian, Hittite or Sumerian ancestry.

From the perspective of Kemalist ideology, Ottoman history was easier to accommodate than Islamic identity. All it really took was to Turkify the Ottomans and integrate them into the nationalist construct of Turkish greatness. What the state was much less eager to do was to let loose the Oriental and the Muslim that lay beneath the Western make-up of the modern Turk. The 1970s were particularly tense with the struggle of popular culture to break free from the Westernist norms of a still vibrant Kemalism. This was the time when an extremely



**Sidney Clark, *Turkey for the Best*,
Turkish Information Office, New York, c 1955**

This cover combines, in a single image, the blue sky, the mosques and minarets of Istanbul, the wooden houses of the Bosphorus, a sandy beach, the sea and sailing boats, and the welcoming smile of a Carmen-like Turkish woman.



**Album cover of *Pop Oryantal*,
Oscar Records, Istanbul, date unknown**

The cover of this LP is a caricature signed by 'Sinan' depicting a scantily clad belly dancer performing in the presence of a reclining Arab sheikh.



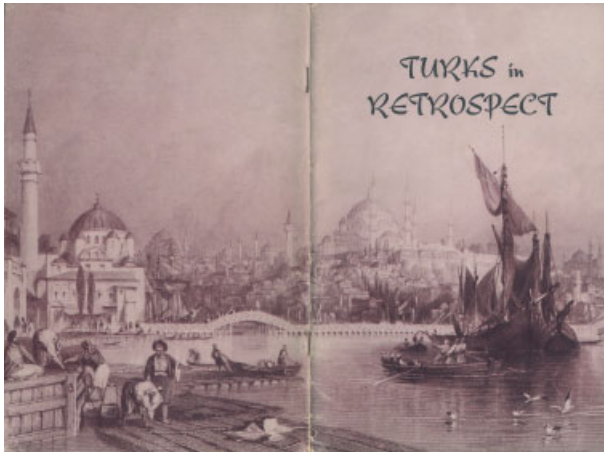
Cover of *7 Gün*, 346, 24 October 1939

This depiction of an Anatolian peasant woman by Ratip Tahir tries to play down Islam (the veil) by promoting the image of a healthy 'Mediterranean' character in a 'classical' pose.



***Arap Âlemi* (An Arab Orgy), by Cafer Zorlu, on
cover of *Akbaba*, Vol 26, 1, 19 December 1973**

This take on the 1973 oil crisis depicts Europe as a half-naked belly dancer performing amidst a group of cheering Arab sheikhs.



Turks in Retrospect, Turkish Information Office, New York, c 1955

The engraving reproduced here is Thomas Allom's *Constantinople*, from *Cassim Pacha*, first published in Thomas Allom and Robert Walsh, *Constantinople and the Scenery of the Seven Churches of Asia Minor*, Fisher, Son, & Co (London), 1838.

popular musical genre, dubbed Arabesk, was banned from radio and television on the grounds of un-Turkishness, being associated with the still thriving image of the lecherous and uncouth Arab. Under the strange effect of a military coup, followed by the rise of liberalism and of Turkish-Islamic conservatism, all hell broke loose in the 1980s. Oriental 'demons' that had been kept at bay by Kemalist policies were unleashed as Turks rediscovered (or reinvented) Oriental music and belly dancing (quaintly referred to as 'Oryantal'), revelled in a nostalgic reinterpretation of Ottoman history, and started consuming the very same exoticism that they had begun selling to Western tourists.

As if this Postmodern self-exoticisation was not strange enough, Turkish Orientalism has made a spectacular comeback in the last decade in the form of a neo-Kemalist backlash against the claim to political and social power of a rising conservative-Muslim middling class, embodied by the political success of Tayyip Erdoğan's Adalet ve Kalkınma Partisi (Justice and Development Party), or AKP. The combined shock to the 'white' elites of seeing the theatrical set of Westernised Turkey crumble at the seams, and of losing their hold over the political system, has radicalised them into adopting an aggressive and authoritarian reaction that targets and stigmatises the Muslim masses as a threat to secularism and to modern lifestyles. Typical of this attitude were the so-called

'Republican Meetings' of the past few years, where masses rallied against what they considered to be a threat to secularism, sometimes implicitly invoking the desirability of a military intervention. Properly analysing this Orientalist polarisation of Turkish politics would require a full-length article; for the moment one can just wonder at the power and capacity of a 19th-century Western ideology to define the terms of a political struggle in Turkey in this new millennium. **Δ**

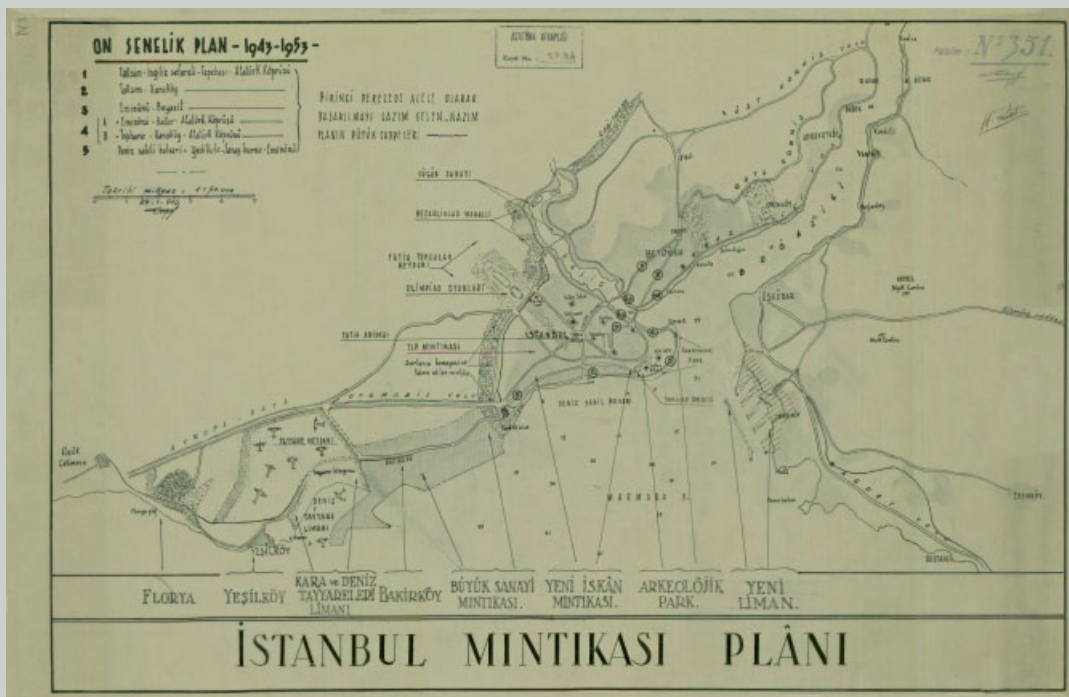
Notes

1. Edward Said, *Orientalism*, Pantheon Books (New York), 1978 is still the basic and classical reference on Orientalism as an ideological construct.
2. Ussama Makdisi, 'Ottoman Orientalism', *The American Historical Review*, 107, 3, June 2002, pp 768–96; Selim Deringil, "'They Live in a State of Nomadism and Savagery': The Late Ottoman Empire and the Post-colonial Debate", *Comparative Studies in Society and History*, 45, 2, April 2003, pp 311–42.
3. Zeynep Çelik, *Displaying the Orient: Architecture of Islam at Nineteenth-Century World's Fairs*, University of California Press (Berkeley, CA and Los Angeles), 1992; Turgut Saner, 19. *Yüzyıl İstanbul Mimarlığında 'Oryantalizm'*, Pera Turizm Yayınları (İstanbul), 1998.
4. Edhem Eldem, 'Osman Hamdi Bey ve Oryantalizm', *Dipnot*, 2, Winter–Spring 2004, pp 39–67; Edhem Eldem, *Consuming the Orient*, Ottoman Bank Archive and Research Centre (İstanbul), 2007.
5. The French philosopher, historian and philologist Renan (1823–92) was a typical, and certainly not unique, advocate of the stigmatisation of the Turks as barbarians. A political equivalent would be Prime Minister William Gladstone (1809–98) and his notion of the 'unspeakable Turk'.
6. The French novelist Pierre Loti (1850–1923) was a fervent admirer and staunch defender of the Turks, but obsessively enamoured with an exotic and Orientalist vision of the land and people, as illustrated by his novels *Aziyadé* and *Les Désenchantées*.
7. Falih Rıfkı Atay, 'Notre réforme linguistique', *La Turquie Kamâliste*, 7, June 1935, p 5.

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The Story of Istanbul's Modernisation



Since reform started under Ottoman rule in the early 19th century, Istanbul has undergone a substantial period of modernisation that has spanned more than 150 years. **İlhan Tekeli** outlines the metropolis' enduring development, characterising Istanbul's transformation into a modern city into four distinct periods. It is a story that bridges the collapse of the Ottoman Empire and the reconstruction of the Turkish Republic as a nation-state, with the initial demise of the city in favour of Ankara; and continues with Istanbul regaining its status as a world city; as it evolves from a monstrous industrial city to an urban region and global centre.

Léon-Henri Prost, Istanbul Master Plan, 1936-58

above: Plan for the years 1943 to 1953 showing a small-scale industrial zone, a cemetery zone, an area for the Olympic Games, public squares, a medical zone, airport, large-scale industrial zone, new housing areas, an archaeological park and new port location.

opposite: The Bosphorus Bridge and its connecting freeways today.



Postcard of Galata Bridge from the late 19th century.

For the last 2,000 years, Istanbul has been a world city. Situated in an important strategic position on the Bosphorus Strait straddling two continents – Europe and Asia – it has served in succession as the capital of the Roman, Byzantine and Ottoman empires. Today it may no longer be the government seat of Turkey (under Atatürk, the capital city of Turkey moved to Ankara in the centre of the new republic in 1923), but it remains Turkey's largest city and very much its cultural and commercial capital; with over 13.5 million inhabitants, Istanbul is a megacity and the 21st largest city in the world. Tracking Istanbul's metamorphosis into a modern city, this article identifies four distinct periods in the history of the city's modernisation: first, the era of 'Shy Modernity', which lasted from the 1860s until the collapse of the Ottoman Empire; second, the phase of 'Radical Modernity', which commenced with the declaration of the Turkish Republic in 1923 and ended after the Second World War when Turkey accepted a multiple-party policy; third, the period of 'Populist Modernity', which took place during the multiparty system until the 1980s; and finally, the period that began at the end of the 1980s and continues to the present day, which can be regarded as the 'Erosion of Modernity'.

The Onset of Transformation: 'Shy Ottoman Modernity'

The Ottoman state was founded by Osman I in 1299 as a small principality. In the second half of the 15th century, it reached empire scale, with territories both in Rumelia and Anatolia. However its expansion stagnated at the end of the 17th century, and in fact reversed as a consequence of the modernisation and industrialisation in Europe at the time. By the beginning of the 19th century, the Ottoman Empire had reached a crossroads: would it be allowed to dissolve into small states, each following their own path towards modernisation, or was it to undergo a centralised modernisation process that would maintain its integration as an empire. Mahmud II (the



Postcard of Galata Bridge from the mid-20th century.

30th Sultan of the Ottoman Empire) opted for the second road, taking Turkey into an era of 'Shy Ottoman Modernity'.

This manifested itself in two ways: through the institutional reforms of central government and wide-scale infrastructure projects, and through the country's introduction to international trading and the implementation of capitalism. In essence this was centrally governed, top-down modernisation. It is not possible to give an exact date as to when Ottoman modernisation was initiated; it can most appropriately be viewed as an accumulation of changes over time. However, it is possible to state that the structural changes within the country's government began in 1826 when the Janissary corps (the sultan's troops) was disbanded by Mahmud II. The English Trade Agreement in 1838 facilitated the growth of capitalism and opened up the Ottoman economy to international markets. With the Gülhane Decree, declared in 1839, and the Royal Decree, declared in 1856, ownership rights, individual's legal rights and equality were guaranteed, activating the processes of capital accumulation in the empire.

Changes in Istanbul influenced by these governmental implementations became apparent during the 1860s. Subsequently, and in addition to, the emergence of entrepreneurship in the form of banks and corporations, after the 1880s the creation of modern education and health-care systems resulted in the multifaced character of the Shy Ottoman Modernity period.

At the end of the modernisation process, during the 1860s, modern business districts started to appear alongside traditional Ottoman town centres composed of covered bazaars, markets and port checkpoints. While the Ottoman economy was linked to the world economy by capitalist interests, banks, insurance companies, commercial buildings and hotels were founded in the centres of port cities. Economic developments such as this required the implementation of new infrastructures and the construction of train stations in or around Istanbul's centre, port, docks, warehouses and post office buildings. As an effect of modernisation, and in parallel to the formation of new state institutions and bureaucracy, government departments were also established in the city centre, which consequently expanded, resulting in the diversification of its functions, and the further differentiation of its traditional and modern areas.



Galata Bridge, today.

City planning applications in Istanbul began in the 1850s. Interestingly, city planning in Europe was also under development during this time in response to the problems caused by industrialisation.

The second important change came with the introduction of public transportation systems such as trams, ferries and suburban trains that replaced the once pedestrian city transport. Also significant was the differentiation of housing areas according to nationality and social class – the result of changes in the social stratification and the formation of new social classes due to new economic relations and new forms of organisation. The suburbanisation of Istanbul was now evolving.

City planning applications in Istanbul began in the 1850s. Interestingly, city planning in Europe was also under development during this time in response to the problems caused by industrialisation. In the Ottoman Empire, this affected the transformation of the traditional city, a process in which urban planning was not determined by masterplans but by partial site plans, put together like mosaic tiles by cartographers, of the areas that were burnt after the numerous fires in this city dominated by wooden buildings. For example, the modernisation of the central business district (CBD) was realised on the one hand by the Historic Peninsula plans after the 1864 Hoca Paşa fire, and on the other by the site plan that was prepared after the collapse of the Galata city walls during the same period. The CBD was later expanded from Galata to Beyoğlu, and spread alongside the main transportation lines (trams, rail and sea) in parallel with the rise of the urban population. This city formation can be visualised as settlement bands.



Postcard of Voyvoda Street, on which bank buildings were starting to be built in the late 19th century.

Improvements in quality of life brought about by developments during the years of Shy Modernity helped to contain epidemics, thus by 1829 Istanbul's population had grown to 329,000. By 1864 it had risen to 600,000, in 1877 it was 720,000, in 1885 it stood at 873,000, in 1897 1,059,000, in 1901 1,013,466, and in 1914 1,200,000.¹

The Nation-State and 'Radical Modernity'

The reinvention of the Turkish Republic as a nation-state after the collapse of the Ottoman Empire challenged the mindsets of Turkish intellectuals. Prior to this, the main problem concerning the Ottoman elites was the salvation of the empire. However, with the declaration of the republic this shifted to the setting up of a new and strong nation.

The Radical Modernity process followed spatial strategies at two different levels: first, it focused on the transformation of the country into a nation-state; second, cities were to become places of modernity. The first step in the creation of the nation-state was to declare Ankara as the capital city. Next came the construction of railway networks to integrate the domestic market, followed by the creation of industries in small-scale Anatolian cities in accordance with the government's industrialisation policy. In addition to this was the founding of Halkevleri (community centres) in every Anatolian city in order to introduce modern lifestyles and values across the country.²

However, these developments were, in turn, disadvantageous for Istanbul. After the long war years, the city's population had decreased to 650,000 by the time the republic was declared in 1923 – nearly half the population of 1914 – and tackling the problems of a shrinking city would be no mean feat. The plans prepared for the fire zones could not be realised due to lack of interest on the part of their former owners, as the decreased population meant there was no stimulus for speculative profits in the real-estate market. In addition, the migration of non-Muslims meant that Istanbul's population became homogeneous and, over time, the city lost its cosmopolitan identity.

Consequently, the government was forced to rethink the urban planning of Istanbul. The French architect and town planner Léon-Henri Prost (1874–1959), who was responsible for the Paris Regional Plan of 1928–39, was

brought in to design the Istanbul Master Plan (1936–58). The construction of new apartment blocks in the shrinking city was the start of the reshaping of Istanbul, which created differentiation in terms of building hierarchy and organisation. These new blocks were densely constructed along the newly opened Atatürk Boulevard and the surrounding areas of Taksim, Harbiye, Maçka, Nişantaşı and Şişli. The open countryside between Kadıköy and Pendik was turned into permanent residential areas with the development of Kızıltoprak, Göztepe, Erenköy, Bostancı, Maltepe and Suadiye.

Populist Modernity Under a Multiparty Political Regime

The implementation of a Radical Modernity project with a social engineering approach proved difficult after the Second World War, when Turkey accepted a multiparty political regime. The result was the implementation of a modernisation process with populist tendencies.

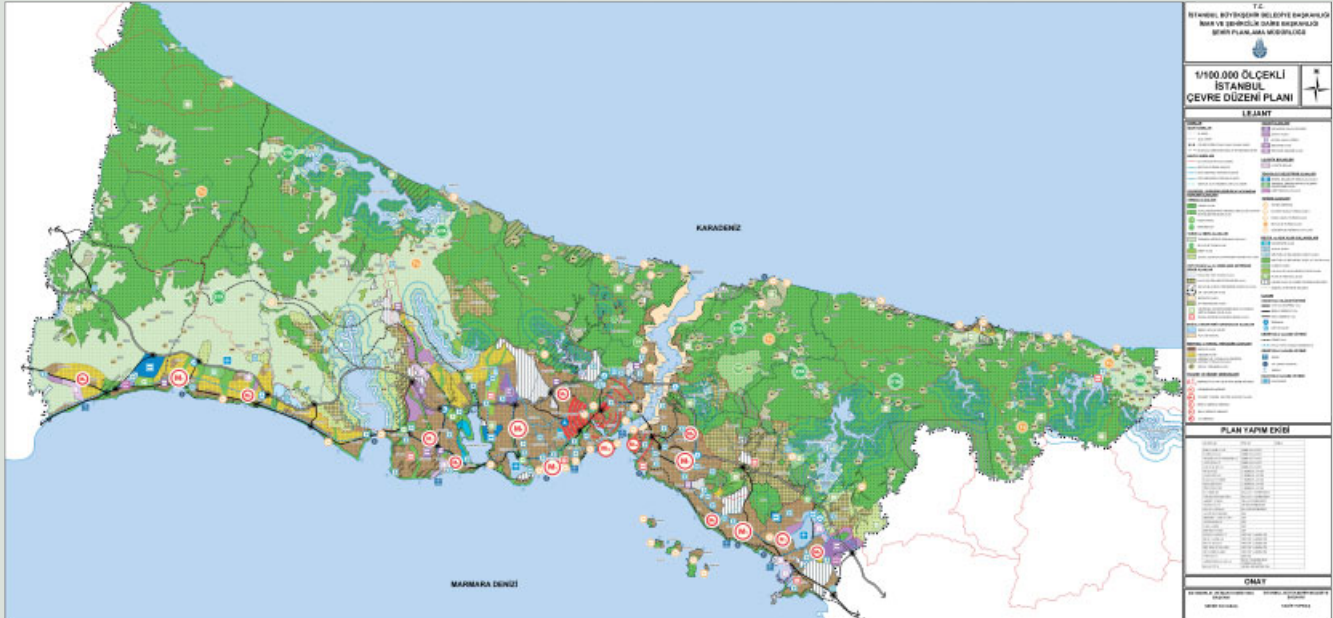
The transition from traditional agriculture to agricultural production on a national and international scale, due to mechanisation, accelerated the disintegration of a large rural peasant class of farm labourers. Extensive investment in the service and manufacturing industries was necessary to create job opportunities for the large numbers of migrants who had recently flocked to the cities. In order for these groups to be integrated and settled in compliance with the norms of the modernity project, further large-scale investment in housing and infrastructure was required. However, Turkey's capital accumulation process, at this point, was far from being able to invest at this level. Rural migrants also needed to be educated in terms of the ways and culture of the modern city and how to use it. Having just left their villages, these newcomers did not have such a capacity and the inevitable outcome was the emergence of urban slums.

Istanbul's population rose from 938,000 in 1950 to 1,467,000 in 1960 and could thus no longer fit within its municipal borders. The number of municipalities that as a consequence formed around the city had reached 32 by 1980. If this new municipality complex was to be understood as the metropolitan area, its population had risen from 2,849,000 in 1970 to 4,643,000 (or 10.4 per cent of the entire country's population) in 1980.³

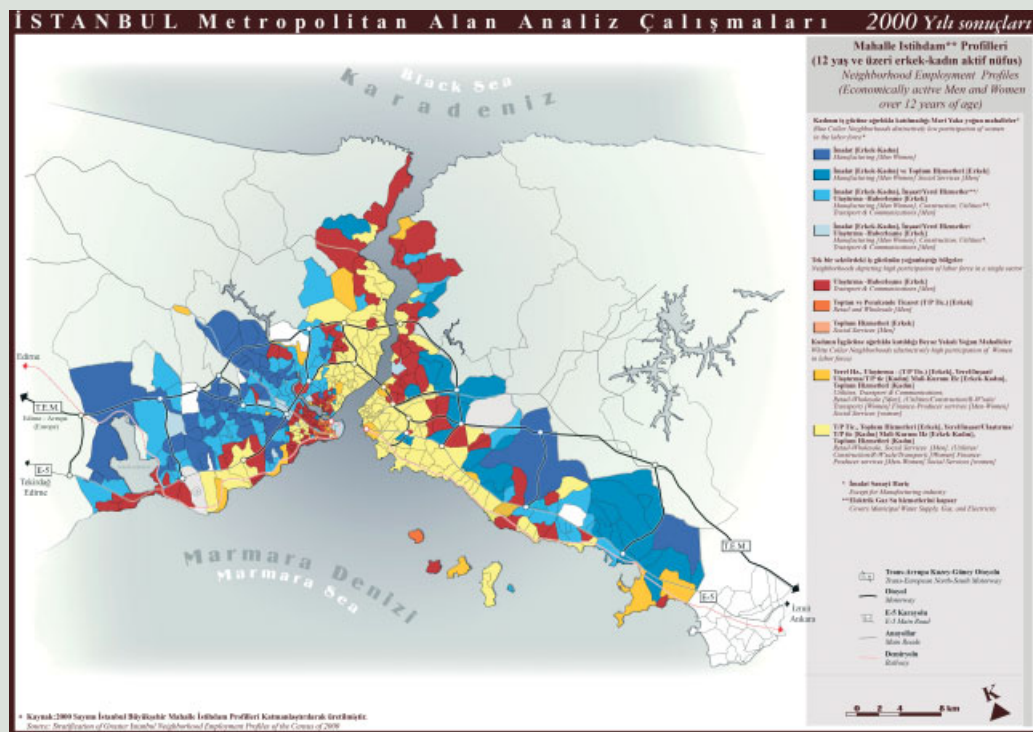
Three mechanisms can be used to effectively identify the distribution of housing at this time: the structural modification of Istanbul's CBD; the new industrial arrangement within its urban fabric; and the construction of the Bosphorus Bridge and connecting freeways. During this postwar period, the CBD, located in the historical peninsula, functioned as an incubator for the city's growing production and service functions which, as they further expanded, were forced to move outside it. It was not possible to move the small- and medium-scale



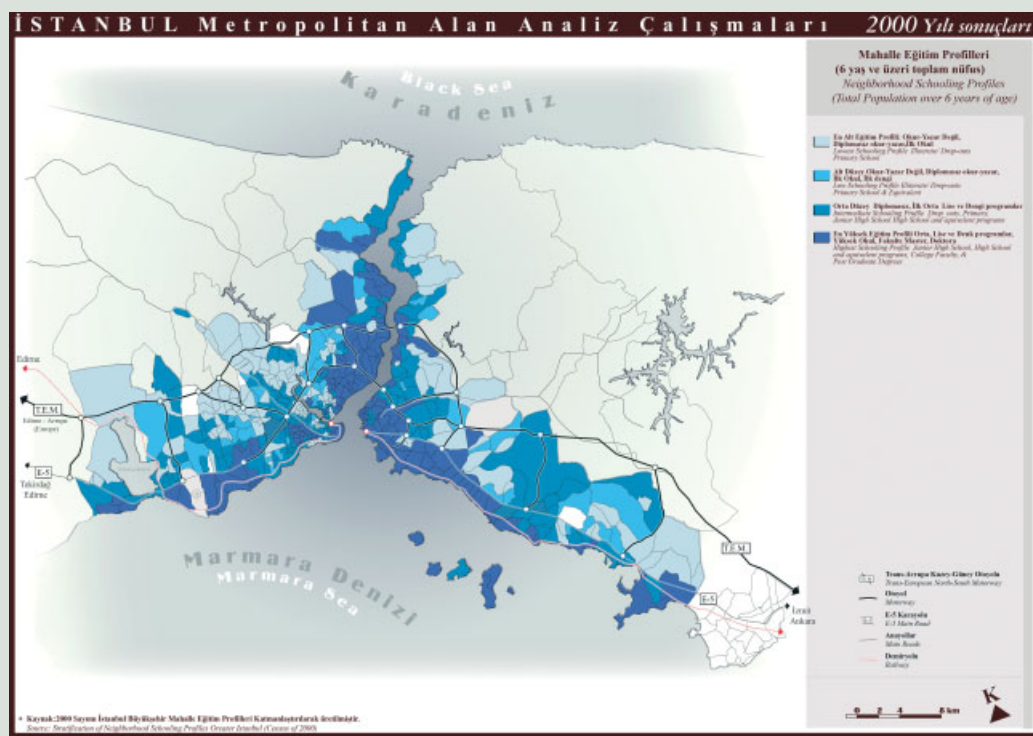
Zeytinburnu Sümer District Urban Renewal Project, by KİPTAŞ (İstanbul Konut İmar Plan Sanayi ve Ticaret AŞ), 2006
 The Istanbul Housing Construction Industry and Commerce Corporation (an institution of the Istanbul Metropolitan Municipality) aims to demolish the existing housing blocks in Zeytinburnu and build new ones that are resistant to future earthquakes.



The Istanbul Metropolitan Area Master Plan was approved by Istanbul Metropolitan City Council in July 2009, following lengthy discussions after its announcement in May 2006.



Map of the neighbourhood
employment profiles of economically
active men and women over 12
years of age in 2000.



Map of the neighbourhood schooling profiles of the total population over 6 years of age in 2000.

The Bosphorus Bridge and the freeways not only connected Asia and Europe; this new network also radically changed the way the various parts of the city were connected.

industrial facilities too far out of the city as it was important that they retain the economic and market advantages of being close to the centre. These decentralised facilities of the historical peninsula were thus relocated just outside the city walls and the municipality borders along an arc between Eyüp and Zeytinburnu; 58.2 per cent of the industrial workforce was eventually located within a ring 4–9 kilometres (2.5–5.6 miles) away from the CBD. Istanbul at that period was a ‘monstrous industrial city’ as the distribution of its industry did not resemble that of any other metropolitan city in the developed world. On the other hand, in the northern Golden Horn, the Taksim Şişli section of the CBD expanded to and beyond Mecidiyeköy. The Bosphorus Bridge and the freeways not only connected Asia and Europe; this new network also radically changed the way the various parts of the city were connected.

City planning zones at this time were often dominated by the construction of apartment blocks, the majority of which were realised by small developers who usually demolished existing buildings to replace them with bigger ones. Modernisation was thus becoming the result of destruction rather than conservation.

The Erosion of Modernity

The story of Istanbul changed dramatically after 1980. Turkey began to follow a neo-liberal direction, implementing an extroverted export-based growth policy and leaving a conservative mixed-economy policy behind. With the growth of international affairs, Istanbul too shifted from a Fordist production model to a flexible one, from an industrial society to an information society, and on towards globalisation; its modernity thus began to decay and Postmodernist developments began to emerge.⁴

The collapse of the socialist bloc in 1989 and the transformation of eastern Europe and Russia's economies into market economies created new possibilities for Istanbul. Once again it had the opportunity to become a

world city. From the mid-1990s, politicians and business agreed on a common vision: ‘a liveable world city Istanbul’, and Turkey's application for full EU membership strengthened this effort. Istanbul used such opportunities wisely. Despite not being one of the most effective top-10 world cities, it has succeeded in becoming one of the second-category world cities. It has grown and transformed through the actions of powerful actors such as large organisations, and large capital investment in developing mass housing projects, organised industrial zones, educational and service campuses, and special free-trade zones.

For Istanbul, this change from a monstrous industrial city to an urban region has required vast improvements within the municipality and to its management approach. Over the last decade, it has started to fulfil its potential via an increasing number of regeneration projects, some of which have been geared towards eliminating the impact of illegal developments such as the gecekondu settlements that took place during the period of populist modernity. Others have included improvements in the earthquake-resistance of buildings, and general improvements to slum areas. Such projects have reutilised the areas left over from the shifting of urban CBD facilities to the periphery, and have facilitated the preservation of the city's historic characteristics and thus protected its identity. It is in this context that the gentrification processes in the old urban districts, such as Kuzguncuk and Cihangir, and the reconstruction of Sultanahmet's emptied zones with its new tourism-related facilities and hotels, has occurred.

Istanbul's transformation into an urban region displayed a very flexible, mosaic-like pattern rather than a rigid unity. This diverse and differentiated model was how Istanbul lost the characteristics of a modernist city. The estimated population of its urban region reached 13,500,00 in 2007. It is now housing 19 per cent of Turkey's population. As of 2009, as the reorganisation of this urban area continues, Istanbul's aim is to strengthen its competitive power as a world city in the global economy. **D**

Notes

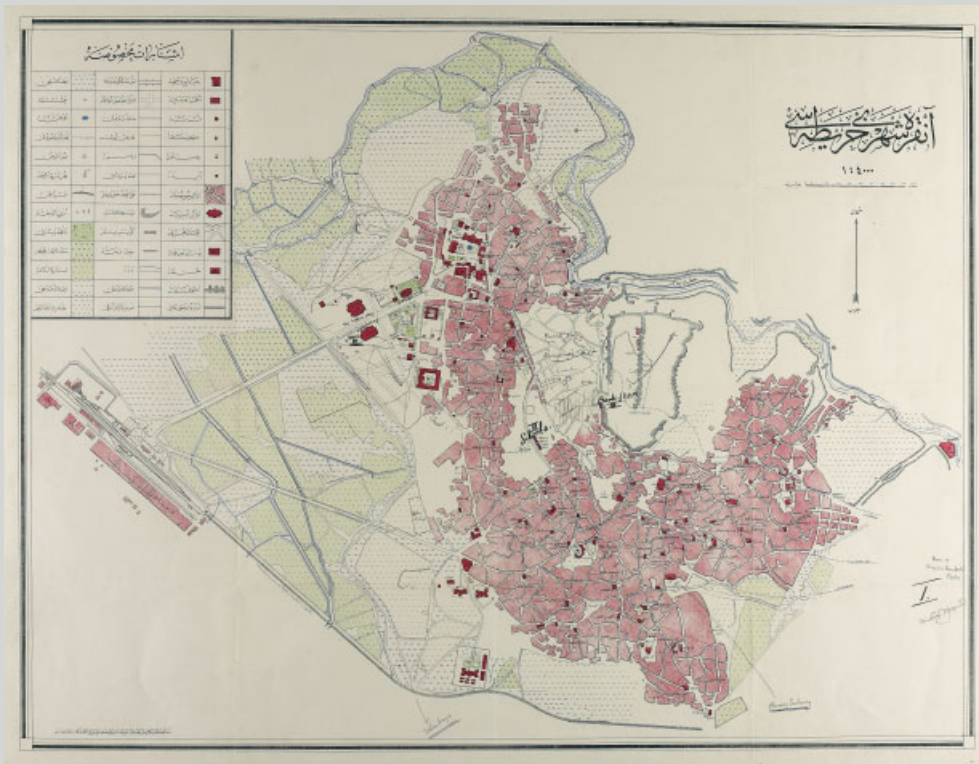
1. Kemal H Karpat, *Osmanlı Nüfusu: 1830–1914* (Ottoman Population: 1830–1914), Tarih Vakfı Yurt Yayınları (Istanbul), 2003.
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ANKARA



THE MAKING OF EARLY REPUBLICAN ANKARA



Zeynep Kezer outlines the ascendancy and development of Ankara from an obscure, central Anatolian town into a capital city that was to become the focus of the new nation state. Informed by German architectural and technological expertise, it was executed to rigorous Modernist planning principles and aesthetics, and came to represent in urban form the polarisation of pre-republican and republican Turkey.

A 1926 map of Ankara (above) and Jansen's finalised masterplan of 1932 (opposite). Note the contrast between the geometric layout of the new streets and Ankara's existing urban fabric.

The making of Ankara is inextricably linked to the story of the Turkish Republic. The city rose to prominence as the staging point of the War of Independence, waged by the Nationalists, to liberate the country from Allied occupation in the aftermath of the First World War. In 1923, upon victory, rather than returning to Istanbul and restoring the empire, the Nationalists, under Atatürk's leadership (from 1919), moved the capital to Ankara, founded a republic, and embarked upon sweeping reforms. Turkey's leaders were determined to mark a new beginning and intended the move to physically and symbolically distance the new regime from the Ottoman capital and the social, political and economic order it represented. The contrast between the two capitals could not have been greater: Istanbul, a city of striking natural beauty, strategically positioned on a crucial passage between Asia and Europe, had been home to two empires for over a millennium. Ankara was a small, impoverished central Anatolian town which, despite its long history, had few attractions to offer. But Ankara's relative obscurity made it easier to frame it as a blank slate on which to inscribe the ideals of the new nation-state.

The process was fraught with difficulties. Turkey's new leaders wanted to build a capital comparable to its European contemporaries, but they lacked the expertise and means necessary to realise this goal. They were under

Ankara's first masterplan was commissioned in 1925 to Carl Lörcher, a German planner who had previously worked for the Ottoman government. Using the Citadel as a focal point, Lörcher charted a web of Baroque-inspired avenues, flanked by perimeter blocks.

mounting pressure to provide space for basic government functions, and shelter for the exponentially growing population, but did not have a shared conception of how to proceed. Moreover, there were profound rifts between the incoming republican cadres, who sought to use their newly acquired power to steer development towards areas of their choice, and Ankara's natives, who felt excluded from decisions regarding the future of their town. The former were further divided among themselves due to political differences and personal rivalries. These conflicts and constraints had a lasting impact on the course of Ankara's development.

Ankara's first masterplan was commissioned in 1925 to Carl Lörcher, a German planner who had previously worked for the Ottoman government. Using the Citadel as a focal point, Lörcher charted a web of baroque-inspired avenues, flanked by perimeter blocks. Republican Ankara's first landmarks – new administrative buildings, banks, cultural institutions, recreational facilities and residential structures – were built along these avenues. Designed in the Ottoman Revivalist style, these were the work of architects such as Giulio Mongeri recruited from the Istanbul Fine Arts



above: Aerial photograph of Ulus, developing according to the first portion of Lörcher's (1925) plan which included various institutions of the new state, designed mostly in the Ottoman Revivalist style. From *Bayındırlık İşleri Dergisi*, 1935.

left: Four ribbons of photographs comprising the ideals that shaped Turkey's capital – political Ankara, revolutionary Ankara, cultural Ankara and urbanist Ankara – converge and intersect with the implied horizontal axis of time (the numbers 200, 1800, 1937 represent the passage of years). The model and the images frame a statement by Atatürk, the founder of modern Turkey, acknowledging Ankara's 'Sacred Place' in the nation's history. From *La Turquie Kamaliste*, December 1937.

Academy, or those such as Kemaleddin Bey, Vedat Tek and Arif Hikmet Koyunoğlu from defunct Ottoman government agencies. Their architecture combined distinctly modern building programmes with a Beaux-Arts-inspired compositional sensibility and an ornamental vocabulary that showcased the distinctiveness of national origins – a practice that had parallels in other areas of cultural production, especially in music and literature, in Turkey and in Europe's other neophyte nation-states.

Lörcher's proposal comprised two parts. While the aforementioned designs pertained to areas in or near Ankara's existing fabric, his plan also had to respond to the inexorable push for southbound expansion that had gained momentum as the republican elite rushed to take up residence near Atatürk's home in Çankaya. The 6.4-kilometre (4-mile) distance between the two areas posed a challenge for any planner, considering there was neither the population nor building density to sustain growth as a congruent urban whole. To integrate the two, Lörcher formalised the path between them as a wide tree-lined avenue (Atatürk Boulevard) and, along the way, proposed a series of monuments and activity hubs, the most prominent of which was the Government Quarter.

The ambivalent adoption of Lörcher's plan fomented chaos. By the late 1920s, emphasis had shifted to the south, sidelining Ankara's historic core. As the government vacillated between different alternatives, slums, squatters, speculative land deals and unsupervised construction projects proliferated all over town. Eventually, in 1928, to reign in haphazard developments, the government organised a competition for a masterplan and selected the proposal by Professor Jansen of Berlin, who went on to enjoy a longer tenure and relatively more support than his predecessor.

Lörcher and Jansen introduced planning principles that differed fundamentally from Ankara's established settlement patterns. Both prescribed a change in scale and new paths of movement through the city. Whereas pre-republican Ankara had narrow and irregular streets, the newly planned districts had a regular geometry, bigger plots and wider streets. Rather than conforming to the topography, the new layout imposed a geometrical pattern of preconceived paths and nodes highlighting the new capital's monuments. In addition, Jansen instituted the concept of zoning by clustering together similar land uses and buffering them from each other with green belts. Zoning was antithetical to Ankara's long-standing spatial logic, which featured a fine-grained mix of religious, commercial and residential uses that were not necessarily demarcated from one another.

Jansen's plan, which allocated distinct zones for residential, industrial and administrative uses, labelled the Citadel and its environs 'Altstadt', as if to imply that the function of pre-republican Ankara as a whole was 'to be old'. This categorisation was



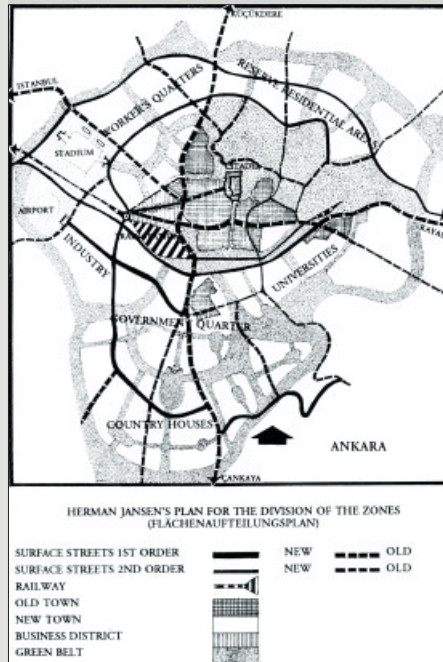
View towards Ulus along Atatürk Boulevard. Republican Ankara's earliest landmarks, designed in the Ottoman Revivalist style: (left to right) The Evkaf Apartment Block (Kemaleddin Bey, 1928); the Ottoman Bank and Agriculture Bank (both by Giulio Mongeri, 1926 and 1926–9); and, in the distance, Clemens Holzmeister's Modernist Central Bank (1931–3). On the avenue's right bank, the Real Estate and Orphan's Bank Headquarters (Holzmeister, 1934) and the cupola of the Customs and Monopolies General Directorate (Mongeri, 1928). Anonymous postcard. From *Ankara Posta Kartları ve Belge Fotoğrafları Arşivi Kataloğu*, 1993.

ideologically expedient for it reframed pre-republican Ankara as the perfect foil to set off the modernity of republican Ankara, the proud creation of a progressive state. It also implicitly legitimised the shifting of resources towards the south, conveniently dovetailing with the private interests of the republican elite. Ankara subsequently evolved as a binuclear capital. Kızılay emerged as a new commercial centre near the new Government Quarter, overshadowing Ulus, its counterpart in pre-republican Ankara. While Kızılay catered to the high-end tastes of Ankara's new elite, Ulus served the locals and less affluent residents, further widening and spatialising cultural and economic divisions.

Jansen continually encountered challenges from the speculatively minded and the authoritarian factions within the administration, who forced their preferences on to the plan. For instance, he retained many of Lörcher's ideas, especially for the newer parts of town and the layout of major streets. He reinforced the symbolic narrative along Atatürk Boulevard, which was to be punctuated with memorials honouring key milestones in Turkey's journey from its grass-roots independence struggle to a parliamentary democracy. However, halfway into the implementation, the presidential residence replaced the Grand National Assembly as the culmination of that narrative. Thereafter, in a shift that betrayed broader changes in Turkey's political direction and the ascendance of authoritarian factions, the construction of the assembly – the centrepiece of the Government Quarter – was delayed by decades and the civic space leading up to it was blocked by buildings and monuments dedicated to the state's security forces.

Lörcher and Jansen were two among many German architects, engineers, contractors and technicians working on a range of projects in early republican Turkey. Facing isolation in the international arena dominated by Britain and its First World War allies, Turkey had turned to its former partner, Germany, which was similarly marginalised after losing the war. Germany aggressively lobbied for a key role in shaping Turkey's reconstruction and modernisation. German-speaking central European architects – such as the Austrian Clemens Holzmeister, who designed the majority of the ministries and military buildings in the Government Quarter, and the Austro-Swiss Ernst Egli, whose work included the State Music Conservatory (1927–9), İsmet Paşa Girls' Institute (1930) and the Turkish Aviation Society Headquarters (1934–7) – also benefited from this shared cultural affinity.

The influx of professionals continued even after the regime change in Germany. Paul Bonatz, the architect of housing for civil servants in Ankara, Joseph Thorak, the sculptor who, with Anton Hanak, designed the Security



left: Ankara's zoning according to the Jansen plan (redrawn by the author).

below: Bruno Taut's Ankara University Faculty of Language, History and Geography (1935). In exile from Nazi Germany, Taut arrived in Turkey from Japan in 1936. In addition to teaching, he designed several buildings (many of them educational) despite his short tenure in Turkey. Anonymous postcard. From *Ankara Posta Kartları ve Belge Fotoğrafları Arşivi Kataloğu*, 1993.



Against Lörcher and Jansen's proposals, Ankara's main axis shifted towards the presidential residence in Çankaya, eclipsing the originally proposed terminus of the axis, the Grand National Assembly, the completion of which was delayed into the 1960s. The buildings that were first completed in the Government Quarter included the Ministry of Interior and Military Headquarters (1930–5) designed by Austrian architect Clemens Holzmeister, who had the implicit support of the more authoritarian factions within the republican administration, and the Security Monument (1935), honouring the police. In addition, the pedestrian portion of the now discarded north–south axis lost its character as a civic space. From *Bayındırlık İşleri Dergisi*, 1935.



Kızılay and the Government Quarter. In the foreground is the Security Monument by Thorak and Hanak, known for their work for the German Pavilion at the 1936 Paris World's Fair, and further back are the new ministries under construction. To the left Atatürk Boulevard leads up to Çankaya with new residential districts flanking it. From *Fotografla Türkiye*, 1935.



Clemens Holzmeister's Ministry of Public Works (1933–4). With the support of the more authoritarian members of the administration, Holzmeister obtained the commission for most of the buildings in the new Government Quarter, sometimes in contradiction to Jansen's overall precepts for the masterplan. His buildings featured stripped-down masses with little ornamentation, which in early republican Ankara's mostly empty landscape made them look rather out of scale, reinforcing a sense of stark authoritarianism. From *Fotografla Türkiye*, 1935.



Educational section of the Turkish Aviation Society designed by Ernst Egli, who developed a modern architectural language recognizable for the dramatic juxtaposition of distinct volumes. Egli was also commissioned to design the administrative headquarters of the same society, further down the hill, and the İsmet Paşa Girls' Institute on the neighbouring site, both facing Atatürk Boulevard. As here, the construction and completion of Ankara's new institutional and residential structures were often publicised in official propaganda publications. From *La Turquie Kamaliste*, April 1938.

Monument (1935), and the founding cadre of the Ankara Agriculture Faculty, came to Ankara via official channels. Meanwhile, Turkey actively recruited Jewish and other dissident German architects, artists and intellectuals who would be seminal in laying the foundations of modern Turkish academia. Prominent exponents of Weimar architecture – such as Bruno Taut (who also designed the Ankara University Faculty of Language, History and Geography (1935) and the Atatürk High School (1937–8), Franz Hillinger and Martin Wagner – were invited to teach at Turkish universities. And Ernst Reuter, the former mayor of Berlin, went on to establish Turkey's first urban planning programme at the Ankara University School of Political Science (he taught there from 1936 to 1948). Ankara thus became a site wherein architects of different political persuasions practised concurrently, as Turkey's leaders were more interested in the cachet of modernity they could lend the new capital than in their individual affiliations. Personal variations notwithstanding, these architects ushered in a strict, austere and classically inspired Modernist aesthetic that became closely identified with the state. Importantly, their input during a crucial stage of Turkish modernisation allowed the Germans to set the standards of architectural practice and education, securing their legacy long after they departed and Turkey forged new alliances in the aftermath of the Second World War.

As even this brief account implies, Ankara's landscape may be seen as a physical register of the formative processes of the modern Turkish state. The relocation of the capital, the polarisation of pre-republican and republican Ankara, the deferment of the construction of buildings to house democratic institutions while expediting the completion of enforcement agencies, were all inextricably linked to intense – and often contentious – deliberations among the republican leadership about the character of the new state.

Similarly, the choice of Germany as the primary source of architectural and technological expertise was directly informed by calculations about Turkey's place in the international arena. Finally, official representations of Ankara in words and images were never far from considerations of political expediency and ideological convictions. Portraying it as a city that was willed into existence by the republican leadership denied Ankara's immediate history. In so doing, not only did it tacitly sanction the exclusion of the town's natives from decision-making processes, but altogether avoided the difficult questions surrounding the demise – during Turkey's transition from empire to nation-state – of Ankara's sizable non-Muslim population and the landscapes they inhabited. Today, a handful of vineyard houses formerly owned by Armenians or Greeks, a hard-to-find synagogue, a makeshift church and a few place names offer only fleeting glimpses into what was, by all accounts, a diverse cultural landscape. Critically for the historian, these artefacts, along with the Citadel and its environs, demonstrate that rather than being a blank slate with no history, Ankara is a palimpsest that occasionally reveals the underlying layers of experience and memory it encapsulates. **D**

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Medium-Scale Anatolian Cities

Conceptual and Physical Routes of Urban Transformation



TAGO Architects, Korupark gated community and shopping centre, Bursa, 2006

Upmarket gated communities such as this are widely believed to meet the aspirations for a modern, idealised lifestyle.



Banu Tomruk investigates the post-1980s transformation of the built environment of medium-scale Anatolian cities. She examines the subject through a conceptual and physical framework that places as much emphasis on populist rhetoric – ‘identity crisis’, ‘historicisation’, ‘the making of a tourist city’ – as on the built structures themselves and their realisation as standardised apartment blocks and gated communities.

Since the 1950s, the urban dynamic of Turkey has changed dramatically due both to the increase in the country's population and to the acceleration of rural migration to the towns.¹ This rapid and unplanned urbanisation was initially accompanied by a housing crisis that led to the illegal – and chaotic – implementation of *gecekondu* (squatters' dwellings) settlements on public land, and then to an unprecedented drive to build apartments, a process spearheaded by the development of poorly designed, poor-quality blocks. The establishment of metropolitan municipalities in 1985 and then Turkey's Mass Housing Administration (TOKİ) in 1990 were the catalysts for the transformation of the country's medium-scale cities, preparing the way for the construction of a large number of mass housing projects, all following a similar typology. Currently, the process of building such housing is combined with equally numerous architectural and urban renewal projects in the most run-down areas as well as on formerly industrial sites.

While Turkey's major cities, such as Istanbul, İzmir and Ankara, have been undergoing a cycle of transformation that was its own dynamic, medium-size Anatolian cities have been experiencing a more rapid urban metamorphosis. Since the numbers of local developers and contractors are generally fewer than in the metropolitan areas, decision-making in relation to planning permission is speedier thanks to a lack of opposition, the only limitation on the implementation of projects appearing to be the financial resources available to the local municipality.

Medium-size Anatolian cities such as Bursa, Antalya, Kayseri and Gaziantep, with populations of around 1.5 million, have experienced particularly rapid transformation since the 1980s because their established industries (textiles, automobile, construction and food production) and thriving economies provide local municipalities with the power and capital necessary to effect such large-scale change.



Sinpa GYO, Bursa Modern housing complex, Bursa, 2007–
Asmalı Yalı Ottoman-style rendering on the facade of this new gated community.



Cafer Bozkurt, Hasan Şener, İlhami Kurt, Merinos Congress Centre, Bursa, 2007–
A former textile factory in Bursa city centre, a brownfield site, is currently being transformed into a congress centre.

While they are located in different regions of the country, the transformation of such cities occurs in the context of physical urban environments that share certain similarities. Their development serves to stimulate and accelerate a parallel transformation in the smaller cities on their peripheries. Their roots have thus been redefined as conceptual and physical routes intended to reflect urban transformation projects and urban scenarios, their impact on quality of life and the city in general, and the way in which they have interpreted their identities.

Conceptual Routes

The Trademark City Ideal

The ideal of becoming a trademark (or brand) city has been at the top of local municipal agendas for some time and, through local and national media, local politicians emphasise the need for, and the potential benefits to be gained from, such status. Meanwhile, attempts to achieve this goal often manifest themselves in the form of large investments in transportation, urban regeneration projects and the construction of upmarket shopping malls and gated communities. A recent example is Bursa, where a disused 270,000-square-metre (2,906,350-square-foot) former textile factory in the city centre has been transformed into an international congress centre. From the outset, the project was presented by the mayor and municipality as a major investment in raising the profile of Bursa as a trademark city.

Even though not all medium-size Anatolian cities boast similar large-scale project investments, their eagerness to be considered trademark or brand cities is evident in project proposals prepared by local municipalities that are then presented on official websites or in local media.

In almost every medium-size Anatolian city, municipalities are constructing below-ground road networks, even in the centres, paying scant attention to the often negative impact on the quality of urban space. Investment in transportation is one of the main initiatives championed by local politicians and the new roads seem to be the latest trend in the drive to make such cities 'civilised' and 'modern'.

Identity Crisis and Historicisation

With a multiplicity of layers, identity changes over time and with context.² However, the rather overworked concept of 'identity', and/or the never-ending quest for personal identity may have different connotations in terms of architecture. In medium-size Turkish cities, in general the very high numbers of immigrants create a heterogeneous demographic. Concerned lest the emerging social identities prove problematic and jeopardise their 'trademark' status, those who push through municipal projects seek to paper over the cracks by deploying the rhetoric of 'regenerating the lost identity'. With the rise of populist and political Islam linked to Turkish ethnicity, blended since the 1980s with the invocation of a glorious Ottoman past, in most medium-scale Anatolian cities, historic buildings are presently undergoing restoration with the aim of regaining their lost identity.



Urban transformation, Central Garage area, Bursa, 2009

The second stage of the Bursa Metropolitan Municipality's transformation project for the Central Garage area.



Sivas Avenue, Kayseri, 2009

Generic investment by the local municipality: 'being modern' with speeded up transportation.

With this objective in mind, in Bursa, Kayseri and Antalya museums have been opened to showcase the city's history, but again only with reference to its Ottoman past.

Even the new housing projects in these cities frequently feature Ottoman facade detail, something that could also be interpreted as an attempt to impose homogeneity on these architectural projects.

The Making of a Tourist City

Intimately connected with addressing a perceived crisis of identity in medium-scale Anatolian cities is the highlighting of a triumphant Turkish past by the creation of a tourist city focused primarily on its historic Ottoman cores. Ancient city centres in Bursa, Gaziantep and Antalya are in the process of restoration with the objective of regaining that lost identity and making them attractive tourist destinations. Reconstruction is by means of either large- or small-scale interventions, depending on the economic resources of the local municipality. However, in the long term, neglecting to maintain formerly heavily used areas in favour of such targeted investment, which effectively shifts the hitherto hybrid structure of city centres into designated touristic zones, could have the effect of driving better-off citizens into the isolated lifestyle of gated communities located on the city periphery.

Physical Routes

The Drive to Build Apartment Blocks

In Turkey, the high number of apartment blocks is responsible for both impoverishing the cityscape and underpinning the negative economic, social, cultural and political aspects of mass housing. The apartment building is a unique type in terms of the formation of the urban environment and of the architectural presence of a medium-scale town. Their appearance normally prescribed by urban regulations, such apartment buildings are usually problematic in terms of the lack of architectural quality, with often unrelated facade elements and inadequate spatial quality in plan organisation.

TOKİ (Mass Housing Administration of Turkey)

Since the mid-1980s, the transformation of the gecekondu areas into designed/planned housing undertaken by TOKİ has been recognised as an ambitious development creating a large number of mass housing projects in Turkey. However, TOKİ has monopolised every aspect of construction, operating as developer, manager, contractor and inspector at one and the same time. Thus, despite their potential, the projects present a standard uniformity with the same building typology replicated all over Turkey. The chance to contribute architecturally to the country has therefore been lost. TOKİ has been overseeing the projects from a capital-based architectural office, neglecting both user profiles and the social, physical, economic and cultural context of the city. The high number of such housing schemes also severely limits opportunities for local architecture practices to obtain housing commissions for the foreseeable future.



TOKi housing, Ankara, 2009

top: TOKi's uniform blocks in the city's Bassan Yapraklı settlement.

Seyitgazi area, Kayseri, 2009

above: Typical inner-city scene in a medium-size Anatolian city.

Inner-city apartment blocks, Antalya, 2008

opposite left: Mixed-used apartment blocks in the generic city centre.

TAGO Architects, Korupark gated community and shopping centre, Bursa, 2006

opposite right: Upmarket gated communities such as this are widely believed to meet the aspirations for a modern, idealised lifestyle.



Gated Communities

In medium-scale Anatolian cities, communal life is largely driven by a form of social competitiveness which is evident in such things as the clothes people wear, the type of house they live in, the way they decorate their home, the car they drive. Here, people tend 'to think through "the eyes of the others"'.³ A 'new lifestyle' in a 'distinctive milieu' is what people aspire to. Combined with the hard sell of real-estate agents, the visual and textual representations of the new luxury housing complex set behind high walls and closed gates both in the media and on the Internet sends out an enticing message to the 'white Turk' of medium-scale Anatolian cities. The mantra of a 'distinctive and happy' lifestyle is seen as key to attracting the high-income upper-middle and upper classes to such housing developments.

One reason, then, for the relatively high demand for gated communities is that they are widely believed to meet the aspirations for a modern, idealised lifestyle. Not only the plan types, site plans and 3-D illustrations, but also the manipulative advertising used in their marketing are similar. Having the most prestigious shopping mall gives a complex the edge over other competing gated developments. What makes the increasing number of gated communities particularly problematic, however, is their isolation – their lack of interaction and integration with their urban and social context, as well as their failure to invest in the local infrastructure. At best, these complexes are constructed with heavy investment in their interiors, but there is no corresponding investment in the urban fabric, no intervention to ensure the existing physical environment is not detrimentally affected, for instance, by the increase in traffic.

Transformation Intensified

The most recent period of urban regeneration is creating opportunities for cities which previously did not or could not fully implement masterplans. Especially post-1990, Turkish cities have experienced intensive transformation reminiscent of the mass housing project phase (TOKİ) of the 1980s. In Turkey's medium-scale cities, this restructuring demonstrates a profound dynamism along with its problem areas and is creating a foundation on which young architects can literally build in the future. A crucial question is whether such Anatolian cities will develop with the same/similar visual/architectural language. To what extent is it possible to improve the architectural and urban quality of the rapidly changing face of these cities?

In the midst of what is a chaotic process of urban transformation, it is vital to maintain a distance from the populist rhetoric which talks of the making of tourist cities, creating points of attraction or regenerating lost identity. To be objective about urban restructuring is to be aware of the inner dynamic of each individual city and to plan its transformation in the light of the needs of all its modern-day citizens. ▴

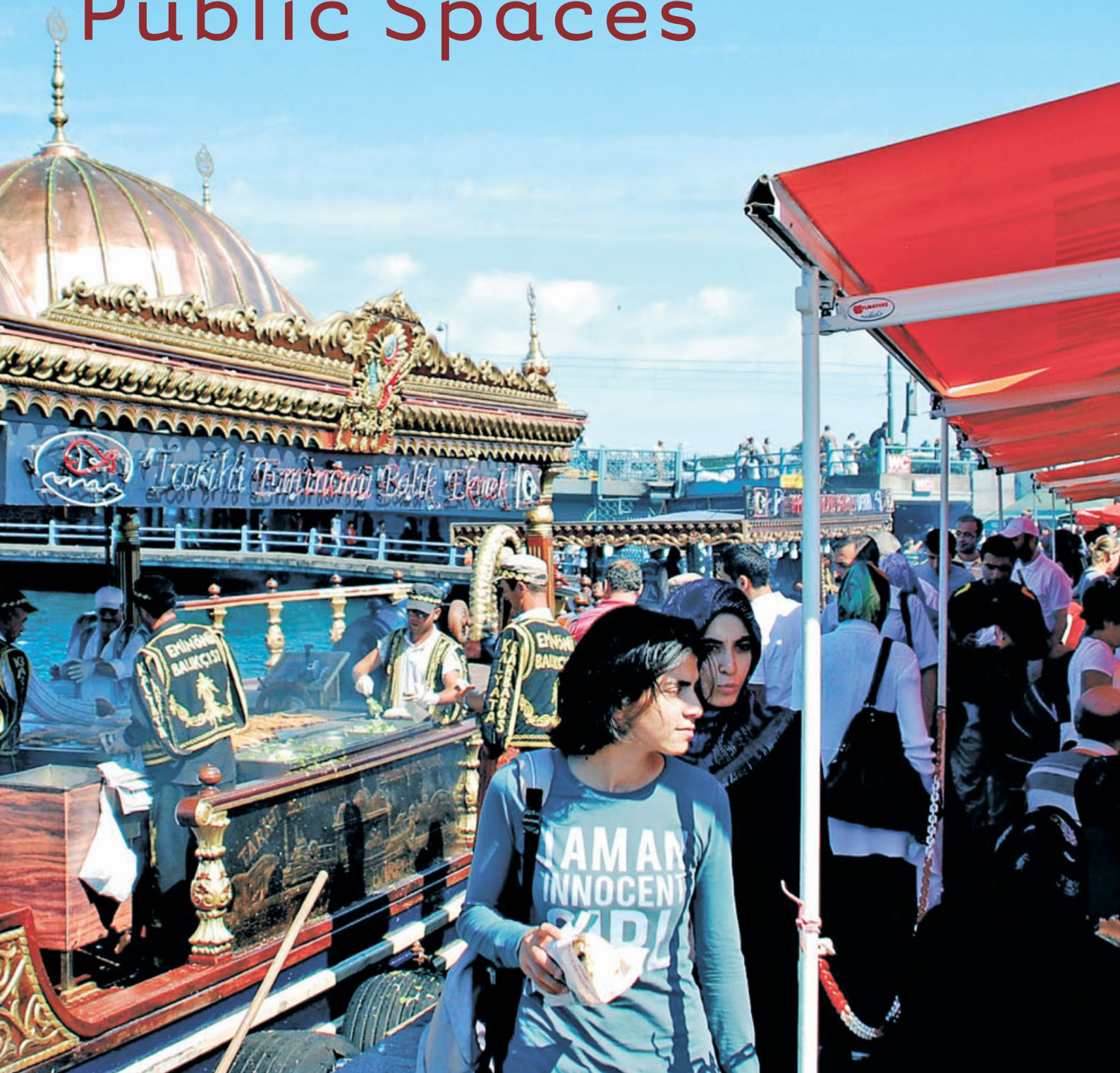
This article is based on ongoing doctoral research by Banu Tomruk at Istanbul Technical University, supervised by Ipek Yada Akpınar.

Notes

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The Potential of Istanbul's Unprogrammed Public Spaces



Istanbul recreates itself constantly. A continually evolving city, it can be likened to a living organism. As **Hülya Ertaş** explains it owes much of its vibrancy and heterogeneity to its unprogrammed spaces. These create a blank canvas for the metropolis' citizens and their activities. They are also at the essence of the city's enviable diversity, as they provide important meeting places for a rich mix of social and ethnic groups.

Unprogrammed space provides rich potential for a city that is complex, crowded and ultimately difficult to manage. Istanbul, as the largest metropolis in Turkey with a population of 12.5 million (about one-fifth of the country's overall population), takes advantage of its unprogrammed spaces to make its urban fabric lively and vibrant.¹ With its illegal settlements and unrestrained character, it is very much subject to the activities of its occupants and citizens.

To further open up the term 'unprogrammed' in this context, it needs to be clear that it should not be confused with the Modernist notion of public space: the space left empty to be flexible to potential uses and functions. If space is unprogrammed it does not mean that a function has not already been attributed to it, but rather that it can be transformed by other external influences, especially users. Unprogrammed space does not require that people come and create activities within it; it is just there waiting to be discovered and improvised. It is self-organising, unstable and variable.

Unprogrammed space is open to transformation and change, it is flexible, and bottom-up rather than top-down; it is public space that is open to being privatised by the citizens themselves. To sum up, the three main characteristics of unprogrammed space are that it is open to transformation and change, nourishes heterogeneity, and is open for privatisation.

Being Open to Transformation

This said, it is pointless trying to decide whether Zenobia is to be classified among happy cities or among the unhappy. It makes no sense to divide cities into these two species, but rather into another two: those that through the years and the changes continue to give their form to desires, and those in which desires either erase the city or are erased by it.

Italo Calvino, *Invisible Cities*, 1974, p 35²

Surely Istanbul is formed by its desires; by the desires of its citizens. A metropolis of more than 12.5 million inhabitants, it has recently (on 20 July 2009) had a new masterplan approved, prefaced by a few years of discussion and testing. But despite these intentions, Istanbul is a city that defies planning and strict regulation and control. Instead it veers towards self-formation, randomness and chaos.

Just like Calvino's fictional city Zenobia in his *Invisible Cities*, Istanbul's unprogrammed spaces just stand there, waiting to be transformed by the activities of their citizens. The metamorphosis of unprogrammed spaces relies heavily on their users. Whether their features are designed or not designed, they hold a world of possibilities. In Beşiktaş, in the city centre, a huge statue of Barbaros Hayrettin Paşa stands by the sea surrounded

Vendors selling fish sandwiches in Eminönü, next to the Galata Bridge in Istanbul. The fish is caught from the sea, cooked on boats decorated in Ottoman style, and served to people on the shore.

One of the huge contrasts of the modern era has been that between public and private, a contrast that became even greater as cities grew and transformed into metropolises.

by a square in which cannons are randomly displayed. Here, there are a few banks to sit on, no shaded areas in which to rest; just a vast space of hard landscaping never intended to be used as a park. Yet this square is full of rollerbladers and skateboarders, and their friends watching them, even though it was not designed as a skateboard park either. It is an undefined, unprogrammed urban place at the very core of a crowded neighbourhood that can be transformed as its users desire.

Balat, one of the oldest settlements in the city, is similarly popular for leisure activities. Along the Golden Horn here is a narrow green belt, between the sea and the road, from which there are views of the coast and the area's historic buildings. On spring and summer days, one can smell barbecues as people gather together for urban picnics on this stretch of grass, which has been carefully positioned here to please the eyes of passers-by, either moving in traffic along the road or walking along the shore. At weekends the belt is full of families enjoying this popular pursuit, unaware of the heavy traffic behind them. However, such urban picnics are not only confined to Balat; they take place also on the vast areas of grass that lie between motorways and crossroads across the city.

Nourishing Heterogeneity

Globalisation and advances in communication have all but eradicated the homogeneous metropolises of the past. A 21st-century city, Istanbul is therefore heterogeneous, both socially and economically, as is its population due to the high rates of immigration from rural areas of the country. The different cultural patterns of the multitude of ethnic groups spread across Turkey – Laz, Circassian, Kurds and so on³ – who immigrate to Istanbul⁴ also have an impact on the built environment. It is no surprise, then, to see *gecekondu* areas (informal housing settlements, constructed mainly on government land) next to modern-day high-rise office blocks.

Scaled down to urban space, this heterogeneity causes multiple uses of unprogrammed spaces. Fishing is just one example of an urban activity common to all these different citizen profiles. Home to localised fishing

communities for centuries, Istanbul's shores are today places where people from different parts of the city come to fish. One of the main sites is the Galata Bridge, across the Golden Horn, connecting Karaköy to Eminönü. With six lanes of heavy traffic and a tramway path in the middle, the pavements on both sides of the bridge are teeming with fishermen, street vendors selling and renting out fishing equipment, and passers-by – especially tourists enjoying the views of the historic peninsula and on their way to the cafés and restaurants on the lower floor of the bridge. Similarly at Bebek, on the European side between the two bridges crossing the Bosphorus, fishermen, swimmers, joggers and walkers are joined by people just relaxing along the area's banks – all crammed on to a 3–4-metre (9.8–13-foot) wide pavement. This heterogeneity, deriving from the unprogrammed manner of the urban space, provides citizens with opportunities to meet and interact.

Citizens' Privatisation of Public Space

One of the huge contrasts of the modern era has been between public and private, a contrast that became even greater as cities grew and transformed into metropolises. According to Lyn H Lofland, the city is a community made up of strangers, something that was not experienced in villages or towns; so the individual is ever seeking to reconcile this feeling of strangeness.⁵ One solution here is the privatisation of public space, enabling citizens to develop a feeling of belonging to the place within which they live. Seventy per cent of Istanbul's buildings are illegal, most of them constructed on government land. However, these *gecekondu* areas are not the very dark places of the city one might think them to be. The infrastructure they require is largely in place, and children can be seen running about and playing outside, alongside women sitting socialising. Their attempts to beautify the streets and gardens close to their *gecekondu* houses are clearly visible. In privatising the land, and adopting it as their own, they have created vibrant settlements that are rarely, if ever, to be found in profit-based mass housing projects.

Similarly, in Eminönü, one of Istanbul's historic trading centres, for example, some street vendors' historically mobile stalls are now permanent fixtures along the pavements and in the markets they have privatised and made their own. However, mobile vendors still play a large part in transforming the area's public spaces. In claiming their place on the pavement and becoming a focal point for customers, spaces become crowded, noisy and vibrant in an instant.

below left: Young skateboarders and rollerbladers at the unprogrammed park in the Beşiktaş district of Istanbul transform the space into a lively area for those looking on and passers-by.

below right: In Balat, urban picnickers enjoy sea views from the green belt between the sea and the road.

bottom left and right: Istanbul's Galata Bridge is one of the city's most popular spaces for fishing. The pavements either side of the bridge are teeming with fishermen, vendors renting and selling fishing equipment, and tourists taking in the views of the coast and historic peninsula.





top left and right: On the European side of Istanbul, along the coast from Arnavutköy to Rumeli Hisarı, the area between the two bridges crossing the Bosphorus was a fishing town before Istanbul became a metropolis. It now provides spaces for picnicking, fishing and swimming along a thin strip between the road and the sea.

bottom left: The informal buildings of the gecekondü settlement in Armutlu, on the European side of Istanbul where the columns of the Fatih Sultan Mehmet Bridge rise, leave space for outdoor use and nature.

bottom right: The mobile nature of street vendors' stands means these illegal traders can quickly and easily escape when the authorities descend.

Life Created by Citizens

As a lively and constantly growing city, Istanbul has defined its own parameters. It is a city largely shaped by its citizens. A reflection of this is the informal creation of urban spaces that are hybrid and continuously changing, always full of people. Although the local and central authorities attempt to impose legislation on the city, its citizens remain resistant to regulation, developing their own tactics for dodging laws and bylaws and effectively taking the power of the city into their own hands. For example, the mobile nature of street vendors means they can pack up their wares as quickly as possible and move on to escape from police officers on the lookout for illegal traders.⁶ And gecekondus are generally (illegally) constructed before elections, encouraged by politicians during their election campaigns to win the votes of those residing in these densely populated urban areas; the same politicians then grant amnesties legalising them before the next elections.⁷

The way that citizens in these ways take advantage of unprogrammed public spaces, and live in the city as they want to, thus raises important questions for architects and designers. Can an unprogrammed public space be designed without falling into the traps of the Modernist idea of vast spaces, or without the designer's ego strictly defining the functions? Can something in between, which gives citizens the opportunity to make their own decisions about their city, be designed and applied? If Istanbul is to be our model, the answer is probably yes. **Δ**

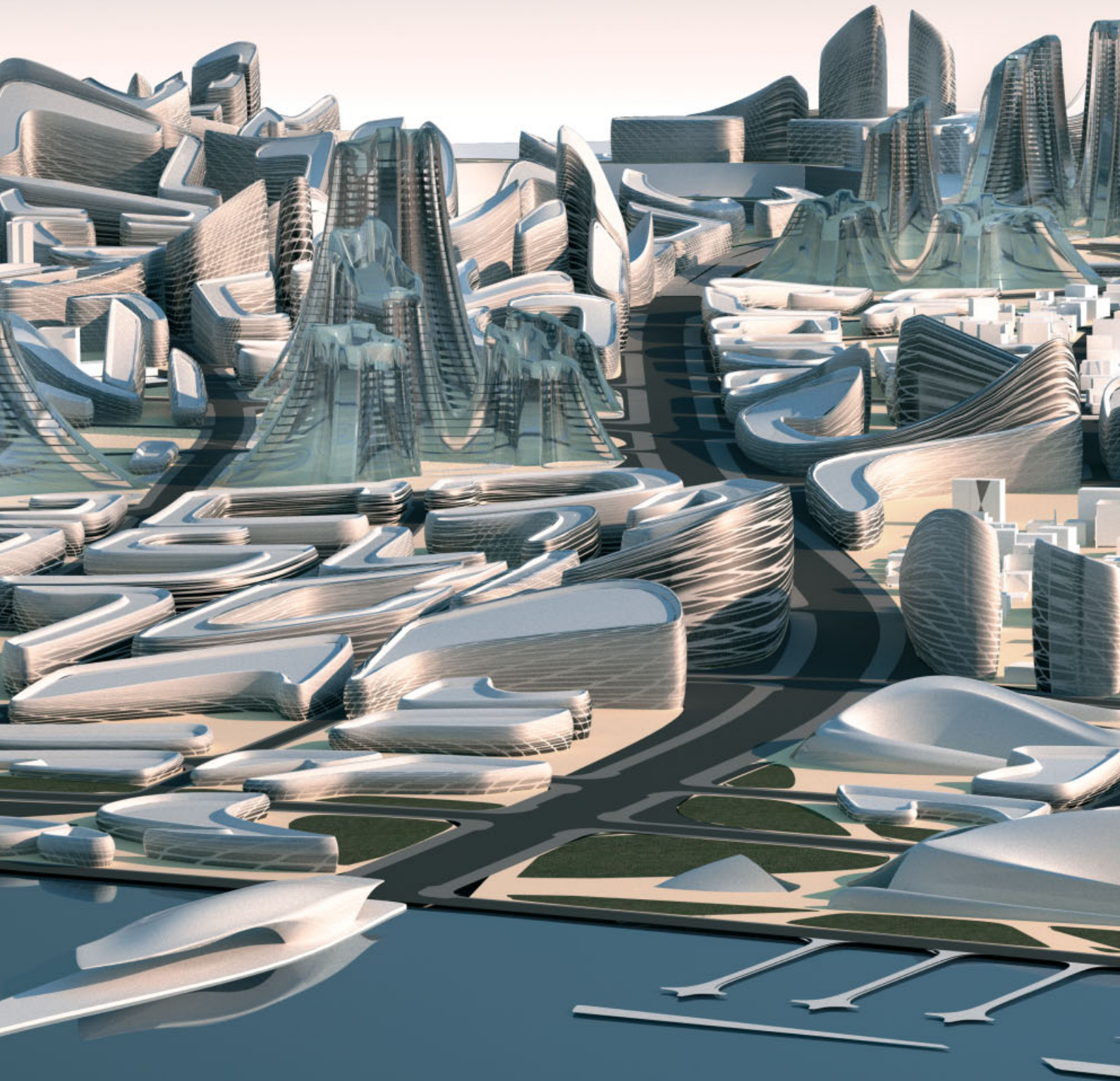
Notes

1. Turkey's population is 71,517,100 according to the census of 31 December 2008; and 17.8 per cent of the population – 12,697,164 people – live in Istanbul. See http://www.turkstat.gov.tr/PreTablo.do?tb_id=39&tb_adi=Population%20Statistics%20And%20Projections&ust_id=11.
2. Italo Calvino, *Invisible Cities*, Harcourt Brace Jovanovich (New York), 1974, p 35.
3. Konda Research and Consultancy's November 2008 research led by Bekir Ağırır demonstrates that 78.1 per cent of the overall population is Turk, while 13.4 per cent is Kurdish, 0.75 per cent Arabic, 0.3 per cent of Caucasian origin and 0.2 per cent of Balkan origin, and that 14.8 per cent of Istanbul's population is Kurdish. See <http://www.konda.com.tr/html/dosyalar/kurtler.pdf>.
4. According to the Turkish Statistical Institute's Regional In-Migration and Out-Migration by Statistical Region Report 2000, 513,507 people immigrated to Istanbul in 2000: 67,409 from western Marmara, 78,807 from eastern Marmara, 57,744 from the Aegean, 42,115 from western Anatolia, 48,209 from the Mediterranean, 27,182 from central Anatolia, 57,787 from the western Black Sea, 50,373 from the eastern Black Sea, 26,600 from northeastern Anatolia, 25,969 from central-eastern Anatolia, and 31,312 from southeastern Anatolia. See http://www.tuik.gov.tr/PrelstatistikTablo.do?istab_id=162.
5. LH Lofland, *A World of Strangers*, Waveland Press (Long Grove, IL), 1973, p 118.
6. There have been many failed attempts to include street vendors within the formal economy. In 2004, the president of the Ankara Chamber of Commerce, Sinan Aygün, stated that there was at least 10 trillion Turkish lira (about 5 trillion euros) of tax fraud in the street vendors' sector. See <http://www.atonet.org.tr/yeni/index.php?p=187&l=1>.
7. There have been many amnesties for gecekondü settlements. The last one was legalised in July 2003, just eight months before the March 2004 municipal elections. Under the new law, public land on which gecekondus were constructed before 31 December 2000 was to be sold to house owners. See <http://www.radikal.com.tr/haber.php?haberno=82067>.

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Current Urban Discourse

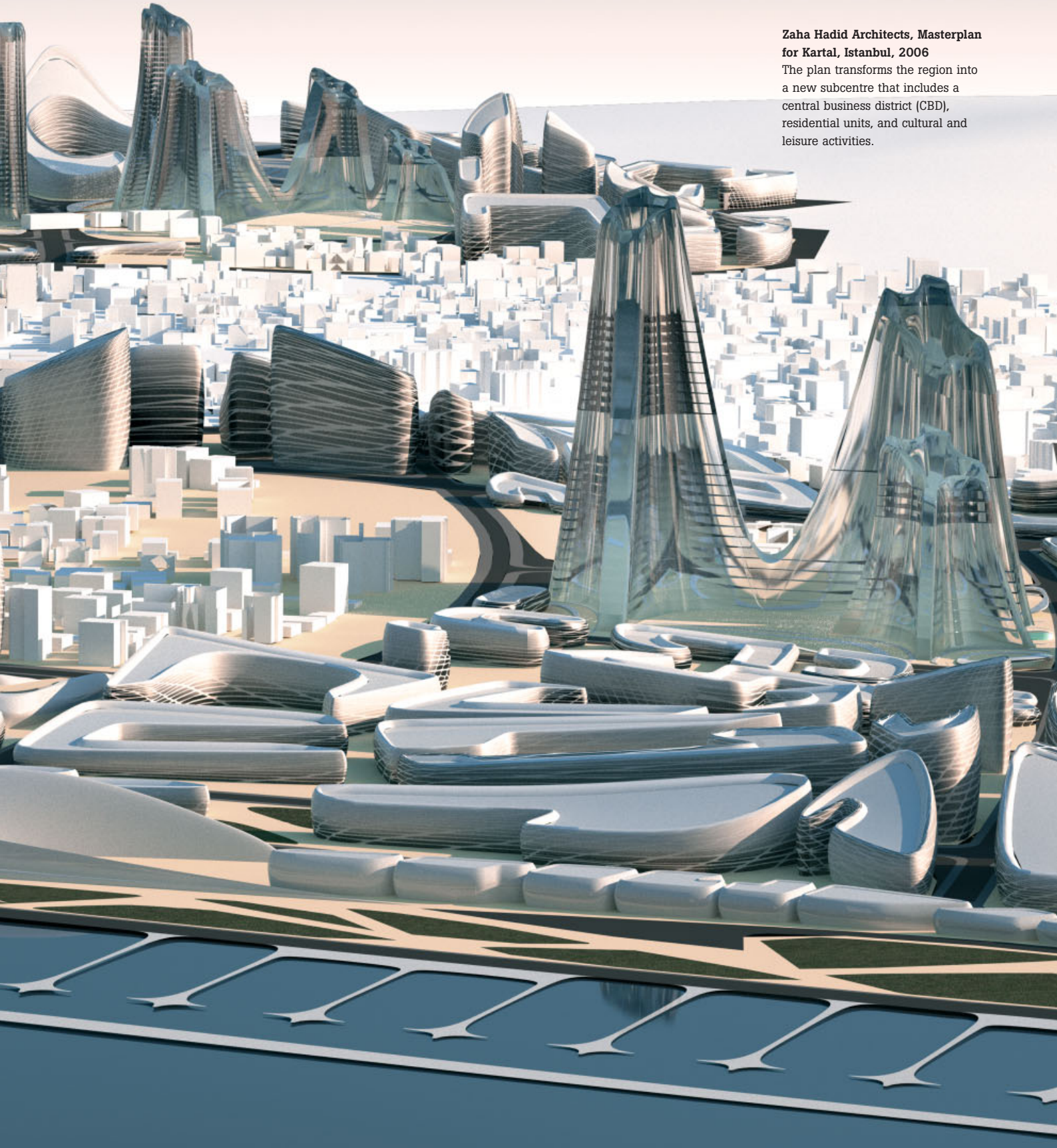
Urban Transformation and Gentrification in Istanbul



In the mid-2000s, unprecedented economic growth provided a catalyst for Istanbul's transformation. **Tolga İslam** outlines the background to large-scale urban development and renewal projects that have been undertaken by local authorities throughout the city.

Zaha Hadid Architects, Masterplan for Kartal, Istanbul, 2006

The plan transforms the region into a new subcentre that includes a central business district (CBD), residential units, and cultural and leisure activities.



**Tabanlıoğlu Architects,
Galataport project, Istanbul, 2001**

right: The project involves the construction of a cruise-ship port and the conversion of existing buildings for cultural and leisure activities. Although the project has not yet been realised due to problems that occurred during the bidding process in 2005, the Ministry of Culture and Tourism has declared Galataport among Turkey's tourism goals for 2010.

opposite: The newly constructed high-rise apartment buildings in the Başbüyük renewal area stand in sharp contrast to the organic pattern of the existing neighbourhood.



Since 2000, Istanbul has entered an entirely new era with rapid transformations taking place on an unprecedented scale. The city has been changing continuously since the 1980s due to the major role it has played in the opening and incorporation of Turkey's economy to the global world. But what makes this era different is the scale of change that casts past experiences into the shade.

The continuous economic growth at the global scale and the political stability maintained by a one-party ruling regime after many years of coalition governments helped Turkey's economy show spectacular growth between 2002 and 2007, with an average rate of around 7 per cent (almost three times the previous 10 years' average), where the gross domestic product (GDP) increased from \$350 billion to \$850 billion in just these six years. In the same period, the volume of foreign trade showed a threefold increase, reaching \$280 billion, 60 per cent of which was realised in Istanbul. Likewise, flows of foreign direct investment (FDI) into the country grew from \$1.1 billion in 2002, to \$20 billion in 2006 and \$22 billion in 2007 – 95 per cent and 89 per cent of which, respectively, were absorbed by Istanbul alone.¹

The reflections and indicators of these dramatic changes in the physical sphere of the city have manifested themselves mainly as investments in the transportation infrastructure, construction on vacant land, and transformation of the existing built environment.

Between 2004 and 2009, massive investments were made in Istanbul's transport infrastructure, amounting to around half of the greater municipality of Istanbul's budget. The investment focused on the construction of miles of underground tunnels for new metro lines, including the Marmaray project that connects the Asian and European sides of the city with an undersea tunnel

passing through the Bosphorus. A second reflection of the changes in the city's economic base are the increased levels of new construction by big capital on the city's vacant plots, for either commercial or residential uses. This is best exemplified by the construction of new shopping malls in every possible empty space: the number of shopping centres has increased around sevenfold, reaching 72 since the start of the decade, with an additional 49 under construction and due to be completed by the end of 2010.²

At the residential level, the most remarkable development has been the intensification and diversification of the construction of gated housing communities at different scales for different social groups on the city's remaining vacant land. Over the past few years, gating has been so prevalent that it has become the main design principle for almost every new residential project in the city.³ Another type of residential development worth mentioning is the new housing on state-owned land undertaken by the Mass Housing Administration (TOKİ), which in the last five years has arguably become the biggest real-estate actor in Istanbul. (Between 2003 and 2008, TOKİ was responsible for the construction of around 60,000 housing units in the city and is projected to create 65,000 more by 2012.)⁴

In addition to the aforementioned, another, and perhaps more significant (in terms of its impact on the social fabric of the city) development is the transformation of the existing built environment via urban transformation projects.

Transformation of the Built Environment

The term 'urban transformation' has been at the centre of the public authorities' urban discourse since the start of the 2000s – a magic term used by politicians at all levels as a tool to justify how they organise the physical sphere. The policy rhetoric surrounding it is quite persuasive, promoted as it is to the general public as a solution to almost all of the city's ills: it helps to avoid earthquakes, reduces crime, decreases segregation, removes stigma, increases poor living conditions and even combats terrorism! The highly convincing nature



of such political discourse has contributed significantly to the formation of a legitimate base and support among the mainstream population for the concept, and its easy translation into Istanbul's urban space. This takes the form of: urban design projects at the district level; flagship projects on the city's waterfronts; the transformation of *gecekondu* (squatter settlements on public land) areas; and the transformation of historic neighbourhoods (via urban renewal projects).

In 2006, the greater municipality of Istanbul launched architectural competitions for the masterplans of two districts located towards the eastern and western edges of the city. The aim was to create two new centres at the end nodes of the new transportation network: a central business district (CBD) in Kartal and a recreational centre in Küçükçekmece. Star architects and architectural offices with international reputations were invited to make plans: Zaha Hadid, Massimiliano Fuksas and Kisho Kurakawa for Kartal; and Ken Yeang, Kengo Kuma and MVRDV for Küçükçekmece, with Hadid winning the competition for Kartal, and Yeang for Küçükçekmece. The invitation of these star architects, whose presence would draw international attention to the city, was part of a wider marketing strategy to promote Istanbul as one of the world's top cities.

Apart from these large-scale projects that cover the entire districts, waterfront projects on a smaller scale are also on the city's agenda. Among these are the two waterfront projects along the Marmara Sea coast: the Galataport project on the European side and the Haydarpaşıport project on the Asian side. The projects involve the transformation of former port areas (which over the last two decades have lost their functional advantages) for use by tourists and the general public: mixed-use areas that involve cruise-ship ports, shopping

centres, hotels, offices, recreational areas and marinas. These are envisaged as flagship projects that would have effects beyond their immediate surroundings and add value to the city as a whole.

Another phase of transformation is evident in the *gecekondu* areas, the settlements that were informally and illegally developed by emigrants from rural areas of Turkey on public – and in some cases on others' – land in the post-1950s rapid industrialisation and urbanisation era. Following the revisions in the municipality law and mass housing law in 2004 and 2005 respectively, the transformation of *gecekondu* areas including Başibüyük, Gülsuyu, Gülsu, Derbent and Kazım Karabekir is now on the agenda. A common characteristic of these areas is the ambiguous and complex structure of the property rights.⁵ Another is the changes in the status of their locations that have occurred over time; the expansion of the city has meant that neighbourhoods located on the peripheries at the time they were founded have now become inner-city neighbourhoods. This acquired centrality has definitely increased the desirability of these neighbourhoods, and thus contributed to the pressures to transform the land for the use of more affluent populations or, in other words, to open them to the process of gentrification.

One recent example is the case of Başibüyük, a more than 30-year-old *gecekondu* area located on the north of the E-5 highway on the Asian side. The neighbourhood was declared a renewal area in 2006 by joint protocol between the local municipality, TOKİ and the city municipality. High-rise apartment blocks are now under construction on a former park, and the *gecekondu* residents have been asked to move into the new units and pay the difference between the construction costs of these units and the current value of their existing *gecekondu* houses in instalments over 10 to 15 years. This led to high levels of protests from local residents who did not want to lose their previous gains. However, despite this, the first stage of construction (the high-rise blocks) is almost completed, though residents did succeed in keeping the project on hold by refusing to move into the units under these terms. Following the municipality elections in March 2009, Başibüyük is now under the rule of a different political party, but ambiguity about the future of the neighbourhood continues.

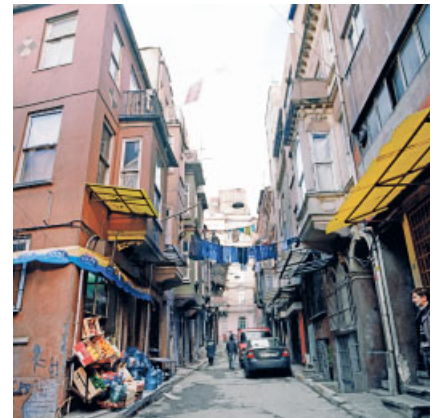
There were also other areas of the inner city which, in the eyes of the ruling neo-liberal Justice and Development Party (Adalet ve Kalkınma Partisi – AKP) should not have been deprived of this wind of change but were beyond the reach of their powers: namely the dilapidated, historically designated sites where disposition and control over the built environment was in the hands of relatively independent preservation boards. However, following the 2004 municipal elections, the agglomeration of the local authorities, the city municipality and the central government under one single party proved useful in overcoming this hurdle.

Two local municipalities, Beyoğlu and Fatih, lobbied for a new legislative framework to gain powers to intervene, and in June 2005 Code 5366, 'Law on the Protection of Deteriorated Historic and Cultural Heritage through Renewal and Re-use', was passed in the Grand National Assembly, providing the local municipalities with new powers of expropriation to implement renewal projects within historical sites and abolishing the need to obtain the consent of the property owners.



above and right: The proposed renewal project for Tarlabası transforms the area into a mixed-use development with luxurious residential buildings, shopping malls, cafés and hotels. The buildings in the render are the work of three different architectural firms: MTM Mimari Tasarım Merkezi, Tures Tourism Planning Restoration Agency and Trading and Tasarım Danışmanlık Hizmetleri.

opposite: Sulukule before and after the demolition that has destroyed the area's unique street fabric.





The law, or at least the way it is being implemented by the authorities, has proved to be a good recipe for increased gentrification via urban renewal projects in areas that have remained largely untouched during earlier rounds of the process. Newly declared renewal areas include Süleymaniye, Fener-Balat, Yalı, Kürkçübaşı and many others, but the most significant have been the pioneering projects in Tarlabası and Sulukule.

Tarlabası is a mixed-use neighbourhood in the centre of the city known for its high crime rates. Under the new law, an area of around 20,000 square metres (215,285 square feet) consisting of nine blocks and 278 plots was declared a renewal area in 2006. The renewal project is based on a model of public–private partnership where responsibility for its preparation and implementation rests with a private company (GAP). The aim is to transform the area into a gentrified enclave with luxurious residential buildings and commercial activities such as shopping malls, cafés and hotels. However, the project remains on hold due to conflict between the developer and residents over the percentage of the new units to be allocated to the existing owners.

Sulukule – now a ruined and deserted land – is a former residential inner-city neighbourhood in the historic peninsula along the city walls, characterised by its Romany population. In 2005, an area of around 90,000 square metres (968,783 square feet) encompassing 12 blocks and 382 plots was declared a renewal site. However, in contrast to the case at Tarlabası, the project here is based on a public–quasi–public partnership where the local municipality and TOKİ are working together to demolish the entire area to construct new and high-quality housing. To obtain one of the new units, existing owners must pay the difference between the cost of construction of the unit and the value of their current building in monthly instalments over 15 years. Existing renters, on the other hand, are granted the right to own apartment units in TOKİ's social housing in Taşoluk, a peripheral area around 30 kilometres (18.6 miles) away, by paying monthly instalments of around 200 euros over 15 years.



The Sulukule renewal project has been widely criticised by activists in the city who have created a platform for resistance and managed to draw the attention of the media to the neighbourhood at both national and international levels by arguing that the project will disperse the Romany community, erase the Romany culture and create homelessness. Despite this resistance, the municipality has already completed the most difficult step of the project by clearing almost the entire area by bulldozer in preparation for the construction of the new houses.⁶

All of the processes mentioned above form only a small fraction of the recent attempts at urban transformation by local authorities within Istanbul. Though there are certain differences between these processes regarding their scale, location and implementation, their outcomes remain the same: they all serve the appropriation of existing land for the use of higher-status groups – in other words, the gentrification of the city. Once these ongoing pioneer projects are implemented and emerge as concrete examples, they will form the basis of a larger wave of transformation across the city, and serve as a model for further transformation across the country. **D**

Notes

1. For the economic growth rates and foreign trade volume figures see www.turkstat.gov.tr; and for the foreign direct investment (FDI) flows to Turkey and Istanbul see www.treasury.gov.tr, and the reports of FDI in Turkey for 2007 and 2006 at www.treasury.gov.tr.
2. Jones Lang LaSalle, Turkey Retail Market Overview, April 2009.
3. Based on the actual increases in the gated developments in Göktürk, a region that is characterised by such communities, Bartu Candan and Biray Kolluoğlu Kırli speculate that the number of gated compounds in the city may have doubled since 2005. See 'Emerging spaces of neoliberalism: A gated town and a public housing project in Istanbul', *New Perspectives on Turkey*, No 39, 2008, pp 5–46.
4. Interview with Erdoğan Bayraktar (head of the Mass Housing Administration – TOKİ) by İsa Sezen, 'TOKİ'den 65 bin ucuz konut' (65,000 cheap housing units by TOKİ), *Zaman Newspaper Construction and Real Estate Journal*, 22 August 2008.
5. As a result of the amnesties granted in the 1980s, the gecekondu areas have a diverse ownership structure: those with title deeds, and those with use rights or no rights. The presence of diverse stakeholders with different interests and with limited legal rights (like the latter two groups) provides certain leverage for the local authorities during the negotiation processes.
6. In June 2009, an interesting and unexpected development took place that may have a significant impact on the future of Sulukule. The head of TOKİ, Erdoğan Bayraktar, asked the activists to present their alternative plan for Sulukule that accommodates more local residents in the neighbourhood. As of September 2009, negotiations between the activists and TOKİ are ongoing.

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DEVELOPING CITIES WITH DESIGN

Over the last decade, design has come to be regarded as a powerful and conspicuous tool for transforming cities to global city status. This has largely focused on the commissioning of a handful of iconic buildings by foreign signature architects. **Tevfik Balcıoğlu and Gülsüm Baydar** question the value of the 'design city' model for Istanbul as one that potentially privileges image over function, and spatial organisation and the novel over practical urban requirements, while overlooking social and environmental responsibility.



Tabanlıoğlu Architects, Galataport project, Istanbul, 2006

above: The government-initiated Galataport project received heavy criticism from professional organisations who opposed the demolition of the city's historical sites to clear the area for construction. The legal battle to suspend the construction was won by the Chamber of Environmental Engineers in 2008.

left: Büyükdere Street in Istanbul has changed radically in the last decade with the sudden rising of tall buildings, each designed as an architectural statement. Most bear the signature of Tabanlıoğlu Architects.



Defne Koz, Dondola seating range, 2008

Koz created this series of stainless-steel rocking seats, benches and lounge chairs for the international design company Megaron. New welding technologies were used to achieve seamless volumes which fold into gentle curves. Koz currently lives and works in Chicago, Milan and Istanbul.

Between 23 April and 10 August 2008, the largest modern art museum in Istanbul (Istanbul Modern) staged an exhibition entitled 'Design Cities 1851–2008'.¹ The exhibition included 109 design works ranging from architecture to fashion by 64 designers chosen from seven cities: London (1851 and 2008), Vienna (1908), Dessau (1928), Paris (1931), Los Angeles (1949), Milan (1957) and Tokyo (1987). This historical parade was to demonstrate how these cities have helped shape modern culture through design. The chair of the executive board of Istanbul Modern, Oya Eczacıbaşı, stated that the event was intended to support Istanbul's aspiration to itself become a 'design city', and claimed that the exhibition would strengthen the relationship between Turkish design, global design and contemporary art.²

The timing of the exhibition was directly linked to Istanbul's selection as the European Capital of Culture for 2010.³ Headed by the Ministry of State, the organisational board responsible for realising improvements in the city for this purpose placed particular emphasis on design, ambitiously claiming that Istanbul also has the potential to become the European Capital of Design.

The 'Design Cities' exhibition, then, had a twofold significance. First, the conspicuously Eurocentric focus of the event marked the geographical priority of the discourse on globalisation, and Istanbul's aspiration to become a global design city needs to be understood in this context. Second, staged at an art museum, the exhibition emphasised the aesthetic aspect of design by



The purity, geometric clarity, abstraction and simplicity associated with the shiny surface of stainless steel are harbingers of new forms with the potential to inspire novel approaches to open-air and urban furniture. Koz's Dondola project won the Elle Decor International Design Awards 2008 for Turkey, and the Red Dot Design Award 2009.

forging a relationship between global design and contemporary art. These two factors link notions of the city and design at both discursive and practical levels.

Indeed, within Turkey's contemporary art scene, the design city idea has attracted considerable intellectual energy and has created an arena in which cities across the country compete for this prestigious title. A recent newspaper article announced regretfully that although many of the city's designers have now established successful practices in Istanbul, İzmir still has a long way to go to achieve design city status.⁴ Such is the prestige of the 'design city' term that in the last few years it has come to be used in wide and many different contexts, ranging from the name of an e-forum of designers to the marketing slogan of a gated community.⁵

No doubt the Bilbao model which championed such designers as Frank Gehry, Santiago Calatrava and Norman Foster has been central in relating the concept of the city to the concept of design. This emphasis on signature designers is supported by the shift of focus in urban planning from the overall physical order of the city to an enterprise dealing with administration, facilitation and process. In *Cities of Tomorrow*, Peter Geoffrey Hall states that:



Aziz Sanyer, Cioccolata bookcase, 2009

Turkish designer Aziz Sanyer designs for international companies including Italian design studio Altreforme. His work, including this aluminium bookcase, is representative of the minimalist approach which blends simplicity with the right proportions to make strong formal statements.

Sometime during the 1970s, the city-planning movement began to turn upside down and inside out; during the 1980s, it seemed at times almost on the point of self-destruction. ... Planning turned from regulating urban growth, to encouraging it by any and every possible means. Cities, the new message rang loud and clear, were machines for wealth creation.⁶

The intricate relationship between planning and design, which began in the Renaissance and continued until the mid-20th century, spreading from Western cities to the postcolonial world,⁷ thus seems to have dissolved. As contemporary urban theorists argue, the city-planning movement reached the point of self-destruction during the 1980s, when cities turned into machines for wealth creation backed by capital support for unlimited growth.⁸

Istanbul's aspiration to become a design city despite its seemingly unregulated growth needs to be understood both in the context of this transformation and the rise of global cities at the transnational scale. The worldwide geographical dispersal of service outlets, offices and factories results in the need for centralised management in a few major cities clustered around major banks and



Aziz Sanyer, The Gull, 2007

Sanyer won a design award from the professional organisation of industrial designers in Turkey for this seat, which embodies qualities of plasticity and whiteness, and enjoys a carefully considered balance of form.

headquarters offices. These so-called 'global cities' are not only important nodes in the flows of finance, trade, migration and information; they also offer unprecedented market opportunities for the design professions.

There is thus an increasing demand for signature architects to be producers of iconic objects rather than planners of cities. As a striking example, a prominent avenue in Istanbul, Büyükdere Caddesi, is known popularly as Tabanlıoğlu Avenue, lined as it is with monumental sculpturesque buildings by Tabanlıoğlu Architects.⁹ Grandiose projects such as this are also supported by political and administrative powers for the prestige they symbolise. The political support for the construction of Dubai Towers (Dubai International Properties, 2005) and the Galataport development plan (Tabanlıoğlu Architects, also 2005) in Istanbul are two of the most prominent recent examples.¹⁰

The 'Design Cities' exhibition justifies this phenomenon by linking the exhibited cities with 'a history of remarkable individuals'.¹¹ This points to the image of the city rather than to its overall function and social organization – to an image that has less to do with formal organisation than the unprecedented proliferation of design-related conferences, exhibitions, fairs and competitions that emanate from Istanbul and spread to other of Turkey's aspirational cities.¹² The former role of the architectural profession in creating a city's image is now a shared one, and is gradually being replaced by other design professions (from graphics to fashion), arguably led by industrial design.

At one level, this may signal a positive development since our immediate urban environments need modest human-scale interventions by design. Development of cities with design concerns not only architecture, urban form and landscape, but also everyday objects, from tram and metro stations and bus stops to urban furniture, billboard advertisements and lighting. With few exceptions, however, designers enjoying rising international reputations tend to privilege novel and exploratory projects with commercial or cultural viability, which do not necessarily address such everyday requirements at the urban scale.



Though the recent work of Defne Koz, Aziz Sariyer and Ayşe Bırsel does not explicitly address urban issues *per se*, the first two in particular exemplify perfect form and function unity with a minimalist touch and stunning sculptural quality. Ayşe Bırsel's effort (with Bibi Seck) in Senegal, on the other hand, marks a turning point where modern design meets local culture, skill and craftsmanship, and generates an exceptional coherence of form, texture and pattern. This bears testimony to the fact that the urban responsibility of the design professions does not merely consist of beautifying cities through design; it also involves the participation of producers and users, and the production process itself, which need to consider the specific characteristics of the social and cultural context in question.

This point is particularly relevant in relation to the 2007 'credit crunch' that resulted in a global economic crisis, with loss of confidence in the markets and a decrease in consumer spending. Such developments have serious effects on both urban growth and the affordability of high-profile signature design products. But what is

their effect on the status of design in general? Citing instances from postwar Europe, cultural commentator Stephen Bayley stated that times of financial constraint have historically stimulated architecture and design: 'The great thing about our new constraints,' he says, 'is that both mediocrity and excess are now intolerable. ... Quality in architecture and design will, however, make everyone better off.'¹³

If political and economic powers have supported iconic buildings and design objects based predominantly on their visual appeal in the past, periods of both environmental and fiscal crisis will inevitably result in the prioritisation of other aspects of design such as sustainability and economic feasibility, and from the UK to Singapore, governmental departments have already made declarations in line with these new priorities.¹⁴ Similarly, a 2009 report by the Istanbul Municipality Urban Department Office has listed environmental, social and economic sustainability among the primary aims of its new development plan.¹⁵

In conclusion, developing such cities as Istanbul requires the full participation of all of the design professions as well as coordinated and well-planned action blended with vision and wisdom. While Istanbul's pride and rejoicing in participating in the increasing vibrancy of the global design scene is well justified, warning signals from the



Ayşe Bırsel and Bibi Seck, Madame Dakar armchair, 2009

left: Ayşe Bırsel, who currently lives in New York, is an acknowledged Turkish designer known mainly for her Herman Miller furniture system designs, which were featured in the science-fiction movie *Minority Report*. The Madame Dakar armchair, produced for Italian manufacturer Moroso, is an excellent example of the relationship between craft and design.

opposite: What emerges from this project for Italian furniture manufacturer Moroso, and the partnership of Ayşe Bırsel and Bibi Seck, is a colourful domestic environment which benefits from the powerful traditional weaving skills of Africa.

fast-growing fields of sustainability and environmentalism call for a radical reorganisation of both the design professions and urban land use. Without social and environmental responsibility, the notoriety of Istanbul (or any other place in the world) as a design city risks short-lived glamour and long-term social inequality. Sustainability in design is a relatively new topic in Turkish discourse, with much room to expand. Hence there is ample opportunity to establish ground for design cities that are not only stage sets of proliferating design events, but also exemplary sites of social responsibility through design. **D**

Notes

1. The exhibition was curated by the renowned architectural historian and director of the Design Museum in London, Deyan Sudjic, and moved to London in September 2008.
2. Oya Eczacıbaşı, 'Throwing Open the Door', in *Design Cities 1851–2008*, Istanbul Modern Design Museum, 2008, p 5.
3. The project was initiated in 1985 by the European Union and included cities of member countries only. Since 2000, the title has been granted to cities of countries that have membership candidate status as well. For more information on related organisations in Istanbul see www.istanbul2010.org.
4. Nedim Atilla, 'İzmir bir Tasarım Kenti Olmalı', *Akşam Ege*, 18 May 2008.
5. www.tasarimkenti.com was founded on 6 June 2008 as a moderated e-forum for designers. Ataşehir Tasarım Kent (Design City Ataşehir) is the name of a prestigious gated community in Istanbul.
6. Peter Geoffrey Hall, *Cities of Tomorrow*, Blackwell (London), 2001, p 379.

7. Filarete's Sforzinda (Italy, c 1465); Ebenezer Howard's Garden City (England, 1898); and Le Corbusier's City for Three Million Inhabitants (France, 1922) and Chandigarh projects (India, 1951–65) are among the most prominent examples of the union of city planning and design.
8. Hall, op cit.
9. The latter, led by Melkan and Murat Tabanlıoğlu, is a well-established Turkish firm with international practices, and ranks among the top 100 firms in a list drawn by the prestigious journal *World Architecture*. See www.tabanlıoglu.com.tr/ (accessed 11 May 2009).
10. The Dubai Towers project, consisting of two spiralling skyscrapers, was launched by the Istanbul municipality and Dubai International Properties in 2005. The Galataport redevelopment plan involves the transformation of a historic district into a constellation of shopping malls and hotels. For further information see www.designer.com/mimarlik/haberler-g5672.html and www.galataport.org/ (both accessed 22 May 2009).
11. Deyan Sudjic, 'A Time and Place, the Design Journey', in *Design Cities 1851–2008*, Istanbul Modern Design Museum, 2008, p 9. Sudjic adds that 'in the last 150 years, design has moved from a mechanical, anonymous process, to what at times looks like a celebrity-driven subset of branding.'
12. Even a brief glance at the e-platform Designer's (www.designer.com) listings of design events over the past few years is indicative of this trend.
13. Stephen Bayley, 'It's out with Marble and Chandeliers; in with Polished Limestone and Glass', *Observer*, 11 January 2009.
14. See [www.ribbonvalley.gov.uk/downloads/Ribble_Valley_Annex_Report_\(2\)_1_.doc](http://www.ribbonvalley.gov.uk/downloads/Ribble_Valley_Annex_Report_(2)_1_.doc) and www.ameinfo.com/153447.html (accessed 28 July 2009).
15. See www.ibb.gov.tr/TR/Documents/ISTANBUL_CDP_GENEL_BILGI.pdf (accessed 28 July 2009).

Text © 2010 John Wiley & Sons Ltd. Images: p 64 © Tabanlıoğlu Architects, photo Ugur Cebeci; p 65 © Tabanlıoğlu Architects, photo Sapphire at CBD of Istanbul, Maslak/by Ugur Cebeci; p 66 © Defne Koz; p 67 © Aziz Sarıyer; pp 68–9 © Ayşe Bırsel & Bibi Seck

CREATING INTERFACES FOR A SUSTAINABLE CULTURAL PROGRAMME FOR ISTANBUL

An Interview with Korhan Gümüş



View from Topkapi Palace,
Istanbul, to the Golden Horn,
showing the modern
infrastructure of the old
city, now a mix of both
new and historic
buildings.





Korhan Gümüş, the Director of Urban and Architectural Projects for the Istanbul 2010 European Capital of Culture (ECOC) Agency, tells **Hülya Ertaş** about his agency's plans for managing the ECOC process, its intention to create a bottom-up model and the challenges it faces. He discusses four of the agency's most significant projects and how these are being realised in collaboration with a wide variety of actors.

In 2010, Istanbul is in the spotlight as European Capital of Culture. The special status this confers on the city raises significant questions about its future and its development: should it be portraying itself as a financial centre, a tourist destination or a city of culture? Attaching a distinctive label to Istanbul is problematic since the metropolis' decision-making processes are highly complex. While the municipality is a service provider for the city's transportation and infrastructure, some major projects for Istanbul, like Marmaray or the mass-housing projects of the Mass Housing Administration (TOKİ) are managed by central government. This management model, with its multiplicity of actors, makes it hard to draw up an all-parties-agreed vision for the city.

The Model

On 13 November 2006, Istanbul was formally announced as European Capital of Culture for 2010, and about a year later, on 2 November 2007, the 2010 Istanbul ECOC Law was passed, setting up the agency as a legal entity. Involved from the outset, from the nomination stage, Korhan Gümüş planned a bottom-up model for an agency that would liaise with NGOs contributing ideas for the regeneration of the city. Indeed, the agency not only started work by contacting NGOs, it also called for projects that were open to other institutions as well. The intention was to create a body to coordinate Istanbul's numerous decision-making authorities, which would empower them and make them more effective. The result, however, states Gümüş, was that the agency turned into yet another authority – albeit one in control of its own budget – which Gümüş believes has in the end caused yet further fragmentation of the decision-making process.

The Goal

Gümüş finds the physical intervention of this fragmented management model in a city problematic since it is based on conflict between authorities and is thus incapable of developing ideas for the city as a whole. This technocratic approach considers as its main aim the realisation of construction projects, and can only produce a further fragmented city, since it lacks an understanding of the indispensable role of a holistic approach to urban planning. Gümüş believes the 2010 Agency could have solved this problem by generating urban ideas itself and by working as a subtle strategic tool to integrate the decision-making process.

Of Istanbul's ECOC Agency budget, 70 per cent (about 800 million Turkish lira, or approximately 375 million euros) was allocated to funding construction projects, and most of this was transferred to the municipalities, since they are more experienced at implementing building



The AKM (Atatürk Cultural Centre), closed for renovation since June 2008.

programmes than at organising cultural activities. According to Gümüş, this emphasis on getting things built subordinates architecture to construction; architecture becomes merely an extension of that industry, whereas it could have served as a jewel in the cultural industry's crown. As Gümüş states: 'The Istanbul 2010 Agency focused on construction when it could have championed the research-based, opinion-oriented culture industry by producing projects based on urban schemes, running open urban-planning and architecture competitions, and doing R&D to produce innovative construction and restoration technologies for Istanbul. Construction can be accomplished somehow or other at any time.'

The invitation to NGOs, architects and contemporary artists to participate in the 2010 process aimed to encourage the development of independent ideas. In Gümüş's opinion: 'One of the main problems facing Istanbul today is that intellectual production has become totally absorbed in philanthropic ventures because public institutions require the artist or the independent concern to toe the authorities' line.' Since some architects and artists are in thrall to these charities, there is a risk that architecture and art become disciplines that address only the elites, and not the general public, and so foster a different kind of class discrimination. Practitioners of the arts are isolated in the private sector, their relationship with power either adversarial or conciliatory, thus they cannot produce a transformative model. Gümüş is of the opinion that the 2010 agency had the potential to transform this dichotomy in collaboration with these actors, and to provide opportunities for creative engagement within the public realm. The aim of the programme was not based on the belief that 'if government can't do it, NGOs should', but rather on the idea of fostering points of contact and common ground for such endeavours between these actors and the state.



Archaeological excavations in Yenikapı revealed during excavations for the Marmaray project are evidence of Istanbul's long history.

The Challenges

Gümüş describes three different approaches to the Istanbul ECOC as follows:

'What the authorities plan for Istanbul has serious implications for 2010. One approach is to promote Istanbul's marvellous history to Europe and to the world; that is what frames the cultural programmes and restoration projects. A historicism can be traced based on a retelling of Istanbul's past, in an Orientalist way that orients itself. This is in part understandable, since it is also a prerequisite of the Turkish setting and has a ready audience. Another approach is more finance related, taking 2010 as an economic resource, as a tool that will create jobs for culture professionals and provide budgets for their projects. A third approach is to use culture not for commercial or economic development, but rather as a tool for generating ideas, as a strategy for transformation – an approach that has been adopted in many previous European Capitals of Culture and many international cultural programmes.' In fact, the agency attempted to follow all three approaches simultaneously, which Gümüş feels at times seems to have produced tensions among those trying to manage the programme.

Gümüş also points out the dangers of conceptualising the city as a political object, considering the city as a tool for the articulation of political concepts. In the case of Istanbul, this would be to give it the appearance of a marvellous Islamic city, which is why most of the construction work related to 2010 revolves around the restoration of buildings belonging to the country's Ottoman heritage. He suggests that if they had taken the city as a political subject, understanding politics at the urban scale, this could have started a revolutionary change.

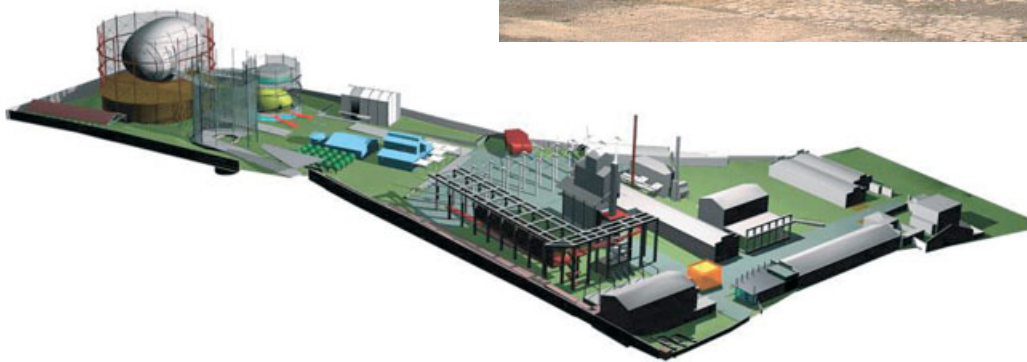
Introducing Istanbul's cultural heritage to a global audience is very new, since to date it is an aspect of national interest that has been confined to domestic politics. Gümüş regards 2010 as a very important opportunity to democratise the process, which is still approached in the fundamentalist way it was during the founding of the nation-state. He also opines that the earlier, historicist approach is no longer relevant.

The Projects

The most high profile of the Istanbul ECOC 2010 projects is surely the AKM (Atatürk Cultural Center) in Taksim which, having started to attract public attention only after politicians declared their intention to demolish it, has managed to survive. However, it required serious renovation. Murat Tabanlıoğlu, son of Hayati Tabanlıoğlu, the architect of the original centre, was commissioned to undertake the work. Even though the project was approved by the 2010 Agency and the Preservation Board, work could not commence because of a court order for a stay of execution as the plans were not in accordance with the original building. According to Gümüş, no individual or institution really cared whether the AKM building was functioning or whether its cultural programme was well managed, but when work started on the project there was nevertheless wide-scale opposition even though no one came up with an alternative proposal for renovating the centre.

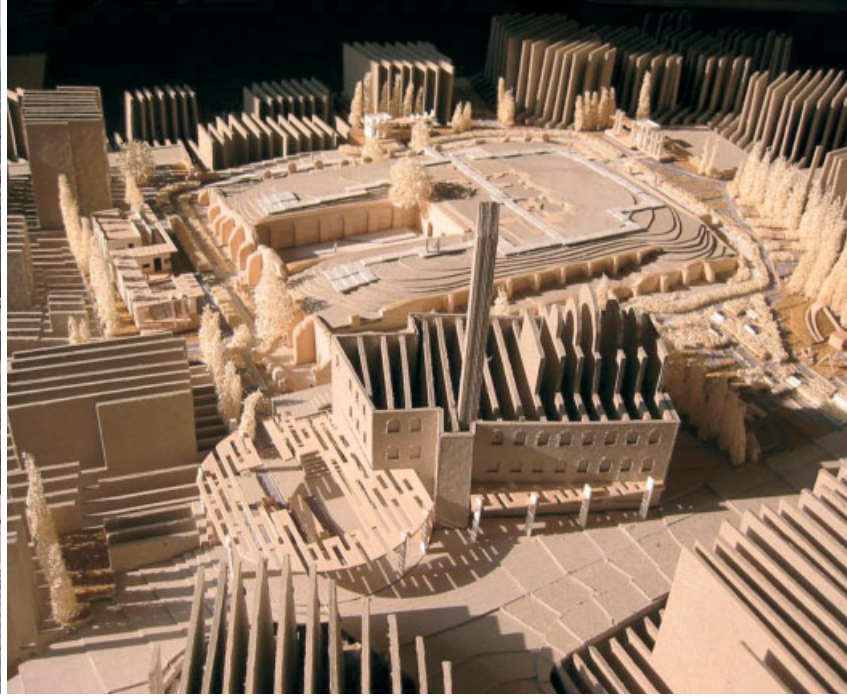
right and middle: The Hasanpaşa Gashouse in Kadıköy has been left unused since 1993.

below: Concept design by Istanbul Technical University's Faculty of Architecture for the renovation of the Hasanpaşa Gashouse for use as a cultural centre.



opposite left: Archaeological excavations in Küçükyalı, believed to have uncovered the remains of the Satyros Monastery which dates back to the 9th century.

opposite right: Atölye Architects' concept design for the Küçükyalı Archaeological Park in Maltepe.



Another important project, under development at Arkeo-Polis and the Yenikapı Transfer Point, is centred on the renovation of Theodosius Port, which was discovered during the excavations undertaken for the Marmaray development. (The Marmaray project involves the construction of a railway tunnel under the Bosphorus to connect Kadıköy and Yenikapı.) The archaeological remains at Theodosius Port, including 33 ancient boats, reveal the city's 8,000-year-old history. When work at Marmaray is completed, Yenikapı will have been transformed into a central hub in Istanbul's transportation network. The plan is to enrich this juxtaposition of the ancient city and the modern metropolis by means of a new approach that will see close collaboration for the building programme between the Ministry of Transportation, the Ministry of Culture and Tourism, the universities, the municipality and the various organisations concerned with sea transportation and subway systems, and that will culminate in an international competition in 2010.

Hasanpaşa Gashouse, located near Kadıköy on the Asian side of the Bosphorus, is an industrial zone that has not been in use since 1993. The aim for 2010 is to convert this industrial heritage site into a cultural centre with a concept design master-minded by Istanbul Technical University's Faculty of Architecture. In addition to the renovation of the existing building, the project also seeks sustainable ways of managing the new centre.

Renovation at the Küçükyalı Archaeological Park in Maltepe is now well under way in collaboration with the Ministry of Culture and Tourism, the Istanbul Archaeological Museum, the municipality of Maltepe and

Koç University. The archaeological remains here are believed to belong to the Satyros Monastery, which was constructed at the time of Patrick Ignatios (860–77). It is hoped the realisation of the project designed by Atölye Architects, will benefit from the contributions of multidisciplinary teams and international organisations and, Gümüş believes, will lead to a reappraisal of Istanbul's cultural heritage and stimulate awareness of the historic layers of the city.

Long-Term Projections

Partly due to the effects of urban regeneration projects, partly thanks to Istanbul's designation as European Capital of Culture for 2010, urban issues have now become daily news. And as the city's inhabitants start to see the impact on their everyday lives of the decisions made about their city, they are beginning to take more of an interest in urban issues. For Gümüş, what will remain from the 2010 ECOC process is a refined experience. What is important is not the construction of buildings, but the production of buildings that will sustain and perpetuate effective managed systems. At the interface of Istanbul's 2010 ECOC initiatives, Gümüş defines his role as that of intermediary between the involved professionals and the politicians. If arts professionals are now prepared to cooperate widely for the sake of their city by creating a public platform open to collaboration, he believes some changes in the way public agencies operate can be achieved. Eventually, technocratic management bodies, through their exposure to a range of bureaucratic experiences, will come to appreciate the work and benefits of a cultural agency. For now, though, the level of management awareness remains too low to transform a city. **Δ**

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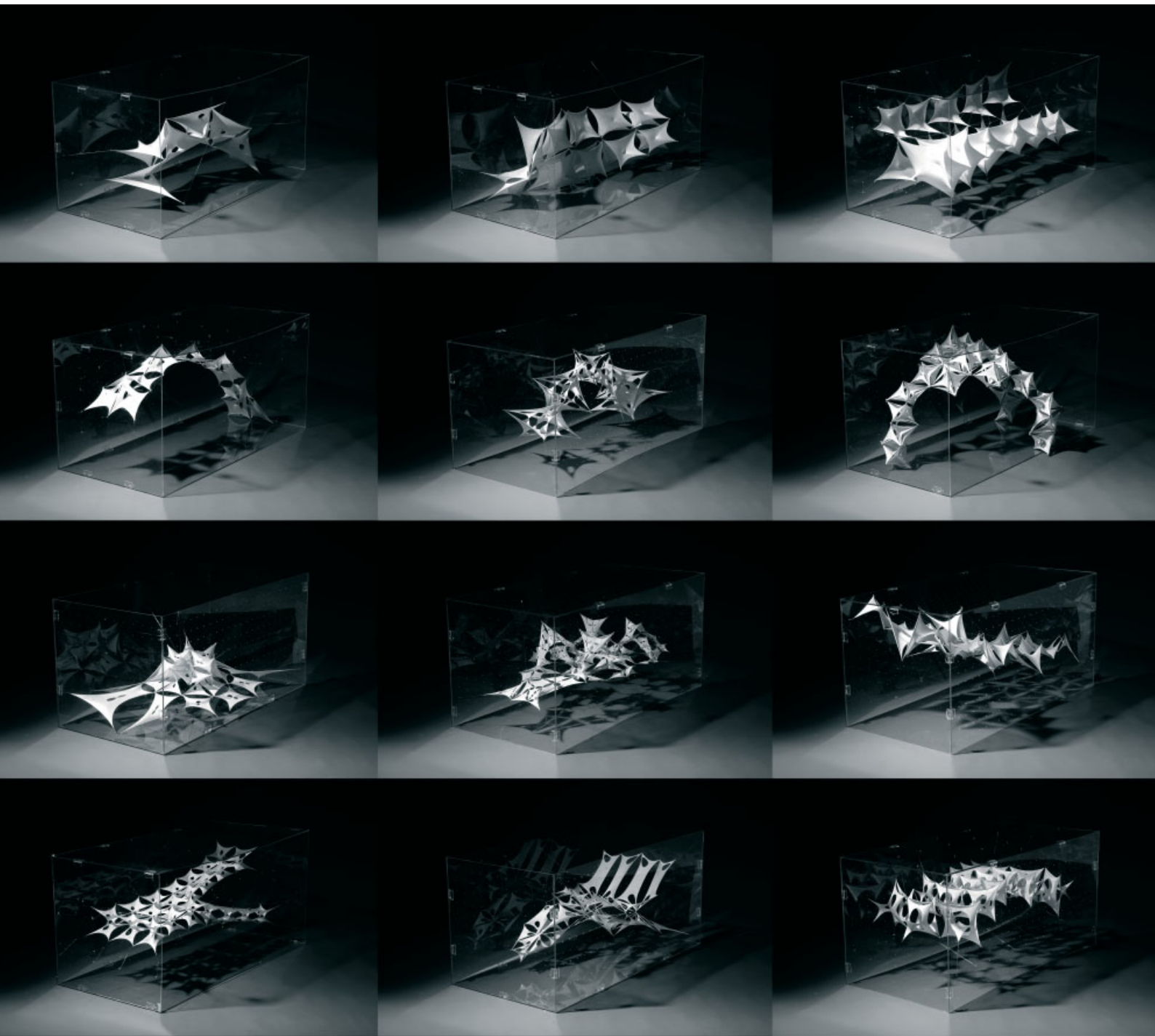


Extended Thresholds III: Auxiliary Architectures

In Turkey, there exists a rich tradition of auxiliary architecture that is supplementary to permanent domestic structures. In hot climates, it often provides essential shade, either as stand-alone shelter or as transitional spaces between the cool interior and the sun-exposed exterior. It is a history that offers great potential for innovative sustainable solutions that require little or no energy. Michael Hensel and Defne Sunguroğlu Hensel describe the work that they have undertaken in this area through the Auxiliary Architectures: Membrane and Cable-Net Systems Workshop at the İzmir University of Economy.

**Auxiliary Architectures: Membrane and Cable-Net Systems
Workshop, İzmir University of Economy, İzmir, Turkey, April 2009**

Around a hundred students undertook experiments to develop different membrane and cable-net systems, deploying form-finding methods and analysing through physical and digital models the capacity of their systems to modulate sunlight, self-shading and shading patterns. The experiments culminated in the development of 20 different systems at the model scale and two full-scale installations.



above: The photos show 12 of the 20 final models demonstrating the integral relationship between membrane arrays and cable-net arrangements and exploring the reduction of necessary anchor points for the systems, while maintaining their intricate articulation.

opposite left: Initial experiments focused on membrane articulations and the proliferation of membranes into arrays that can be set within more complex cable-net arrangements.

opposite right: Based on physical form-finding experiments, digital models of the membrane and cable-net systems were developed using Rhino Membrane software, utilising dynamic relaxation, an iterative mathematical process, in order to digitally form-find the respective membrane and cable-net configurations. The digital models facilitate digital analysis of each membrane and cable-net arrangement with regard to environmental performance.

This third article on the design problem of the extended threshold concerns the topic of auxiliary architectures: architectural interventions in the built environment above and beyond settlement patterns and building design. Auxiliary architectures might be designed in conjunction with settlement patterns and discrete building envelopes or, if the built context is already a given and cannot be modified, as a supplementary way of providing potentials that the existing conditions do not. However, the problem with auxiliary architectures is that they require independent structural solutions and may thus be larger, heavier and generally more constraining than can be afforded in a given context, or they may have to rely on the structural capacity of the existing fabric.

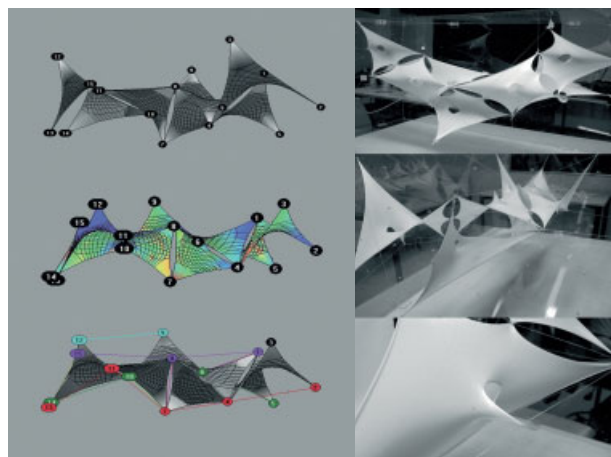
Depending on the specific context, auxiliary architectures may also have different requirements regarding environmental performance, which may determine whether such interventions require more or less mass. That these auxiliary architectures are in demand becomes obvious when observing people's movements in hot climates, from one climatized interior to another or, likewise, in cold climates where heat sources such as external gas heating devices are required. The abundance of auxiliary architectural devices now available ranges from no-energy material interventions such as umbrellas (elaborated in great depth by Frei Otto and his team) to high-energy consumption electrical-mechanical devices for heating, cooling and ventilation. As a result, the design problem has shifted from architecture to industrial design or mechanical engineering, and often from no-energy to energy-consuming solutions. This is not an inevitable development, since architectural history is rich in examples that offer great potential for innovation of sustainable no-energy-consumption design solutions.

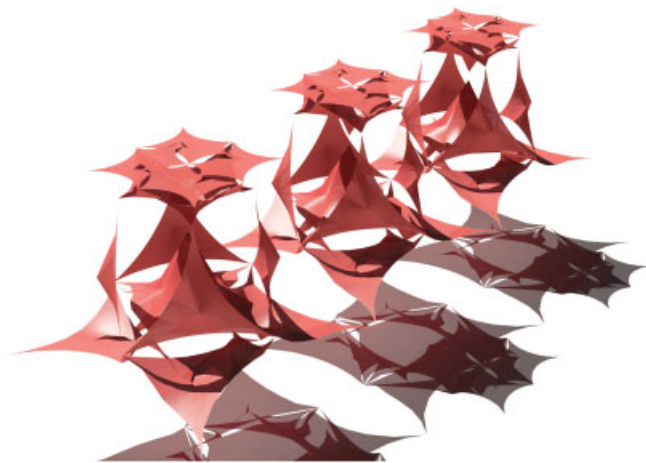
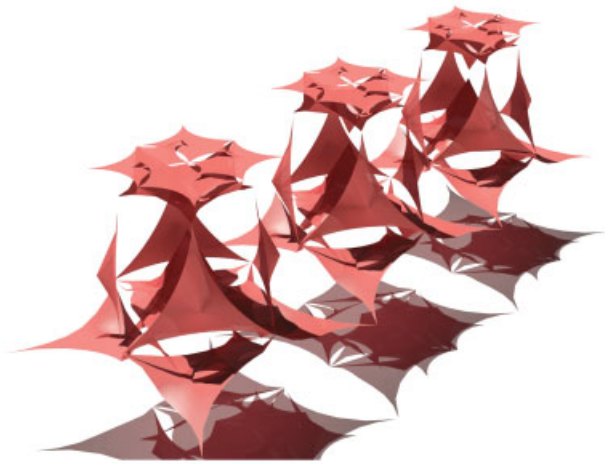
Examining the use of auxiliary architectures in Turkey, with particular attention to its local cultural, spatial and environmental circumstances, the Auxiliary Architectures:

Membrane and Cable-Net Systems workshop held in İzmir, Turkey's third largest city, at the University of Economy in April 2009 focused on light membrane and cable-net systems: lightweight combinations of spatial nets with membrane arrays.¹ Both membranes and cable nets belong to form-active tension structures that acquire their optimal structural shape under tension, making it possible to form-find both systems. Form-finding as a design method deploys the self-organisational characteristics of such systems under stress, that is when tensioned. Although nets and membrane systems, and their related form-finding methods, were pioneered and extensively developed by Frei Otto from the 1950s onward,² further systematic development of these systems, both separately and in combination, is only now beginning to take place.

Membranes are traditionally made from textiles, and nets from cables that together form a flexible mesh structure. Both systems can be combined, the cable net acting as a way of collecting tension forces from membranes and distributing them to anchors. Typically these systems form large lightweight and uninterrupted membrane roofs. However, in warmer climates this is not always an advantageous configuration for environmental modulation, as heat can accumulate under a large membrane, especially when the perimeter consists of a building mass that does not allow sufficient ventilation. One solution here is to design systems that are more akin to tree canopies that provide sufficient shelter and ventilation, and also result in rich sunlight and shadow patterns on the membrane system itself, below or beside it. In this case, the membrane system can be designed as a differentiated array of membrane patches. Membrane arrays can thus be designed with regard to their size, density and orientation to different environmental inputs (sun path, prevailing wind direction, and so on).

Other considerations when designing such systems include the structural requirements of the membrane and cable-net system and the structural constraints of the context (How many potential anchor points in existing architectures are available?), as well as the desired spatial organisation and environmental



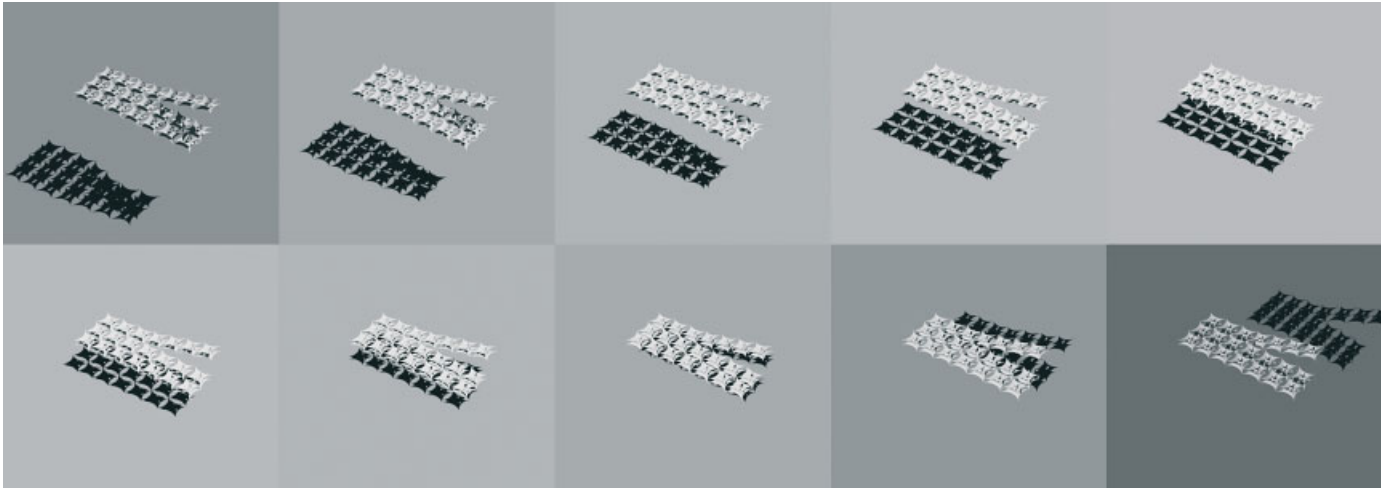


modulation (How many and what size spaces are needed? Which range of environmental conditions is desired?). From these, the existing constraints for the articulation of the membrane and cable-net system, as well as a desired configuration concerning space and environment, can be determined. But how can these be negotiated?

There are two ways of resolving the discrepancy between the desired and possible arrangements of a membrane and cable-net system. The first involves the construction of additional compression elements, frames or anchor points. The second involves an experiment-driven process in which the system is modified (perhaps using evolutionary algorithms or physical models), which often requires a shift away from planar net configurations to spatial ones that allow wider options for the disposition, articulation and orientation of the membrane arrays. These two solutions may also work together where it is possible to involve smaller compression elements that rearticulate and reorient the system incrementally by creating smaller local manipulations that in sum affect the overall articulation.

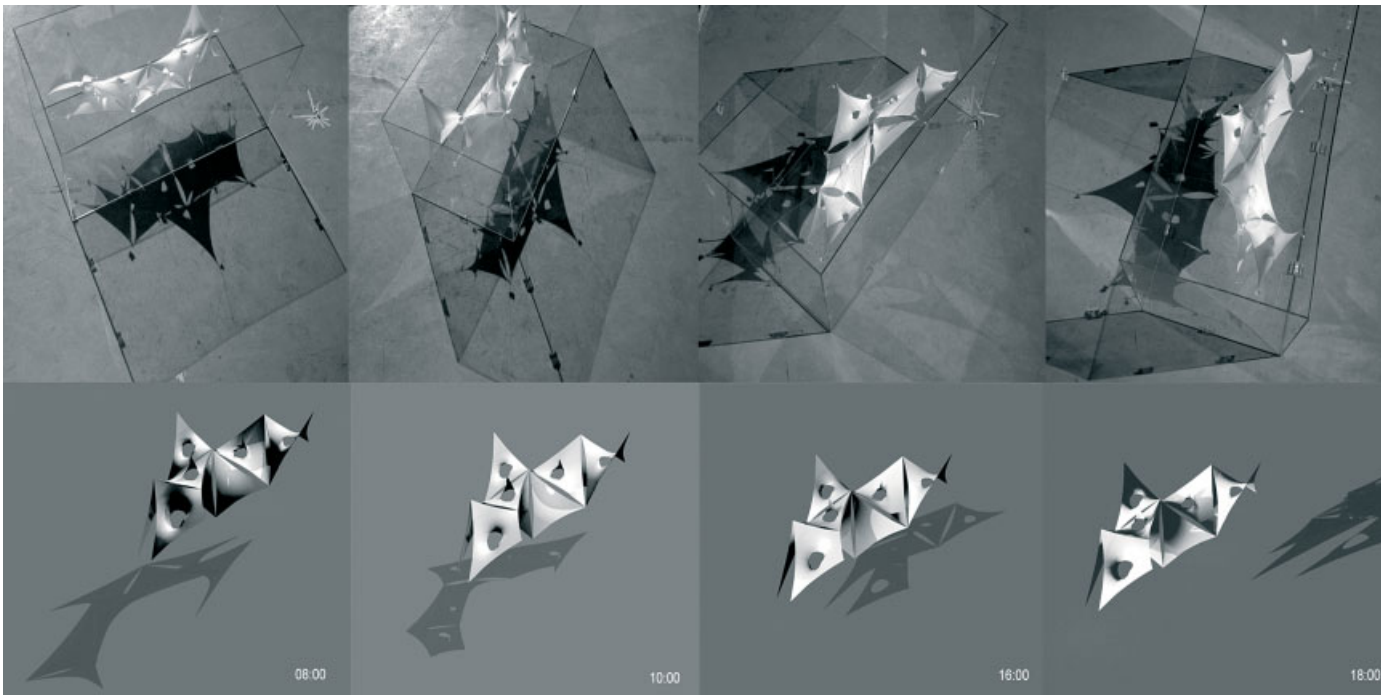
The İzmir workshop focused precisely on these possibilities. Around a hundred second- and third-year students were introduced to physical and digital modelling of membrane and cable-net systems, first separately and later in combination. The increasing number of membranes in an array requires an increasing number of connection and anchor points. The latter can be connected by cables that begin to articulate spatial nets.

A similar context-specific digital analysis of a shading pattern changing over time. Here the time sequence is organised from top to bottom and the analytical emphasis is on the intricate layered shadow pattern that results from the layered arrangement of translucent textiles of the membranes, creating different shades of shadows.



above: Context-specific digital analysis of shading pattern resulting from a branching cable net inhabited by a double-layer of hyperbolic-paraboloid membrane patches. The two layers of membranes are connected by two minimal holes per pair of membranes. The time sequence is organised from left to right and top to bottom, with the morning hours in the top left corner and the evening hours in the bottom right corner, showing the pattern and distribution of shadows resulting from the design.

below: Context-specific digital analysis of a shading pattern changing over time. Here the time sequence is organised from left to right. The top row shows a series of photos of an analysis deploying a scaled physical model, while the bottom row shows a digital analysis of the same membrane and cable-net system.



right and below: The 20 membrane and cable-net arrangements exhibited at the izmir workshop. Due to the position of the models in the exhibition space, different light reflections and shading patterns are visible at different times of the day, showing not only the material aspect of the systems, but also the environmental modulation affected by them.

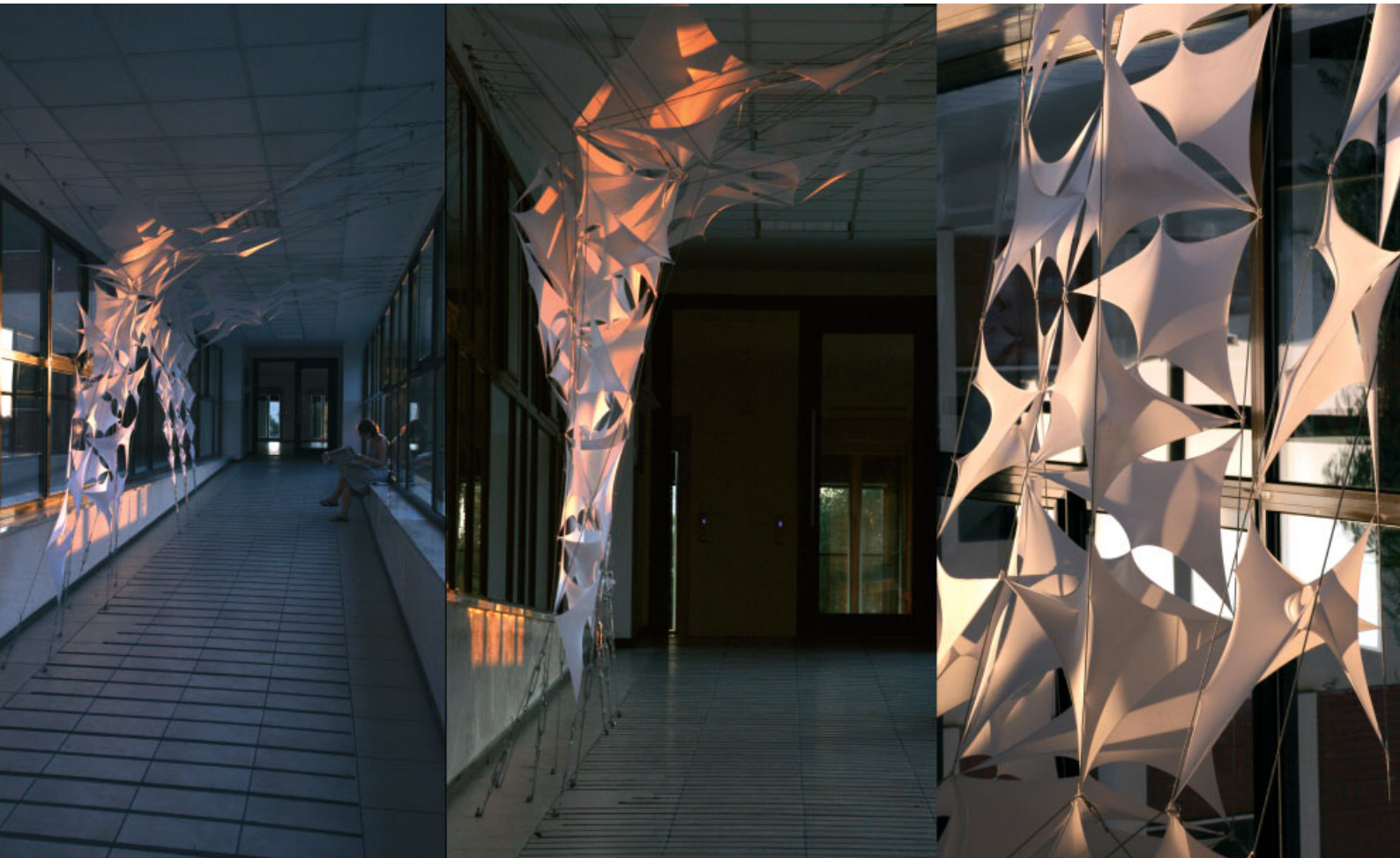
opposite: The full-scale installations at izmir. During the evening hours the membranes shift from shading to reflecting and amplifying the sunlight penetrating the space at a low angle.



All of the workshop's membrane and cable-net systems were designed in response to the specific sunlight conditions of izmir, and analysed and developed accordingly through physical model testing and digital analysis.

During the 12 days of the workshop, 20 different membrane and cable-net combinations were developed and two installations constructed to investigate the design and construction logic at full scale. Different system articulations were also developed. Nets were developed as continuous or branching systems, either more planar or more spatial, with varying mesh sizes to facilitate the placement of membranes of various sizes and geometries. Membranes were tested as triangular patches in hexagonal arrays, as hyperbolic paraboloids, hyperboloids or cones. Patches were connected at corners or through the use of minimal holes. Additional local compression members were added, in one instance transforming the whole into a self-stable tensegrity system, and in another case the local application of bending rods enabled system articulation and structural integrity.

All of the workshop's membrane and cable-net systems were designed in response to the specific sunlight conditions of izmir, and analysed and developed accordingly through physical model testing and digital analysis. In future it would also be useful to involve computational fluid dynamics (CFD) analysis to develop specific ventilation patterns. This would be



especially relevant in the case of İzmir, where parts of the urban fabric along the Mediterranean waterfront are articulated as large uninterrupted volumes that block ventilation from the seaside and result in unbearable levels of temperature and humidity in the city during the summer months. One way of addressing this could be with membrane arrays that act as wind-catchers and accelerators of airflow. In other parts of İzmir the suburban sprawl is unchecked, without any consideration for the consequences on the resulting environmental conditions. Again, solutions can be found here that are as lightweight as they are inexpensive.

It is easy to imagine the positive impact of such lightweight auxiliary architectures throughout the Middle East, and Turkey is indeed the place that may begin to accumulate the expertise, and which has the technology, to pursue this field of research with great vigour. It is, then, possible that auxiliary architectures may eventually become an integral part of designing the built environment, such that they are no longer auxiliary and are instead, from the outset, integral to architectural design. **D**

The authors would like to express their heartfelt gratitude to the Dean of İzmir University of Economy, Professor Dr Tevfik Balçeloğlu, and the Head of Architecture, Professor Dr Gülsüm Baydar, for making the workshop possible, and also to our academic collaborators in the workshop: Professor Dr Gül Kaçmaz Erk, Burak Pasin, Selma Göker, Buket İlter, Özlem Akın, Clarissa Mendez Ersoy and especially Michael E Young for continuously solving unsolvable predicaments. Special thanks go to the fantastically hardworking and enthusiastic students who took part in the workshop.

Notes

1. Excerpts of the research can be found at www.membranespaces.net. Similar research by Michael Hensel and Defne Sunguroğlu Hensel on membrane and cable-net systems was undertaken in Australia at the University of Technology in Sydney, where the authors hold innovation fellow positions, as well as at AHO – The Oslo School of Architecture and Design in Norway, where Michael Hensel holds a professorship position in Research by Design and where Defne Sunguroğlu Hensel is currently undertaking her PhD focusing on Integral Design Methods for Performance-oriented Design. Excerpts of this research can also be found at www.membranespaces.net.

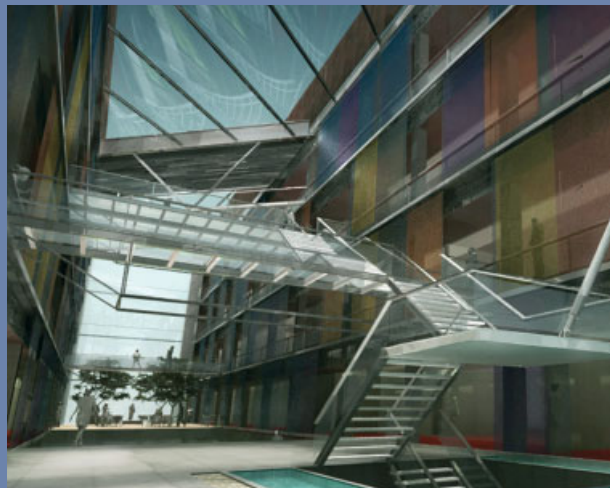
2. See, for example, Frei Otto (ed), *Tensile Structures*, MIT Press (Cambridge, MA), 1973. For nets see K Bach, B Burkhardt, R Graefe and R Raccanello (eds), *IL8 Nets in Nature and Technics*, University of Stuttgart, 1975.

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Transforming Turkey

Eight Emerging Practices

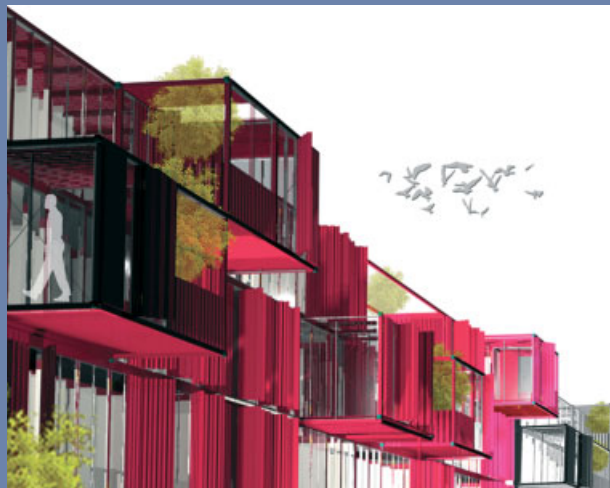
Over the last decade, Turkey has experienced an unprecedented construction boom. Many architects responded with commercial opportunism, collaborating in the design of gated communities and coastal resorts that did not contribute to the overall quality of the built interior. **Hülya Ertaş** focuses on the work of eight emerging practices whose integrity and original design approaches set them apart, and provides an alternative path for the future of architecture in Turkey.



The Turkish architectural scene has changed dramatically since 2000 – a direct result of an unprecedented construction boom and the expansion of the country's real-estate business. Gated communities have proliferated, growing up on the peripheries of major cities such as Istanbul, Ankara and İzmir. The south coast has similarly been the site of large-scale developments with the mass building of holiday apartments and houses. With the burgeoning market, real-estate companies have realised the potential use of architects in the selling and marketing of properties. Many architects' offices have responded accordingly by filling their portfolios with schemes for corporate developments and gated communities. Such apparent changes, in such a short space of time, have triggered significant discussion about the relationship between architecture and capital, and architects' new role and responsibility to the built environment. The ways in which Turkey's young architects are questioning these changes and finding alternative

means of commercially sustaining their offices is illustrated by the following projects here.

The architects selected, most of them under 40, demonstrate different approaches to design. A common ground, though, can be perceived in their consideration of the fabric of a site and their efforts to create 'new' forms in existing contexts. Though there are many more young architects and architecture offices in Turkey, the eight emerging practices featured stand out because they set their own unique positions on the architectural scene in order to create architecture that is not merely a tool for the market economy and construction industry, but is rather an environment that reflects the ideas and concerns of its designers. Turkey's construction boom, which now seems all but over due to the current global financial crisis, will probably regain its momentum post-crisis. So this may be just the right time for architects to reconsider their role in terms of the built environment and to look at how they will react once building resumes.



Global Architectural Development (GAD)

Gökhan Avcioğlu, with his partner Özlem Avcioğlu, founded GAD in 1994. With offices in Istanbul and New York, the practice's recent works demonstrate an organic approach to architecture that relates to its particular topographical and material context. The Kuum Hotel, Spa and Residences complex (2008) in Türkbükü, Muğla, a tourist destination in southern Turkey, includes an administration building, two restaurants, a spa and 11 individually designed residences/hotel rooms. GAD here relied on computer modelling to design the complex according to the organic

topography and beautiful views. The aim was to make each building unique according to its location and site, rather than resorting to the copying and pasting that is typical of many housing projects. For another of the firm's recent projects, the Beşiktaş Fish Market in Istanbul, completed in 2009, GAD has created a concrete shell on the triangular site. The organic design of this concrete structure provides a column-free space that responds to the needs of both sellers and customers by facilitating the flow of people through the market.

Kuum Hotel, Spa and Residences, Türkbükü, Muğla, 2008



Beşiktaş Fish Market, Istanbul, 2009



TeCe Architects

Tülin Hadi and Cem İlhan specialise in the design of educational and cultural buildings and urban schemes, rather than housing, shopping malls or office blocks, which have made up much of the output of the last decade's construction boom. Their project for the Vehbi Koç Foundation Culture and Education Complex in Gölçük, Kocaeli, an award-winning scheme for a limited

competition held in 2009, integrates two different user groups: the personnel of the Ford Otosan production plants next to the site, and the general public. To meet the needs of both, the complex is composed of two low-rise building blocks that are positioned to create recreational open and semi-open areas at the heart of the site.

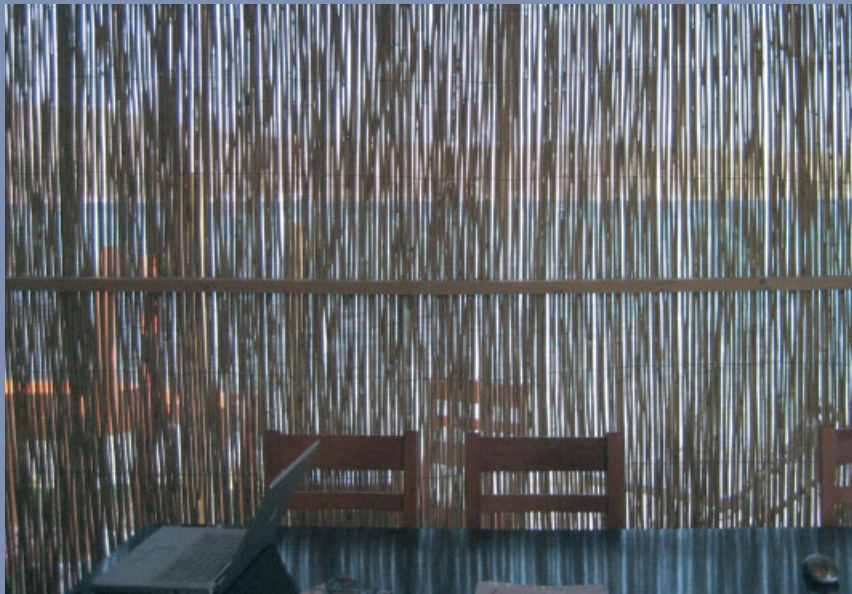


Vehbi Koç Foundation
Culture and Education
Complex, Gölçük,
Kocaeli, 2009

Trafo Architects

Istanbul-based Trafo Architects (Sena Birşen Otay, Sevim Aslan, Deniz Aslan, İpek Yürekli and Arda İncoğlu) distinguishes itself through its use of materials and the way it seamlessly interconnects buildings and landscape design. Babylon Alaçatı (2006), located in Çeşme, in İzmir, is a multiuse project that is a beach by day and a concert venue at night. The walls are constructed of light local straw to let in the strong Alaçatı wind for interior air-cooling. The visual impact is that of yellow partitions

melting into yellow sands. Another project by Trafo Architects, also located in southern Turkey, in Yalıkavak, Muğla, is the Tekfen Yalıkavak Houses and Hotel (2008). Set on a steep hillside, the houses merge into the topography like a continuous garden. The use of existing rocks for supporting walls and the creation of roof gardens extend this continuity and integrate the architecture with the surrounding landscape, both natural and designed.



Babylon Alaçatı, Çeşme, İzmir, 2006



Tekfen Yalıkavak
Houses and Hotel,
Yalıkavak, Muğla, 2008

Teğet Architecture

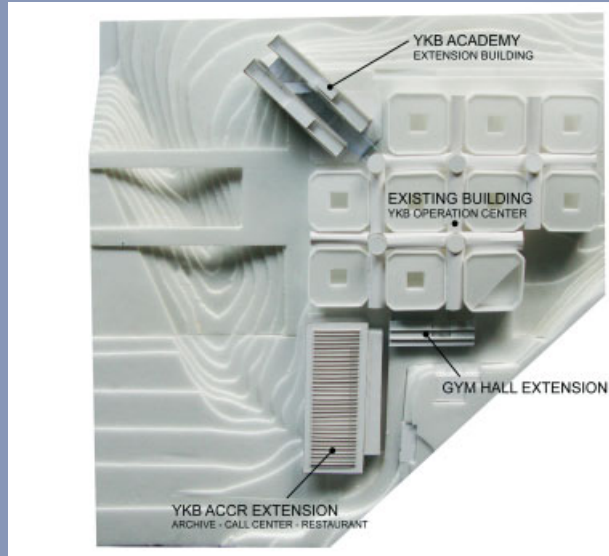
The work of partners Mehmet Kütükçüoğlu and Ertuğ Uçar can be identified by its massive forms and the spatial experiences these afford. The Istanbul-based firm's prize-winning project for the Beşiktaş Naval Museum in Istanbul is currently under construction and demonstrates how such monumental forms can interact with museum visitors. Here, the spaces dedicated to displaying the sultan's boats have glass facades and viewing platforms on the water that set them apart from the main museum building. The museum is an extension to the old building and is expected to house the

sultan's boats; one of the upshots of this approach is the ability to take the existing situation of the old building, the sizes of the boats and the potentials of the building's location into consideration to dramatically change the whole site. The same is true also of the practice's Yapı Kredi Bank Academy Building (2009), which is an addition to the bank's existing campus. Situated on the corner of the campus, the diagonal setting of the academy building distorts the original grid plan; following the circulation of the existing campus, it welcomes visitors from the corner of the street to the streetwide atrium at its heart.



Beşiktaş Naval
Museum, Istanbul, due
for completion 2011





Yapı Kredi Bank Academy, Istanbul, 2009

DB Architects

DB Architects is known generally for its award-winning competition projects. Founded by Bünyamin Derman and Dilek Topuz Derman, the office has been able to take advantage of the various competition projects it had previously designed, experience that, according to Derman, has helped them to develop an understanding of urban issues and allowed them to work on different building typologies including cultural

centres, opera houses and public buildings. DB Architects' and 'asp' Architekten's 212 shopping mall in Bağcılar, Istanbul, completed in 2009, is located beside the highway that connects the airport to the city, its facade acting as an urban face overlooking its surroundings, and its dynamic form seemingly blending in with and joining the traffic flow.

212 shopping mall,
Istanbul, 2009



Yazgan Design

Started in 2003 by Kerem and Begüm Yazgan in Ankara, Yazgan Design focuses on designing the design process. The construction of the Orange House (2008) in Ankara is based upon this idea of systematising the design process for setting up the relationships between different parameters such as site, construction system, building materials, programmatic needs and climate. This provides flexibility and sets up a strong dialogue between the architect, client and engineering teams. A similar method was also applied

Orange House,
Ankara, 2008

in the interior design project for the METU Northern Cyprus Campus (2005), which covers 80,000 square metres (861,112 square feet) across the various buildings. By creating a table for all the programmatic needs, and choosing and designing the right furniture for the various campus locations, the architects were able to provide a unified design within a very short period of time. In prioritising the design process itself, Yazgan Design thus plays with traditional methods of architectural production.



ddr|p

Since founding his office in 2005, Boğaçhan Dündaralp has been exploring the research and development aspect of architectural practice. By entering competitions, organising workshops and summer schools, and writing, he seeks out new means of production for which design research can be undertaken. The Urban.annex project, designed with Pelin Tan for the Bauhaus Awards 2008 competition, for example, highlights the social and economic problems of the workers at Istanbul's Tuzla shipyards. The intention is to make these problems visible and present a model for the interaction of the

different actors – workers, shipyard owners and architects. Dündaralp has achieved this by designing housing for up to 2,500 shipyard workers that provides both private and community spaces. (The workers are largely immigrants who are a long way from their families). By rehabilitating the lagoon next to the shipyards, and transforming its shore into a multifunctional recreation area where citizens and workers can interact, the project not only provides an architectural solution to the housing needs of the workers; it also creates a socially sustainable urban area.

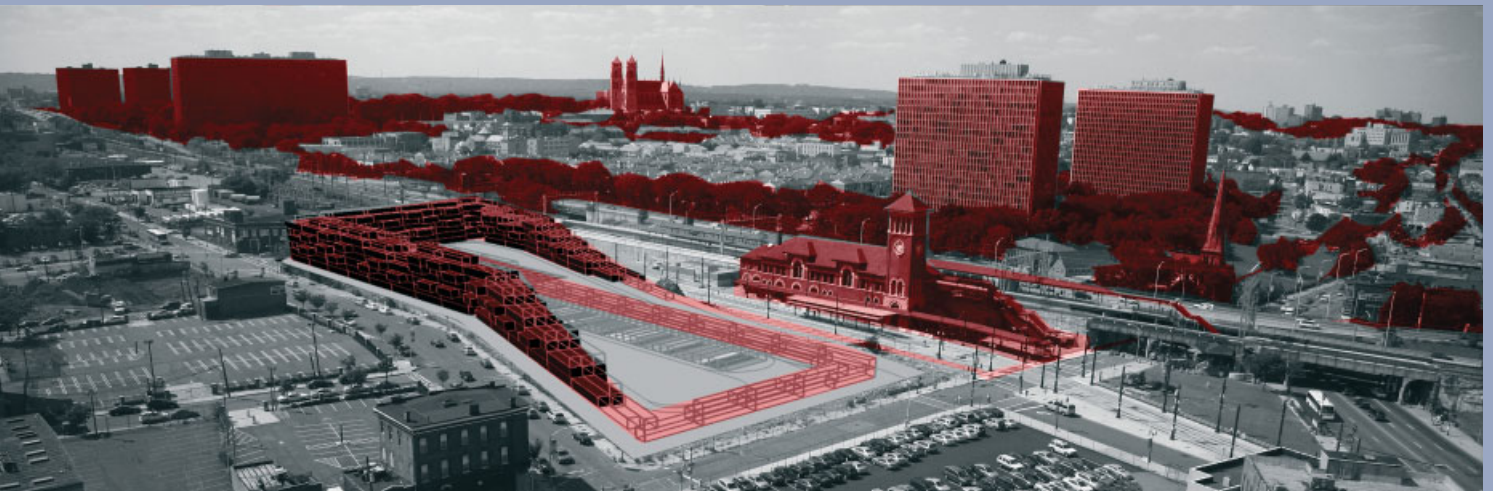


Urban.annex, Tuzla, Istanbul, 2008

MeMA/merteyiler, mimar atölyesi

The works of Mert Eyiler, founder of MEMA, are living environments, shaped according to the physical and perceptual needs of their users. This user-oriented approach is strengthened by the architect's close relationship with his clients. Most of his projects draw on collaborators from other disciplines, such as art and sociology. His Lunchbox project (with Şevin Yıldız for the Live the Box competition held in 2008) is a former Westinghouse factory site in Newark, New Jersey, that is to be transformed into a housing settlement


constructed out of shipping containers. Taking into consideration the demographics of the city's population, and by leaving as much space for public areas as for houses, Lunchbox proposes an urban scene in which living and commercial activities overlap. The shipping containers are positioned for maximum daylight and interaction with the city, and the garden is also composed of containers since the soil at the site has been contaminated by the former industry. Δ



Lunchbox, Newark, New Jersey, US, 2008

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To Integrate or Not to Integrate?

The image shows a modern interior space with large glass walls and a dark, textured ceiling. Sunlight filters through the glass, creating a pattern of light and shadow on the floor. In the background, a white sofa and a floor lamp are visible. The overall atmosphere is bright and airy, with a focus on natural light and architectural details.

Turkish architecture over the last 150 years has been plagued by its preoccupation with its integration with the West. Should it be embracing or reflecting Western cultural, technical and professional standards?

Uğur Tanyeli provides the background to this pessimistic context and describes how a new generation of architects over the last 10 years have transcended this predicament by producing work that turns away from this obsession with identity.

Han Tümertekin, SM House,
Assos, Turkey, 2006



Han Tümertekin, SM House, Assos, Turkey, 2006

left: With its blanketing masonry construction and steel skeleton, this summer house becomes a semitransparent box.

Tabanlıoğlu Architects, Sapphire apartment block, Istanbul, 2006–

below: Istanbul's future tallest tower, and one of its most luxurious housing projects, Sapphire merges the skyscraper with typical terrace housing units.



Ever since the publication of *Usul-u Mimari-i Osmani* (The Principles of Ottoman Architecture) in 1873 and the rise of the Turkish nationalist movement in the second decade of the 20th century, every aspect of architecture in Turkey has been focused on the problem of cultural integration. This has manifested itself in the way both Late Ottoman and Turkish architecture has concerned itself with its relationship to a definite *Kulturkreis* – that is, ‘the First World’, the metropolitan nations, the developed capitalist countries, the modern world. As in almost every other realm of cultural life, architects have positioned themselves according to their acceptance or rejection of the modern West. On some occasions this has been openly declared; on others it has been implied within non-architectural discourses and narratives.

The advocates of integration have generally expressed the desire for architecture to reach required technical and aesthetic standards, providing professional planning services and applying standardised morphologies in the built environment, hence becoming an integral part of the

‘other’ – the West. Others, however, have based discussions on the presumption that the Turks should never actually merge with the West, that they have no choice but to be themselves. Often the proposition is that the Turks should join the ‘other’ but only while retaining their own identity, culture and values. Fervent defenders of this line have a preference for full integration in such areas as technology, and industrial and organisational capability, with inherent qualities like humanitarian values that ‘make the Turks what they are’ kept intact.

In the 1930s, prominent representatives of the integrationist camp included Seyfi Arkan (Atatürk’s favourite architect), and from the 1960s until his death in 2008 Şevki Vanlı was a prolific architectural writer of the same group, though he seldom built. On the opposition front, both as a theoretician and practising architect, was Sedat Hakkı Eldem, who was especially influential in the 1940s and still active until the 1980s. Turgut Cansever, a three times Aga Khan Award recipient who wrote profusely on architecture and urbanism, was a radical contributor to the nonintegrationist cause in the last two decades of the 20th century. Without doubt, the majority of the architects in Turkey tend to problematise integration even today.





**Emre Arolat Architects, Minicity,
Antalya, Turkey, 2004**

Minicity is a sort of Turkish Madurodam (the miniature city located in Scheveningen, The Hague). It consists of scale models of the monuments of Anatolian architectural history from prehistoric times until today. The main building of the complex is a small, multipurpose retail space. Arolat here blurs the boundaries between architectural planning and landscape design.

It is not easy to discuss the reason why cultural and architectural integration was, and still is, traumatic in Turkey. A possible explanation is the overestimation of the power of the 'other'. To Turks, the Western world appears so economically and culturally powerful that it is capable of swallowing Turkey up; all the means and networks of information and communication are controlled by the West. At least, the image of the 'other' in Turkey was drawn in this way. What made the previous generations of Turks almost paranoid when they were confronted by the partly imaginary (and predominantly real) cultural hegemony of the West was this unequal relationship. Thus they pathetically feared they would never be able to create authentic cultural products and practices, and felt obliged to use and imitate, now and in the foreseeable future, their Western counterparts. The atmosphere in Turkey was one of desperation.

This pessimistic context resulted in only reactionary agendas being drawn up for modernity and architecture. The architectural establishment, which was formed in response to these reactionary attitudes, beginning in the first decade of the 20th century, was deeply involved in creating indigenous and necessarily



anti-integrationist policies. This meant that, for Turkey as for any other non-Western country, cultural opposition to the 'other' was, and to a limited extent still is, a vital and existential necessity, and is why even the most ambitious integrationists (in Turkey and elsewhere) can seldom express a radicalism that simply acknowledges cultural and architectural change. Thus, even the most ardent integrationists have reservations about transformation, limiting its parameters to an extent that is politically correct. For them, integration with the 'other' is a matter of love and hate. As it is, ironically, for those who pitch themselves against it.

However different the discourses for and against Westernisation may seem, they are in fact reproducing the same course of integration. Within a polarity of affirmation and denial, what is merely problematised by them is the modern Turkish identity, not architecture itself. Architecture becomes instrumental in a changing society that is trying to overcome the paranoia of losing its

identity. In these circumstances, constantly asking the questions Should we change?, Shouldn't we change?, How should we change?, Which is the best way to change?, always keeps the matter of identity on the agenda; seeking answers becomes an exercise in self-persuasion, justifying the normality of integration and transformation. For the psyche of society, just as for that of the individual, talking about the motives of fear lifts the fear itself. In short, by endlessly talking on issues of integration, by continuously problematising it, over the span of almost 150 years, at least an important part of the Turkish architectural audience became ready to hear and produce alternative discourses no longer centred on the subject.

Outstanding Turkish buildings of the past 20 years, if nothing else, have at least demonstrated that the issue of integration has evolved from being merely the psychoanalytical subject of conversation into architectural actuality. Works that have recently been published in the Turkish architectural media show that a certain section of Turkish architectural production has finally achieved that all-problematic goal of integration. The majority of buildings published in the national press are on a par with those in the international architectural media.



Without a doubt, some could benefit from this opportunity. Nevertheless, the problem of integration remains. As Turks witness success in integration, they may also realise that they are, in fact, reproducing their own predicament. Constructing mentally an actuality by considering it the 'other', while simultaneously wanting to assume otherness by joining it because the 'other' and the 'self' are defined as mirror images, creates a serious psychopathological impasse.

Undoubtedly there is a possible though not easy solution to the seemingly insurmountable problem of identity: forgetting about the discourses that are centred either implicitly or explicitly on integration, and starting to rethink architecture by establishing new discourses and different lines of thought. A very large portion of Turkish society, however, does not seem ready to leave behind identity-based discursive practices. The paranoia of identity is still an important phenomenon that is expected to be overcome through the realisation of architectural works. For example, a new governmental programme of

courthouse construction has given many Anatolian towns historicist buildings which propagate 'Turkishness'. Municipal authorities everywhere generally intend to express their political imagination of national identity through the public structures they build. Mosque architecture seldom produces buildings that cannot be defined stylistically as 'Turkish' or 'Ottoman'. An explanation can be provided with the reversal and extension of Marx's much quoted words: along with the processes of modernisation 'all that is solid melts into air', but the same processes create a desire to resolidify all that is melted.

Nevertheless, a small but influential group of architects, especially in Istanbul and Ankara, ignore this desire and try to go behind the established discursive practices. For them, the dichotomy of the East-West is not a credible or self-evident fact. The 200-year-old obsession with inherent identities is now under threat from a new understanding based on the notion of cultural difference rather than the cultural diversity within a binary division of the East and the West. Instead of the coexistence of culturally pure opposites, what is observed in the world-historical context by them now is a constant production of hybridity. This provides the new possibility of enabling architecture to be discussed on its own terms without



Emre Arolat Architects, Minicity, Antalya, Turkey, 2004

repetitively discussing ideological positions and engagements – at least for a group of architects and their clients.

Among the group of architects who have freed themselves from the discussions about identity, Emre Arolat, Gökhan Avcıoğlu, Melkan and Murat Tabanlıoğlu, and Han Tümertekin are particularly important. All in their forties, this group forms the younger generation of Turkish architects. Their works differ in size, content and morphology. They share, however, the radical denial of traditionalism and historicism. On the other hand, they all prefer to discuss their works as mere architectural realities without theorising them within supra-architectural contexts. On the contrary, they problematise or simply ignore conventions, especially the ones ardently defended by the Turkish architectural establishment.

Without doubt, the best recent work shows the most radical denials of convention, some of which can be defined as Deconstructive practices. Tümertekin's SM House in Assos (2006) on the Aegean shore, extensively

published abroad, is an example of this practice: the masonry construction becomes a semitransparent skin that does not function as a conventional load-bearing wall, but is born like a continuous sun-breaker shell by the building's steel skeleton. Here, Tümertekin brilliantly problematises a traditionalist expectation dominating the whole of coastal Turkey. Tabanlıoğlu's ultra-luxurious Sapphire apartment block in Istanbul (2006–) is equally innovative, merging the skyscraper with typical terrace housing units. All the apartments have a common garden in front of them, repeating on every three floors. And Arolat's Minicity in Antalya (2004) is an exercise in blurring the boundaries between landscape planning and building design.

In these works and numerous others, the intentions of the architects have nothing to do with the obsession with identity, which has intellectually castrated previous generations. What characterises qualitatively, not quantitatively, the last 10 years of Turkish architectural production is that the producers do not ceaselessly ask themselves 'Who am I?'. Δ

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Contributors

Tevfik Balcıoğlu is the Dean of the Faculty of Fine Arts & Design at İzmir University of Economics. He studied at the Middle East Technical University, attended the Royal College of Art, and taught at Goldsmiths' College and the Kent Institute of Art and Design, where he established and ran the BA (Hons) in Three Dimensional Design. He has organised several international conferences, edited a number of books including *The Role of Product Design in Post-Industrial Society* (Kent Institute of Art and Design, 1998), and published many articles and conference papers. He is the founder of 'Design History Society, Turkey'.

Gülsüm Baydar received her PhD from the University of California at Berkeley. She has taught various design, history and theory courses at the University of California, National University of Singapore, MIT, University of Adelaide, Australia and Bilkent University, Ankara. She is presently the Chair of the Department of Architecture at the İzmir University of Economics. Her work explores the boundaries of the discipline of architecture and has appeared in many journals. She is the co-editor of *Postcolonial Space(s)* (Princeton Architectural Press, 1997) and *Negotiating Domesticity* (Routledge, 2005).

Edhem Eldem is a professor in the Department of History of Boğaziçi University, Istanbul, and has taught as a visiting professor at the University of California at Berkeley and at the École des Hautes Études en Sciences Sociales, Paris. Among his fields of interest are foreign trade in the Levant in the 18th century, Ottoman funerary epigraphy, the development of an urban bourgeoisie in late 19th-century Istanbul, the history of the Imperial Ottoman Bank, and late 19th-century Ottoman first-person narratives and biographies. His publications include: *French Trade in Istanbul in the Eighteenth Century* (Brill, 1999); *A History of the Ottoman Bank* (Ottoman Bank, 1999); *Death in Istanbul: Death and its Rituals in Ottoman-Islamic Culture* (Istanbul, 2005); and *Consuming the Orient* (Ottoman Bank Archive and Research Centre, 2007).

Hülya Ertaş is the managing editor of the monthly published architecture and design magazine *XXI* in Turkey and editor of the *Yeni Mimar* architecture newspaper. She completed her architectural education at Istanbul Technical University in 2005, where she is currently studying for her MSc in architecture. Her research areas cover spectacular architecture and its reflections on the daily life of citizens, how

globalisation affects architecture, and the ethics of the architectural practice.

Michael U Hensel is an architect, researcher and writer. He is Professor for Research by Design at AHO – the Oslo School for Architecture and Design, where he is involved in setting up an architectural research centre. He is founding and board member of the OCEAN Research and Design Association, as well as board member of BIONIS – the Biomimetics Network for Industrial Sustainability – and editorial board member of *AD* and the *Journal of Bionic Engineering*. He has published, taught, lectured and exhibited in Europe, the Americas, Asia and Australia. His research interest and forthcoming publications focus on performance-oriented architecture.

Tolga İslam is a research assistant in the Department of Urban and Regional Planning at Yıldız Technical University, Istanbul. He has studied the gentrification process in the Galata neighbourhood of Istanbul in his Masters thesis and is currently studying state-led gentrification processes in Istanbul in his PhD thesis. He is co-editor of the book *Istanbul'da Soylulaştırma: Eski Kentin Yeni Sakinleri* (Gentrification in Istanbul: the New Owners of the Old City). He has also written a number of articles and papers, and attended several conferences on issues related to Istanbul's gentrification processes.

Zeynep Kezer is a lecturer at the School of Architecture Planning and Landscape at Newcastle University. She has a Masters in architecture and a PhD in the history of architecture from the University of California at Berkeley. Her research focuses on the relationship between nation-building processes and the transformations of space and spatial practices in Turkey. Her articles have appeared in edited volumes and in the *Journal of Architectural Education*, *Informationen zur modernen Stadtgeschichte* and, most recently, *Environment and Planning D: Space and Society*. She is currently working on a manuscript entitled 'Building the Nation-State: State Space and Ideology in Early Republican Turkey'.

Defne Sunguroğlu Hensel is an architect, interior architect and researcher. She has completed her Diploma, RIBA II and MSc in architecture at the Architectural Association. She is currently pursuing her PhD entitled 'Multiple Performance Integration Model' as a research fellow at AHO – the Oslo School for Architecture and

Design. She is a board member of the OCEAN Research and Design Association. She has been involved in numerous research projects that have focused on performance-oriented design methods, design innovation and alternative approaches to sustainability in architecture. She has taught, lectured and exhibited internationally and her work has been published widely.

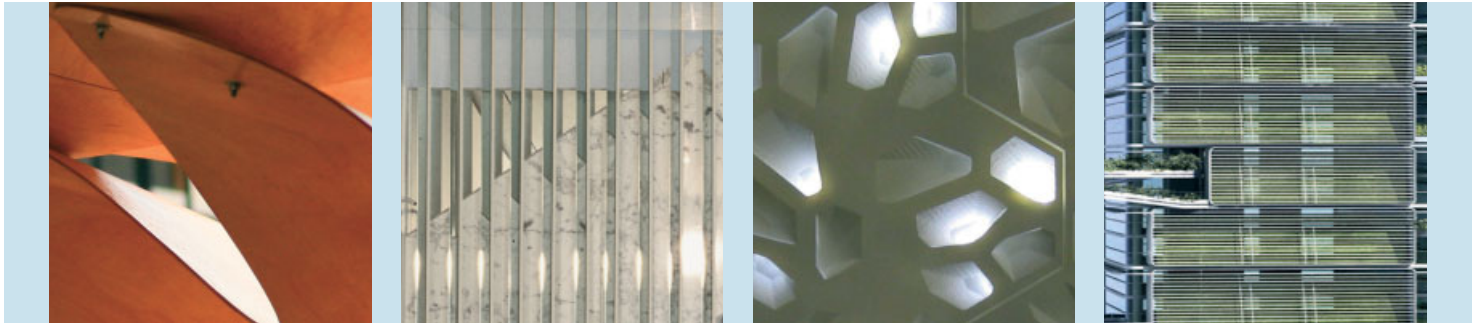
Uğur Tanyeli graduated from the Department of Architecture at Istanbul State Academy of Fine Arts in 1976. He completed his doctoral thesis at the Istanbul Technical University in 1986, and has taught the history of architecture at the Academy of Fine Arts, Istanbul Technical University and Anadolu University. He received the Turkish Chamber of Architects' Contribution to Architecture Award in 1994, and currently teaches in the Faculty of Architecture at Yıldız Technical University in Istanbul. He has been editor of the Turkish architectural magazine *Arredamento Mimarlık* since 1989, and has written numerous books and organised several architectural exhibitions.

İlhan Tekeli is Professor of City and Regional Planning at the Middle East Technical University and has published extensively on this field, as well as on planning theory, macro-geography, the geography of migration and political behaviour, the theory and history of local administrations in Turkey, urbanisation and urban policy, economic policy, the economic history of Turkey, and the history of cities, space and society. His bibliography covers more than 60 books and 500 articles and conference papers on these subjects published in various languages. He has won several social science awards, including the Sedat Simavi Award of Social Science (1989, together with Selim İlkin) and the Mustafa Parlar Award of Science (1994). He received the TÜBİTAK Life-Long Service award in 2006, and has been a member of the Turkish Academy of Sciences since 1995.

Banu Tomruk is a PhD candidate at the School of Architecture at Istanbul Technical University. She has a Masters in architecture from Yıldız Technical University. She has been a fellow of the Bauhaus Dessau Foundation since 2007. Her research focuses on the dynamics of urban transformation in medium-size Anatolian cities. She is currently working on her PhD thesis entitled 'Restructuring Medium-Size Anatolian Cities after the 1980s: the Case of Bursa'.



C O N T E N T S



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Amanda Levete Architects
(AL_A)

Mark Garcia

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Jil Sander Boutique and Derek
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Building Profile

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Site Lines

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Howard Watson

Amanda Levete Architects (AL_A)

Like a phoenix rising from the ashes, Amanda Levete Architects (AL_A) is taking up where Future Systems left off. Led by Amanda Levete, previous co-director of Future Systems with the late Jan Kaplický, the practice retains its unique sensibility with its emphasis on new technologies, materials, science and engineering combined with art, design, fashion and the organic. Mark Garcia visited AL_A's Notting Hill-based studios to review the current projects of this 40-strong team and to talk to Levete about the underlying design principles and processes behind the office's work.



*left: AL_A directors and Amanda Levete.
From left to right: Ho-Yin Ng, Amanda
Levete, Kwamina Monney and Alvin Huang.*

**News Corporations HQ, Wapping, London,
due for completion 2013**

*opposite: A 33-metre (108.2-foot) high
atrium carved out of the original print works
with a series of other atria along main
circulation paths to maximise natural
lighting and ventilation.*

There is something quite exceptional about AL_A and Amanda Levete. Walking into their airy warehouse office in Notting Hill Gate one can literally feel the weight of both past and future. Judging by the circumstances of its birth, this very young/established practice is destined to excel. For Levete previously headed up Future Systems together with the late Jan Kaplický. The precocious old/new firm thus has an illustrious heritage encapsulated by the re-emergence in this new venture of the gifted and resilient Amanda Levete (a leader of the Stirling Prize-winning team that built the Lord's Media Centre and Selfridges in Birmingham). AL_A has hit the ground running.

Levete's work and drive exhibit a level of athletic, disciplined training, of technical control and expertise which never looks over its shoulder. Moving from the entrance of the offices to the business end with its working and meeting areas, one can understand why. The walk is one through an architectural heroes' hall of fame, with award-winning work displayed like prizes on tables and walls. So while the firm is linked to its legacy, it is also on course for an increasingly long-haul journey aboard its latest reincarnation.

The reforging of Levete's well-tempered pragmatism, tenacity and boldness make her new firm long awaited. AL_A has only been in existence for six months (at the time of writing), and though some of its recent projects (such as Hills Place and Spencer Dock Bridge) were under Levete's lead and designed under Future Systems, many are completely new. Her work is pitched between the expressive, Romantic *éclat* and imagination of the artist and the strictly objective, technical rationality and authority of the scientist-engineer. It is this careful poise, blending and balancing itself into hybrids of harmonised oppositional tendencies that brands these designs. Elegant, aerodynamic, artful and urbanely high-tech, this new body of design projects exudes an increasingly multidisciplinary and multimedia range of influences that extends well beyond engineering,

science and high design to embrace aspects of the craft's more informal, popular, high-performance, streamlined manifestations in fashion, sport, leisure, entertainment and the media.

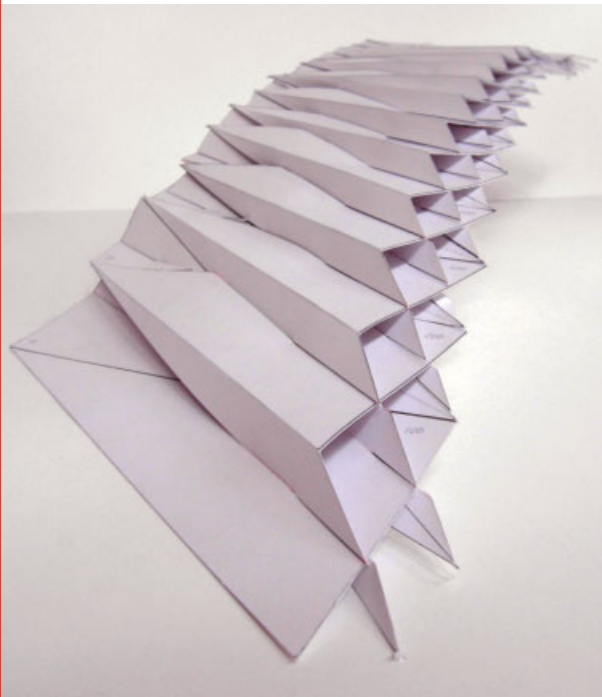
As Levete explains: 'What we do is who we are.' AL_A's 40-strong, youngish, barefoot personnel appear neat but casual, hard at work at white desks in a single large open-plan, pink-carpeted space where the only daylight falls in long slits of sky through the transparent roof. Aside from Levete, each of the three directors is responsible for their own projects, but also oversees different aspects of the firm's corporate functions. Alvin Huang, who specialises in digital design, production and constructions, is also responsible for organising the office's design research; Kwamina Monney's interests centre on the more artful, handcrafted and collaborative aspects of design processes, cultural diversity, and multidisciplinary and sustainable design; Ho-Yin Ng engineers the IT infrastructure and the management of parametric, manufacturing and emerging technologies, their processes and products.

Research Systems and Structures

The centrality of research to AL_A's work is part of the reason why Levete was sought out by the Department of Architecture at the Royal College of Art (as external examiner and now visiting professor). This is the height of high-concept architecture. At each scale and stage of work, the office identifies a specific strand of research. For Levete:

Whether the research is material, geometrical, about fabrication, a social dimension or of any other kind [it] is relentlessly pursued. It makes the work analytical and intellectual both in context and programme and it leads to a less object-based result. The work is not just about form and the object, but also about the performance of the building on cultural, social and other less determinate dimensions ... What we do is not bounded by the object in this formalist way.

What is common to the work of both Future Systems and AL_A is their distillation of new technology, materials, science and engineering with art, design, fashion and the organic. Part of this is evident in the networked approach to their research demonstrated in the division of labour and specialisms among the firm's directors, part in the fact that

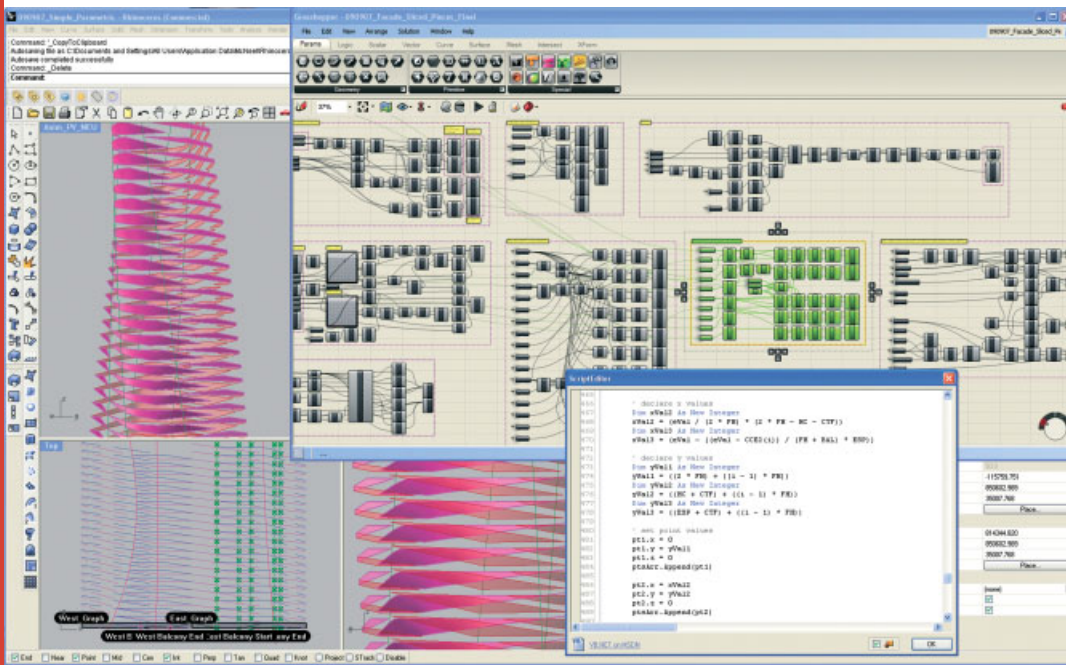


Château Lacoste Footbridge, Bordeaux, France. 2009

Card model of the parametrically designed bridge. AL_A's research exploits the discursive synergies and reflexive dialectics between the digital and the physical as an integrated trajectory of exploration in which both methods are necessary components of each line of investigation. Both digital and physical methods were employed in this project to allow the designers to go beyond what might otherwise have been a simplistic, purely parametric study of a continuously varying, twisting and folding bridge without handrails.

Levete is a serial collaborator. She includes Antony Gormley and Anish Kapoor among a host of others in her list of professional partnerships and is keen to bring in economists to make the practice's research yet more relevant. It is these kinds of lateral fusion, seasoned and tested in previous projects, that drive the firm's originality and added value. The AL_A brand of the 'shock of the new' is (like Future Systems was) consistently futuristic and radical in a very welcome, sensuous, strangely familiar and friendly way, something in sharp contrast to much other high-tech work that can seem menacing, too alien and mechanistic. This tension between design constraints is expressed in solutions that seem effortlessly playful, colourful and humane. It is a fusion, updated and refined, that is now also proving popular, for AL_A is not short of work.

The firm's approach to research is exemplified in three of its most recent projects: Spencer Dock Bridge in Dublin, and Hills Place in London (both completed in 2009) and Central Embassy in Bangkok (due for completion in 2013.). The lenticular, slitty oculi cut into the street elevation have the aesthetic of Lucio Fontana 'slash' paintings, shark gills and (Pininfarina) sports cars or fighter-jet air-intake vents. These oculi have something of the filleted, racy apertures in the roof of the (unbuilt) Future Systems Masserati Museum in Modena (2004) and remind us that Levete has worked on projects for a number of high-profile luxury racing-car brands, including interiors and exhibition designs for Ferrari (Frankfurt 2001 and Paris 2002). The softer, more fashionesque cuts of these forms, reminiscent of the 'slash n' pull' techniques of Vivienne Westwood and the Elizabethans, are linked to their textile sensibility; unsurprising, considering Levete's long-term relationship with fashion and retail.



AL_A Tower, Shoreditch, London, 2009

Parametric design development (on in-house scripted Grasshopper software) to refine balcony and solar-shade panel geometries, investigate tower height and twist, and automate/integrate the facade elements model to automatically adjust to changes in the base tower geometry (ie, floor height/number of floors) as the design evolves.

Hills Place, London, 2009

Completed in September 2009, Hills Place is a slickly gleaming five-storey, 1,320-square-metre (14,220-square-foot) jewel of an office for Clarendon Properties with all the styling, detail, and sense of prowess and glamour of minimalist couture, luxury sports cars and high-performance racing yachts. Its main, street-facing elevation is formed of a tongue-and-groove system of curving 140-millimetre (5.5-inch) aluminium strips which have been coated with a metallic silver paint, a combination used in the manufacturing of ship hulls. Projecting from this surface are three large windows made from self-cleaning glass, three surgically tailored dissections to create a neat solution to the situation of its narrow, side-alley site. So unattractive is the spatially crowding street, so limiting of horizontal daylighting, that the building raises its eyes upwards to maximise privacy, making the sky the most important visual connection with the exterior. Its stealthy surface mirrors the alley in a flattering, well-mannered way while it generously bounces some of its borrowed light to (at times and in the right angle) liquefy itself and simultaneously lighten up its neighbours. The ground floor is fronted by a fibre-optically illuminated facade of sandwiched glass, steel mesh and dichromatic film over a semitranslucent layer that creates a coloured, virtually 3-D moiré pattern. Hills Place is the closest Oxford Street comes to contemporary landmark architecture.

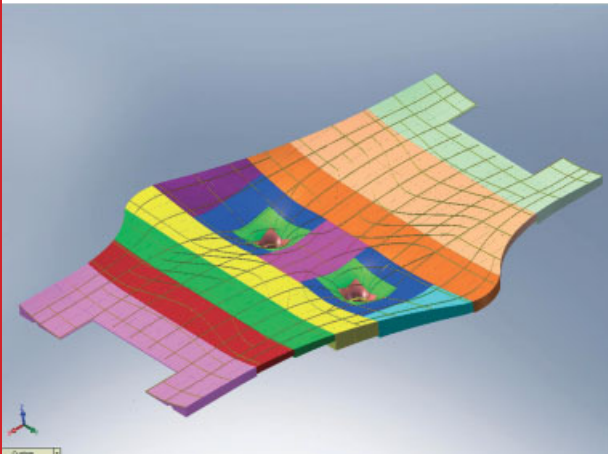


Another example of Amanda Levete's original and significant research lies in the double piers and underdeck of the Spencer Dock Bridge. Merging into a lean monocoque structure that swoops and dives into and out of the water in a single surface manoeuvre to form two conical feet in the river, the design recalls the montage (but not the model) of the (unbuilt) Future Systems People's Bridge (1996) across the Thames, as well as the more recent Amanda Levete Drift Bench and other furniture. The oversailing 'wings' of the bridge echo the earlier (unbuilt) Future Systems River Clyde Bridge of 2005 and other details of the shearing, flowing tiers of spaces featured in the internal massings of many Future Systems projects. Constructed from both in situ and precast reinforced concrete and white limestone, the mouldings for the soffit were CNC-milled from resin-coated polystyrene, directly from parametric models. The bridge is currently the largest example of this type of digitally led manufacturing process.

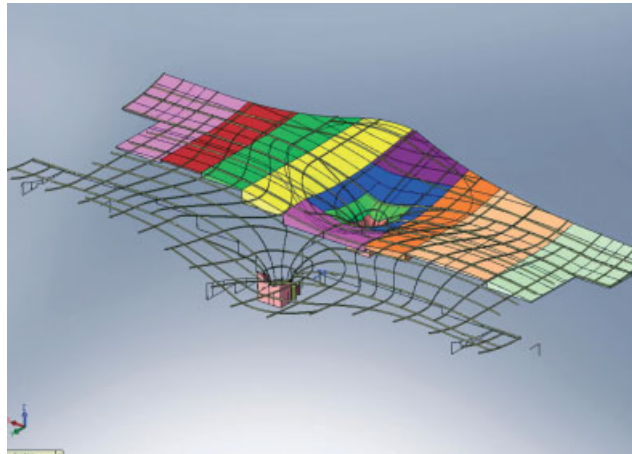
More of this type of AL_A research is behind the three-dimensional topographic landscape of ceramic tiles on the deep envelope for the Central Embassy, Bangkok, a design solution stimulated by research funded by a Churchill Fellowship for travel and study

into patterns and artisanal techniques in traditional Thai architecture. As AL_A director Alvin Huang points out, this research resulted in a combination of indigenous patterns, materials and fabrication methods that furnishes – unusually for a building with such a parametric pedigree – a strong and poetically contextual twist. The effect is to bestow a consistency and coherence on the whole envelope and form, lending them kinetic differentiation intensified by the changing light over the course of the day, introducing novelty and providing the viewer with shifting sites of fascination.

The tiles are an intelligent advance on the spun aluminium discs of the Future Systems Birmingham Selfridges, while its cross-legged, 3-D figure-8-type Möbius strip-like forms are also found in Amanda Levete's slinky and sinuous Around the Corner (2008) series of furniture and products. The continuous morphing of the patterns generates some spectacular optical and *trompe l'oeil* spatial effects, making this building seem at times more virtual than real and positioning the work not just as architecture, but as large-scale Op Art sculpture, digital urban public artwork, and possibly the largest urban-scale optical illusion ever designed. This is Op-Arch at its cutting-edge zenith.



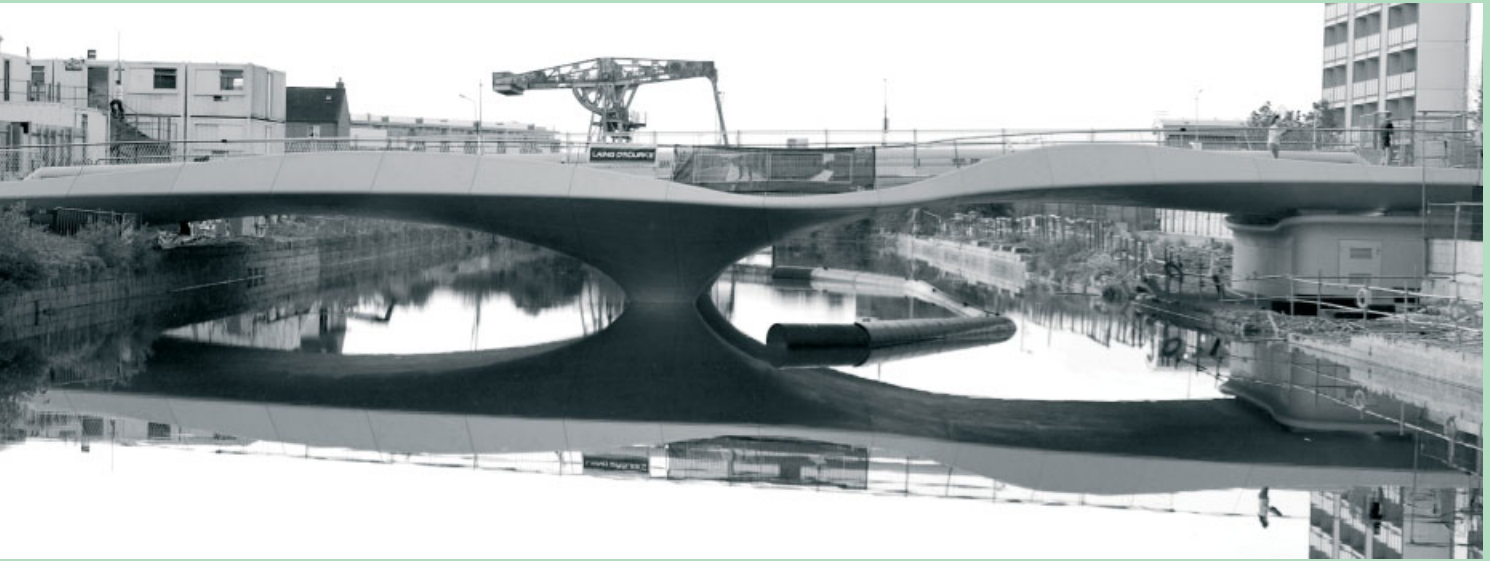
Spencer Dock Bridge, Dublin, Ireland, 2009
above: 3-D parametric computer model formwork components and geometry screen shot.
right: Cantilevering wings and feet of the bridge's single-surface underdeck.



Spencer Dock Bridge, Dublin, Ireland, 2009

The €4.5-million, 40-metre (131-foot) concrete Spencer Dock Bridge built across the Royal Canal for the Dublin Docklands Development Authority Railway Procurement Agency carries trams, cars and pedestrians. It is almost wider than it is long, AL_A stretched and pulled the bridge so that its edges shear down and away from the traffic. These edges swerve out and back smoothly, terrace-stepped to hang suspended over the water in a finny, curvy cantilever. The perpendicular, asymmetrical wings flap out

in a tonguey, lippy pout at the canal. The design is a mixed typology of landscape, infrastructure, product and public urban sculpture, as much a stopping-off point and destination as a transit space. Sewing together the banks and the linear park alongside it, this is a giant urban stitch in the flows of the city: a venue in its own right, the bridge is begging for cultural and social events.



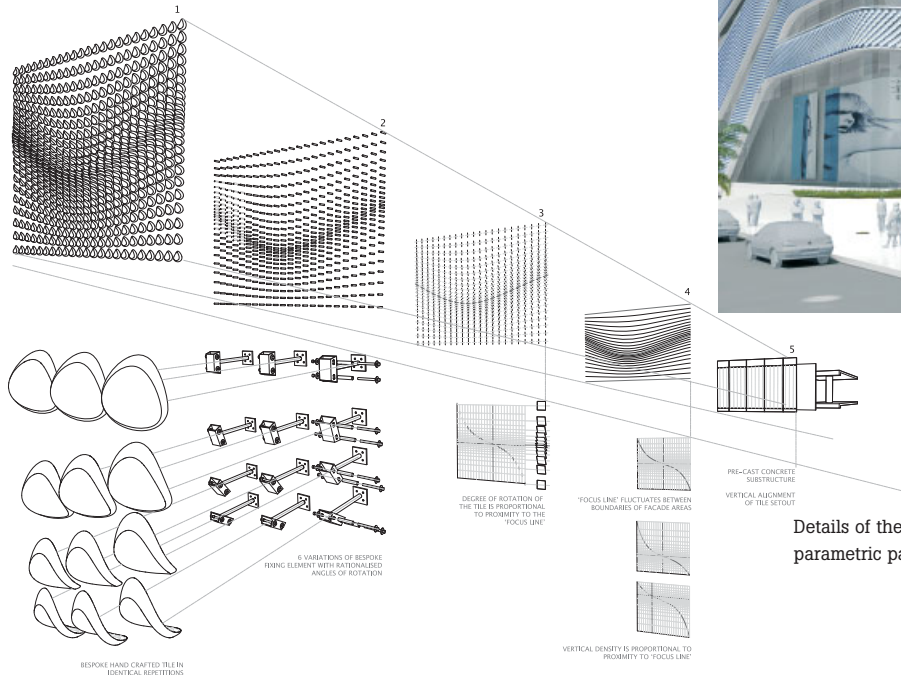
Central Embassy, Bangkok, Thailand, due for completion in 2013

In March 2009, AL_A announced its Central Embassy project. A 140,000-square-metre (1.5 million-square-foot) retail and hotel complex for the Central Retail Corporation, it is located on central Bangkok's main shopping thoroughfare, Ploen Chit Road. Central Embassy consists of a seven-storey retail block and a 30-storey six-star hotel. The overall form is a unified and snaking, spiralled mass so sculptural and so unlike any other building in the city that it is set to become Bangkok's first contemporary landmark building and a Thai icon. The enveloping form simultaneously enfolds two vertical lightwells

in the slab and diversifies itself to articulate a sequence of staggered terraces, external courtyard and elevated garden elements distributed around the hotel. Central Embassy is an original solution to the major millennial architectural problem of big-box, megastructure, mixed-use, building-complex projects that require a tower and a large, horizontal plinth to form a single isolated building on a large open site in which no single elevation must dominate. Central Embassy is AL_A's and Leveté's largest and most programmatically complex building to date.



Central Embassy, Bangkok, Thailand, due for completion 2013
Retail entrance elevation showing the effect of the parametrically patterned landscaping of tiles on the facades.



Details of the tiles and their parametric patterns.

Flightlines of Great Futures

AL_A's systematically piloted vectors of design development are one of its core strengths, enabling the practice to build on and extend its historic interwoven networks of research into evolving trajectories of investigation and innovation, trajectories that work beyond individual, discrete buildings to extend through projects and over time. The success of this distinctive research sensibility is already borne out by AL_A's burgeoning portfolio and, tellingly, by the fact that most of their clients come to them. Among current commissions are the News Corporation headquarters in Wapping, an exhibition on choreography at the Hayward Gallery, houses in London and Dublin, an academy in Southwark, and a department store in Milan, as well as the usual portfolio of products. AL_A has high, lofty dreams, including masterplan designs for the refurbishment of existing cities as well as designs for galleries, stadia, factories, stations, concert halls and even a nuclear power station.

What is so remarkable about this practice, then, is not just the manner of AL_A's phoenix-like rise and relaunch from the glory and tragedy of the pioneering Future Systems. For its profile is in part recognition of

what AL_A has already achieved not just through Levee's contribution, but through the firm's current projects and the cleverly controlled design processes, people and possibilities of its precisely researched range of projects and partners.

Departing the office, one is struck by the idea that the workspace is itself another AL_A signature hybrid, one programmatically somewhere between an office, museum, laboratory, lounge, showroom, university and shop, a space designed more like a ship or an airliner. Which is apt, as looking back at the staff watching the sky clear after a thunderstorm, it is as if a kind of take-off as much as a rebirth might just have occurred. A legendary architect once wrote: 'There is not enough flying in Architecture.'¹ Well watch this bird soar. **Δ+**

Mark Garcia is an academic, author and journalist. He has worked in industry as Research and Development Manager for Branson Coates Architecture and has held academic research and management posts at St Antony's College, Oxford, and in the Department of Industrial Design Engineering at the Royal College of Art. He has taught MA and MPhil/PhD students in the departments of Textiles and Industrial Design Engineering, and in the Department of Architecture where he was most recently Research Co-ordinator and an MPhil/PhD Supervisor. He is the guest-editor of the AD issues *Architextiles* and *Patterns of Architecture*, and editor of the book *The Diagrams of Architecture* (John Wiley & Sons, 2010).

Note

1. Jan Kaplický, *Confessions*, John Wiley & Sons (Chichester), 2002, p 62.

Text © 2010 John Wiley & Sons Ltd. Images: pp 106-8, 110(t), 112-13 © Amanda Levee Architects 2009; pp 109(t&b), 110(b), 111 © Amanda Levee Architects, photos Gidon Fuehrer 2009; p 109(br) © Mark Garcia

JIL SANDER BOUTIQUE AND DEREK LAM BOUTIQUE, NEW YORK CITY

The recession devastating retail in most places is nowhere to be found in a recently shabby area of New York's SoHo, just north of Chinatown. Among a handful of new boutiques, galleries and at least one hot new restaurant are two recently opened shops that demonstrate the emerging interconnections between fashion and architectural design. **Jayne Merkel** explains that Jil Sander creative director Raf Simons, who is now designing the Jil Sander line, also designed the store that houses it and, a few doors away, the much lauded new designer Derek Lam selected one of his first customers, Kazuyo Sejima of SANAA, to design his first retail store.



Raf Simons and Germaine Kruip,
Jil Sander boutique, New York, 2008

above: The ground floor of the Jil Sander store is a kind of art gallery intended to offer customers a chance to view the collection in a pristine, detached atmosphere similar to a fashion show. Garment selection and sales take place upstairs where there are changing rooms and cashiers.

opposite: The first floor of the Jil Sander boutique is spare and elegant, too. Simple stainless-steel hangers placed on simple stainless-steel racks hold garments in neat, widely spaced rows. Shoes and bags are artfully arranged on marble shelves. Both are illuminated by rows of Serge Mouille arm ceiling lamps.

High style is subtly nestled into a newly developing area of SoHo, a little south and east of the now overdeveloped main drag. Here, some shabby wholesale outlets and small industrial spaces still coexist with the newcomers – Ted Muehling jewellery design, BDDW custom furniture and a new space for the Museum of Chinese in America, designed by Maya Lin, which opened in autumn 2009, right across the street from the simply chic Red Egg restaurant specialising in Chinese-Peruvian food. The turnaround in this lost little corner of bustling Manhattan began six years ago when the Philippine-born art and antiques dealer Federico De Vera opened a shop on the northeast corner of Crosby and Howard streets in a high-ceilinged, cast-iron-columned space with windows on two sides. He painted the entire interior black, installed simple modern cases and spare stainless-steel bookshelves, and then allowed the spotlighted, varied, exotic works of art and jewellery to bring the space to life.

Across the street on the northwest corner of Crosby and Howard streets, the new light-filled, all-white Jil Sander store is the ying to De Vera's yang. The very severe but beautifully made garments for sale are placed far apart in this spacious 535-square-metre (6,300-square-foot) two-storey shop that devotes the whole ground floor to a gallery-like display intended to provide an experience midway between that of a fashion show and a regular store. Slim Carrara marble shelves hold a few artfully displayed shoes and bags. Geometric pedestals hold clutch purses and earrings under Plexiglass covers and pedestals hold abstract mannequins, but the main statement is made by the veined white Carrara marble floors and the absence of almost anything else.

At the back of the ground-floor gallery, tall vertical slats, mirrored on one side and flat white on the other, shimmer as they rotate in unison providing a fountain-like quality. They enliven the room, reflect images of the customers, and shield the serene display area from a severely geometric white marble staircase at the back of the room that leads to the first floor. The exquisitely detailed, rigidly geometric staircase was designed by the Dutch artist Germaine Kruip. The rotating slats were also created by Kruip who has installed similar ones in European



above: Upstairs, triangular mirrored dressing rooms, also designed by Kruij, penetrate the otherwise pristine space, reflecting activity inside and outside the windows on two sides. This part of the space is a real store, where customers can take garments off the racks, try them on and actually buy them.

The ground floor is a pristine gallery space with Carrara marble slab floors. Most side-wall windows are covered with plain wallboard, and at the back of the space, tall vertical slats, mirrored on one side and flat white on the other, rotate in unison, partly hiding a severely geometric white marble staircase that, like the shimmering slats, was designed by the Dutch artist Germaine Kruij.



SANAA, Derek Lam boutique, New York, 2009

In SANAA's new Derek Lam boutique, the architects demonstrate their wizardry with layers of transparency created by a series of rounded interior rooms, or 'bubbles', one for each of the designer's equally dramatic and flowing collections.



museums and galleries. She also placed rotating, opaque white, vertical slatted blinds in the store's ground-floor front and corner windows to create a peek-a-boo effect, teasingly uniting the space with the street.

Kruip's rotating, mirrored rear wall continues upstairs where spare stainless-steel racks holding garments on hangers make the space look a little more like a store, though the same marble slabs artfully display shoes and accessories under neat rows of Serge Mouille arm ceiling lamps. Here there are even changing rooms, also designed by Kruip, though it takes a while to figure out that these elegant, freestanding, triangular mirrored objects actually have a practical purpose. The message clearly is that art, architecture, fashion and design are all one thing. Certainly, the shop shares the same very spare, beautifully detailed, geometric aesthetic as the Jil Sander line, which is also now designed by the Antwerp-based Raf Simons, who trained as an industrial designer, since Sander herself left the company in 2004 after selling it to Prada five years earlier.

A few doors up Crosby Street, Derek Lam's first retail store also shares the aesthetic of his collections, which

are soft, fluid and gracefully draped instead of crisp and geometric like Sander's. Here the 260-square-metre (2,800-square-foot) space on the ground floor of a five-storey brick loft building is even more sensational; unsurprisingly, since it was designed by SANAA's Kazuyo Sejima and Ryue Nishizawa. Although these Tokyo-based international architects have been doing public buildings recently, they did design the HH Style store in Tokyo in 2000, the Prada Beauty boutique in Hong Kong in 2001, and the Issey Miyake by Naoki Takizawa shop and the Christian Dior building, both in Tokyo and both completed in 2003. Although the Derek Lam store has the same austere art gallery feel as their first New York building, the New Museum of Contemporary Art half a mile to the northeast, the shop gave the architects a better chance to show what they can do with transparency.¹ This deep, high-ceilinged, loft-like space with whitewashed exposed brick walls is filled with a series of transparent 'bubbles' that often glisten in the natural light from generous street-front store windows, where mannequins face the sidewalk in a rather traditional way.

The rounded interior partitions, with 2.5-centimetre (1-inch) thick acrylic walls, separate one collection from another, providing an intimacy for customers that a larger space could not, even though one can see through them. Somehow they are comforting and exciting at the same time. Highly polished, bare, one-pour concrete floors – very



above left: One elongated, double-curved space holds aluminium benches for accessory display which curve fetchingly along the bubble walls.

above right: Crinkly gold curtains create some of the most dramatic dressing rooms in New York. These shimmering dividers also provide flexibility for displays in other parts of the store and contrast dramatically with the very smooth, one-pour grey concrete floors they barely skim.



opposite: Near the entrance, a small round 'bubble' housing original cast-iron columns that were already in the space is visible from Crosby Street in the generous shop windows. Slits in ceiling panels provide a different audial environment in each space, and pin lights allow different lighting effects for each collection.



refined versions of those ubiquitous in art galleries these days – keep the space both simple and elegant, as do plain aluminium clothing racks, staff-like mannequins, and plants in plain terracotta flowerpots. Minimal furnishings – a few rectangular wood and aluminium tables, serpentine aluminium display stands, upholstered benches and stem-like display stands – evoke particularly delicate examples of mid-century modern design, such as Eero Saarinen tulip chairs and geometric Florence Knoll tables. Each sensuous bubble has a different configuration (large round, small round, amoeboid, relaxed rubber band), a different pattern of overhead pin lights, and its own sound system for a unique effect. Simple slits in circular ceiling panels provide conditioned air. Crinkly floor-to-ceiling gold curtains add glitter, offer varying options for displays within the bubbles, and create unbelievably sensuous changing rooms.

SANAA engaged New York architect Toshihiro Oki, who was born in Tokyo but educated in the US, as executive architect on this unusually sensuous project. Derek Lam is a New York-based fashion designer who trained with Michael Kors and founded his company with Jan-Hendrik Schlottman in 2002. The company's atelier, offices and a showroom are located on the upper storeys of the 19th-century industrial building that houses

the store. They were designed by the Brooklyn-based firm Solid Objectives, whose founders, Florian Idenburg and Jing Liu, are former SANAA employees. They also created some of the subtle furnishings for the store.

The curved acrylic walls are similar to those used in aquariums everywhere and were made by the same company. They were manufactured in Thailand as flat acrylic sheets and then shipped to Nevada where they were heat-moulded into curves before being loaded on to wide-bodied trucks and hauled across the country in the middle of the night – many nights. US states only allow wide-bodied shipments to travel on highways between midnight and 5 am, and the factory is a 38-hour drive from New York. Since the walls are so large and there are so many of them, it took at least three separate shipments to deliver the interior partitions for the store. When they arrived in New York, the owners had to turn the heat way up so that they would not break, and remove the transom and door to get them in, rolled on tiny titanium casters. They create an atmosphere not quite like that anywhere else: fluid and glistening. Because they are almost invisible from some perspectives, a few customers have walked into them, so minimalist mannequins and potted plants now guard dangerous un-corners. Nothing should get in the way of the treat it is to visit this store. **AD+**

Note

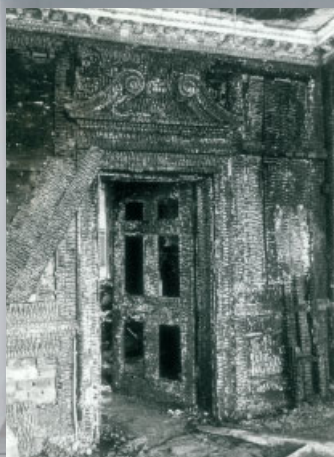
1. See 'SANAA's New Museum of Contemporary Art, New York', *AD Interior Atmospheres*, Vol 78, No 3, May/June 2008, pp 98–101.


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Raven Row, Spitalfields

Subject to many adaptations and reworkings over the centuries, Raven Row in London's Spitalfields displays resilience and an enduring quality. **David Littlefield** describes how 6a Architects have relied on impeccable judgement in their renovation of what were once silk merchants' premises into a non-profit contemporary art centre, enabling them to combine cheeky references with authentic craftsmanship.

(below left) 1960s view of the silk merchants' premises. Knocked into a single office after the Second World War, the building has now been reinvented as the Raven Row contemporary art centre. *(below centre)* Despite a fire in 1972, the architecture of the building remained: the panelling was replaced faithfully, while concrete floors were inserted elsewhere in the building. *(below right)* The same view of the burned doorway today. 6a Architects have preserved the texture of the walls, but applied an art gallery aesthetic of white walls and timber floors.





There is a moment of subtlety in this building that encapsulates 6a Architects' approach to creating a 21st-century gallery out of what began as an 18th-century, Huguenot silk merchants' premises. The flattened arch of the original building does not meet its brand-new extension with a self-conscious line or flamboyant contrast. The moment of meeting is indeterminate; as the orthogonal language of the extension approaches the Georgian building, the angle between wall and ceiling dissolves into a three-dimensional curve. Architectural languages do not so much touch, as fuse. What the architects have done is regard the building as a centuries-old work in progress. So many acts of revision have been visited upon 56 Artillery Lane during its lifetime that commonplace juxtapositions of old and new would appear clumsy and simplistic. Even a postwar addition was treated with a degree of respect: '1972 is as real as 1754,' says practice director Tom Emerson.

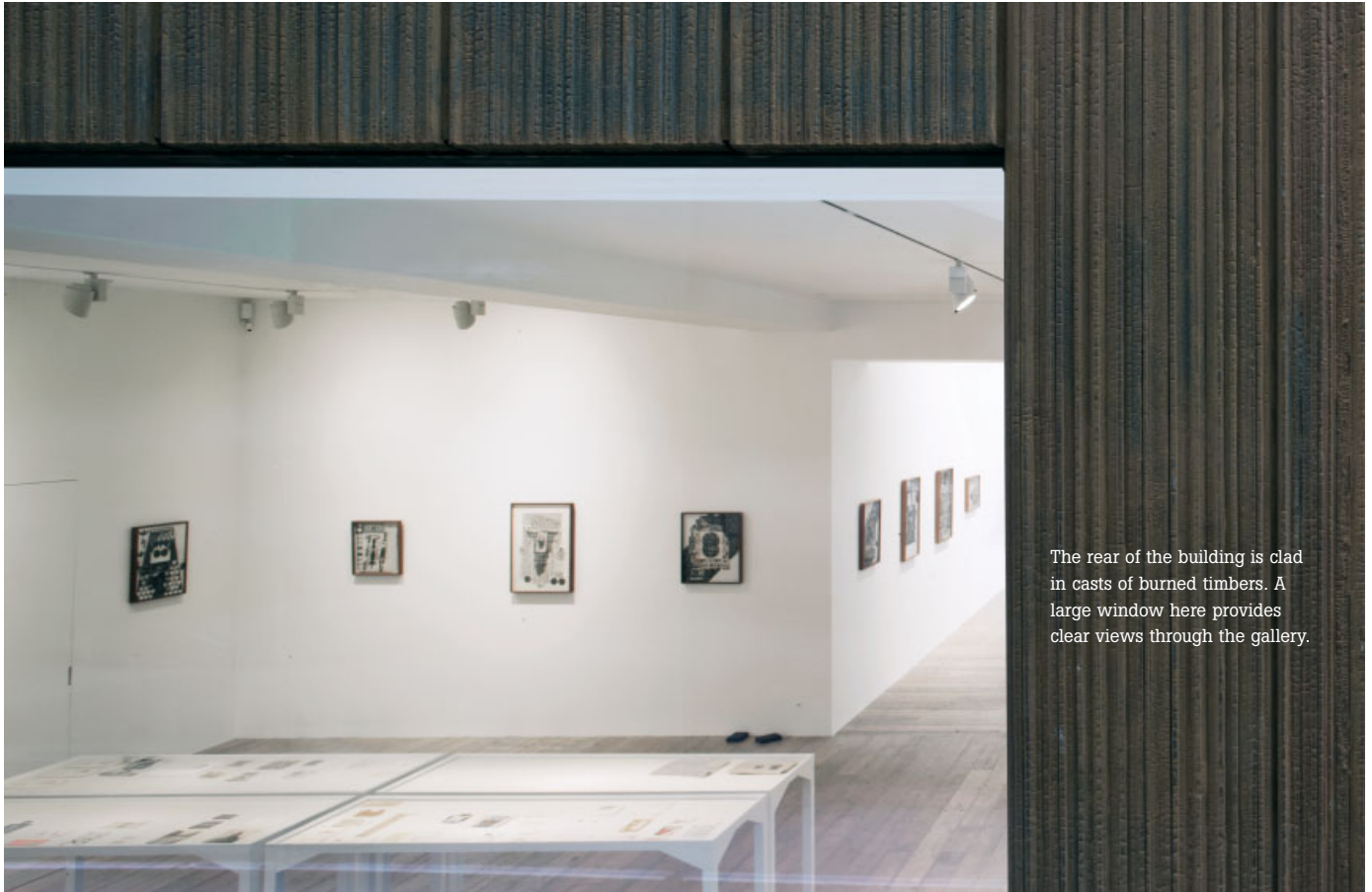
These dates are significant. The pair of buildings, constructed as adjacent shops and dwellings near London's Spitalfields, were built in 1754. After the Second World War they were roughly handled, merging into a single office premises while retaining their Georgian facades with Regency additions. A serious fire in 1972 triggered a major restoration effort, although concrete floor slabs were also introduced at ground level,

along with a new lift and circulation core at the rear. But the biography is actually more complicated than that. Vestiges of previous buildings, notably stairwells and fireplaces, remain from the 1720s. More curious still, the interior of a principal first-floor room was stripped out in the 1920s and shipped to Chicago, only to return as a super-complicated jigsaw puzzle in the 1980s. Stored in an Essex barn, the panelling, window shutters and fire surround (having escaped the fire because of their US sojourn) were retrieved by 6a and restored to their original location, with adjustments here and there due to building slippage. The building is, despite the abrupt changes and accidents that have occurred throughout its history, still very much itself. Even the fire, which was considerable, failed to cut too deeply. 'Despite the fire, the architecture was still there. There was something enduring, a certain resilience,' says Emerson.

Bought by supermarket heir Alex Sainsbury, these fine spaces have been refashioned into the not-for-profit Raven Row art space. According to Emerson, Sainsbury was a thoughtful and sensitive client, and together they developed an approach that blends restoration, conservation, experiment, absolute modernity and even, perhaps, a little knowing Postmodernism – cheeky references that manage to be both new and old, keeping English Heritage satisfied while avoiding the need for too much slavish reinstatement. A handrail and door knob, for example, appear as rough metal casts of 18th-century originals. A small, concrete, cantilevered stair (unquestionably contemporary) has been assembled using the very same techniques Georgian contractors

6a Architects, Raven Row contemporary art centre, Spitalfields, London, 2009

View through the additional space at the rear of the building, through the flattened arch to the 18th-century reception area. The join between new and old is blurred.



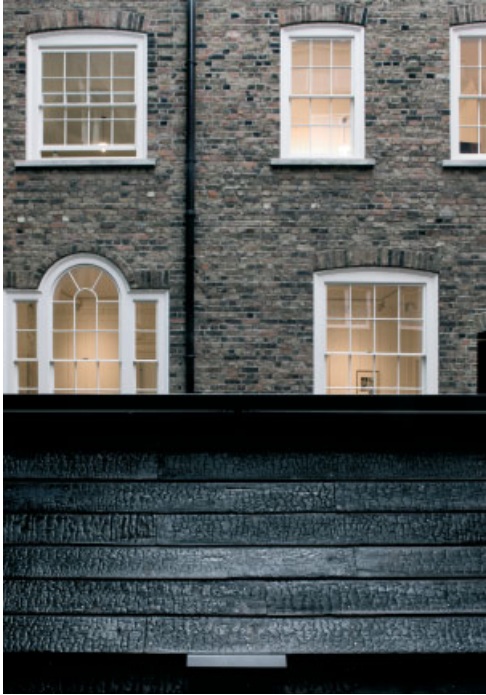
The rear of the building is clad in casts of burned timbers. A large window here provides clear views through the gallery.



Second-floor spaces, now art galleries, retain many of their domestic features, though the interior fit-out is not from a single historic period.



This first-floor room, the interior of which was moved to Chicago in the 1920s, escaped the fire. The fireplace remains bare, however.



above: Section through the development. The 18th-century building can be seen on the left; the building on the right is a newer residential building, under which sits a gallery extension.

left: Raised window lights on the green roof, under which the new gallery is positioned. Burned timbers provide the cladding.

would have employed. This project is about, more than anything else, impeccable judgement. 6a has managed to respond to the prompts of the building and create something entirely new yet authentic. No mean feat.

It has also been considerably extended. The upper two floors of this five-storey building are given over to offices and flats, and new spaces have been added at the rear to add both square metres and the height required for contemporary art installations. Filling what was formerly a tatty courtyard, the principal gallery space runs beneath a reasonably new residential block that had to be propped up while structural changes were made.

The new galleries drop down below street level, allowing generous heights to be achieved while keeping the new green roof at first-floor level. This is the space that meets the original building with the faded line, the curve that saves the junction of new and old from any sense of abruptness. But the floor plan still has a certain quirkiness about it, caused by the fact that the boundaries of the building are not parallel. The largest gallery, lit from above by a pair of raised roof lights, is not quite square. 6a, valiantly, have not corrected this slightly flawed geometry and the result is a very subtle adjustment of perspective. Contortions like this operate all over the building. The floor of the 'Chicago room' drops by 150 millimetres (5.9 inches) – a drop which had increased since the 1920s, causing the joiner who reinstated the panelling no end of agonies. This room is, in fact, unfinished; although the fireplace has been fitted with its original surround, its interior is of bare (and loose) brick.

Perhaps, says Emerson, a cast-iron fitting from an appropriate period may one day be found; but one suspects this rough and sooty opening will remain exposed.

The architects have also explored the building's relationship with fire in a far more visceral way. A Japanese member of staff, Takeshi Hayatsu, recalled that wooden structures back home were traditionally built from surface-charred timbers, reducing insect attack and offering fire protection. The technique is to form lengths of wood into a three-sided tube, tie it with string, stuff it with straw, and set it alight. Held vertically, the assembly burns furiously, but the string soon breaks, causing the structure to collapse and self-extinguish; the timber is burned sufficiently to gain a surface charring, but not so much that its structural integrity is threatened. As a nod to the fire of 1972, 6a has used this technique to treat the cladding on the raised roof lights. Furthermore, metal casts of the timbers provide cladding at the rear of the building. Again, subtlety is the order of the day. Neither of these measures is terribly obvious; they sit quietly as clever details that repay the effort of noticing them.

This is a project which operates at two levels: in a practical sense, the architects have made the best of what they have; but as an act of interpretation, they have shown history to be multilayered, never-ending and not a little beguiling. This building is not quite what it seems, and it is worth looking at it very closely. **AD+**

David Littlefield is an architectural writer. He has written and edited a number of books, including *Architectural Voices: Listening to Old Buildings* (2007) and *Liverpool One: Remaking a City Centre* (2009), both published by John Wiley & Sons Ltd. He was also the curator of the exhibition 'Unseen Hands: 100 Years of Structural Engineering', which ran at the Victoria & Albert Museum in 2008. He is a visiting lecturer at the University of the West of England.

Text © 2010 John Wiley & Sons Ltd. Images: pp 120-1, 120(r), 122(b) © David Grandorge; p 120(bl) © London Metropolitan Authority; pp 120(c), 122(t), 123 © 6a Architects

The EmTech Wave Canopy 2009

Michael Weinstock describes the constraints and creativity behind the Wave Canopy, the EmTech Masters programme construction project for 2009, which was located on the upper terrace of the Architectural Association's premises in Bedford Square.



EmTech, Wave Canopy, Architectural Association, London, 2009
The 5-metre (16.4-foot) long wave-like timber composite strips are fabricated from shorter individual thin timber veneers, CNC-cut and laid up on a jig in two layers with an interlayer of glass fibres and resin.



The 'outboard' view of the canopy on the upper terrace of the AA.

The Emergent Technologies and Design (EmTech) Masters programme at the Architectural Association (AA) includes an experimental construction project each year, and in 2009 this was located on the upper terrace of 36 Bedford Square. EmTech constructions are undertaken in collaboration with a team of young engineers from Buro Happold, led by Wolf Mangelsdorf. The Wave Canopy has two principal subsidiary systems – wave-like strips of a thin timber composite, and upright timber fins that provided local stiffening to the strips and the connection to the existing steel columns that are a permanent feature of the upper terrace. The upper terrace is one of the school's most public areas, used throughout the year by all staff and students, and so the multiple constraints of this situation determined the initial brief – the canopy needed to provide partial shelter from the rain, shading from the sun and modulate the wind. The fabrication method was constrained by the size of the CNC bed and the standard size of timber veneer and plywood panels. Finally, the fabrication by students had to take place within the school, and the assembly was conducted in a very small space with limited access, bringing further constraints on the scale, weight and assembly logic.

The 5-metre (16.4-foot) long wave strips were fabricated by the students in the studio from two layers of 1.5-millimetre (0.06-inch) plywood with an interlayer of glass fibres and resin, and the fins were fabricated from three rather thicker layers. The two outer layers were 12-millimetre (0.5-inch) thick plywood and the central inner layers were 18 millimetres (0.7 inches) thick. The fins

were assembled from two separate parts joined together by a steel flitch plate. A 20-millimetre (0.8-inch) diameter steel pin connected each fin to the plate at the top of each column. The lower part of the fin was positioned on the outer side of the balustrade, and was connected to the columns by a two-part steel ring clamped around the base of each column and extended through the balustrade to the bottom of the fin.

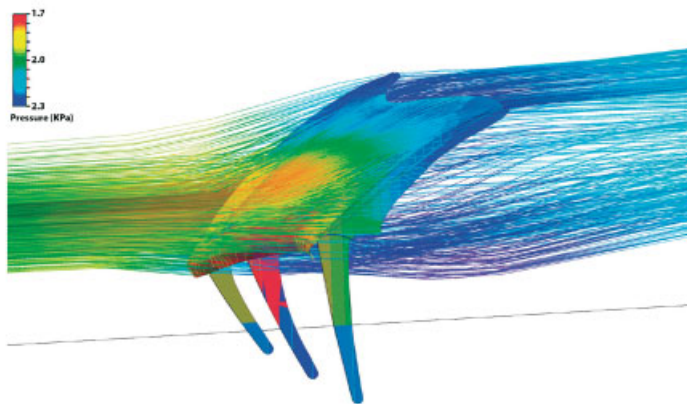
The canopy project brings together two of the principal research paths of the EmTech programme – the mathematics of evolutionary development processes and physical experiments whose geometry is developed in relation to material behaviour. The iterative process of design and fabrication involved advanced computational tools whose input parameters were derived from physical models together with manufacturing and assembly logics. The design of the strips and fins was co-evolved together with the assembly sequence to make the best use of the limited space and time available on the upper terrace, and to ensure that all the assembly took place safely 'inboard' of the balustrade at the edge of the terrace.

The overlapping wooden wave-like strips were explored and developed in a series of physical models that began with the initial component and concluded with full-size joinery prototypes. The structural capacity of the assembled strip morphology was developed by testing various degrees of overlap between the layers of strips, and differing patterns of simple bolted connections between them. Exploratory physical models gave a close but still approximate structural configuration that was refined by digital analysis of deformations under self-weight and wind load. The spatial arrangement and the environmental conditions of the terrace were transformed into data inputs for the optimisation algorithms and 20 successive iterations developed the initial surface to

The first material scale model exploring the behaviour of the thin timber veneer in overlapping layers.



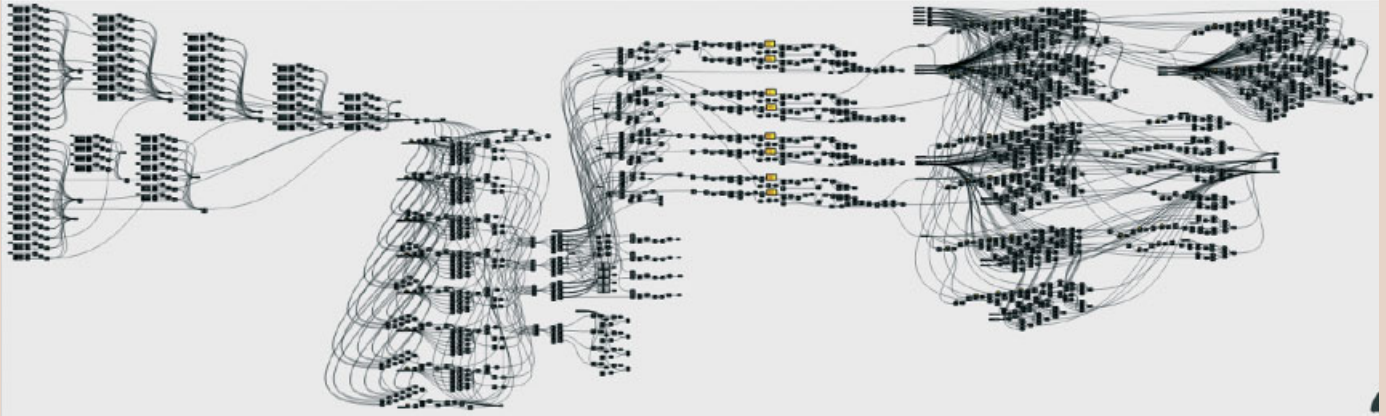
Wind pressure through CFD analysis



Fluid dynamic analysis of the global form indicating the area of maximum stress under wind load. In response the openings formed between the 'waves' are larger in this zone.

The outboard side view of the overlapping timber composite strips.





The associative model diagram (in Grasshopper) indicating the large number of parameters and their associations.

minimise wind load, and direct the rain to the drainage points. Computer fluid dynamics (CFD) simulations were used to assess the consequences of each geometric modification on the environmental conditions, and the successive iterations of the associative digital model progressively reduced the turbulence under the canopy, increased the laminar airflows, increased the porosity to prevent the canopy from acting as a sail, and enhanced the structural capacity.

The physical experiments also generated the information on the curvature radii that could be achieved by bending thin strips of veneer. The selected material gave the desired curvature but was insufficiently stiff, and so two layers of wood were laminated together with glass fibres and resin to create a much stiffer composite. Prior to lamination the strips were laid up on the jig, curved and clamped in order to check the precise dimension of each curve against the digital geometry that had been evolved with an 'attractor' script that incrementally increased the dimensions of the openings that are formed by the overlapping 'waves' of the strips, and so reduced the wind load in the most critical areas. The lamination process required a jig to be constructed that accurately set out the overall curvature of the finished canopy. The strips were laminated together and then directly curved and bolted in place. Each strip was held in position by clamps until the resin was dry, and then the next strip was then fabricated on top of the previous, securing the relative position of the two with bolts.

Once all the pieces were fabricated, the three fins were laid out on the terrace, and the first three layers of the wave strips were fitted to them. The partial assembly was then lifted and bolted to the top of the columns, so that the 'foot' of each fin was pointing up to the sky. The remaining 11 layers of strips were fitted to complete the material system, and once fully assembled the whole system was rotated on the pins that hold the fins to the column. The rotation brought the 'foot' of each fin outboard and down to position so that the ring clamps could be fixed. $\Delta+$

Students: Selim Bayer, Stephanie Chaltiel, Kunkun Chen, Shuai Feng, Ittai Frank, Uttav Gupta, Konstantinos Karatzas, Mohamad Khabazi, Tamara Lavrovskaya, Mohammed Makki, Maria Mingallon, Michel Moukarzel, Sara Pezeshk, Sakthivel Ramaswamy, Jheny Roperio, Revano Satria, Kyle Schertzing, Pavlos Schizas, Xia Su, Ioanna Symeonidou

Acknowledgements

This project would not have been possible without the generosity of Buro Happold who worked alongside us in studio throughout the project. Unto This Last trusted us to use their CNC equipment outside normal working hours. We also thank Alec Tiranti Ltd for sponsoring 50 per cent of the resin and glass-fibre strands used for the lamination of the wood.

'Unit Factor' is edited by Michael Weinstock, who is Director of Research and Development and of Emergent Technologies and Design at the Architectural Association School of Architecture in London. He is co-guest-editor with Michael Hensel and Achim Menges of the *Emergence: Morphogenetic Design Strategies* (May 2004) and *Techniques and Technologies in Morphogenetic Design* (March 2006) issues of *Architectural Design*. He is currently writing a book on the architecture of emergence for John Wiley & Sons Ltd.

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Telling Stories ...

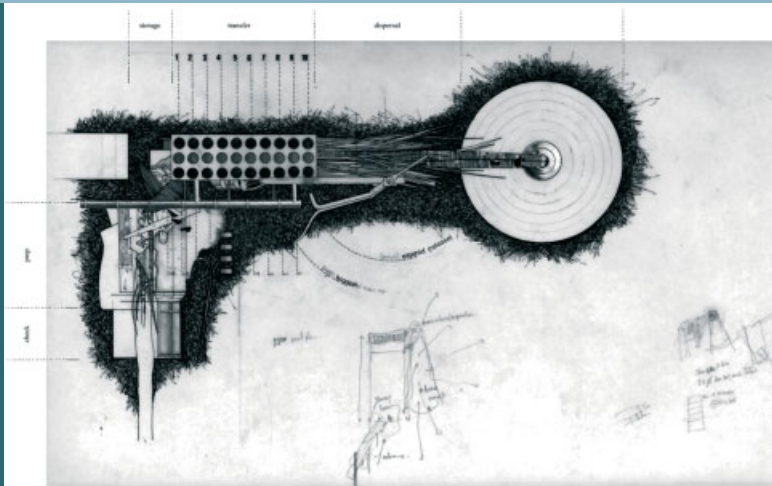
Neil Spiller celebrates 'the messier sides to architectural discourse', which take in myth-making, collaged semiotics and moreover the untidy art of narrative.

We all know that telling stories is one of humanity's oldest pastimes. In architecture, Modernism put an end to story-telling unless it complied with the global meta-narrative, that of 'machine production is moral, clean, democratic and civilised' – the worst type of myth, if ever there was one. For a myth so clearly wrong, it is amazing how many architects still subscribe to this silly twaddle. But thank goodness there are messier sides to architectural discourse, ones that are ill-defined, personal and lacking any official taxonomy. These are design methodologies that include narrative, myth-making and collaged semiotics. Maybe these notions are latent in the mnemonics of Cicero, or the proto-Surrealism of

Lautréamont or Jarry. Certainly André Breton, Louis Aragon and the Situationists explored them as today Iain Sinclair, Peter Ackroyd and WG Sebald explore them. It is also clear that the influence of Paris and Parisian 'actors' on these ideas of ambience, situation, event and narration has been considerable.

One of the 1980s British innovators of the narrative method in architecture, Nigel Coates with his Narrative Architecture Today Group, describes how the manipulation of the drawing (or whatever representational method is used) is crucial in communicating the intentions of such work. 'The drawing has to contain a filmic hypothesis and at the same time bring this back into the moment of the creative process. Sometimes this means drawing key pictures of the action even bigger than the building – in other words





Luke Chandresinghe, Patent Office and Archive, London, Unit 16 (Tutors: Simon Herron and Susanne Isa), Bartlett School of Architecture, UCL, 2006

above: This beautiful project is for a depository for patents held in a protected stasis for 20 years following a rigorous process of application, inspection, verification and final granting. It deploys a postindustrial machine aesthetic, created from collaged assemblies that are dismantled, restructured and recomposed. As with patent drawings, information is only glimpsed. No single view or patent reveals the entire design.

Nigel Coates, Gamma Venice, 1986

opposite: Here in the heyday of NATO, Coates brings the group's powers of quotidian détournement to Venice. Peggy Guggenheim, gondolas and East meets West whirl in a high-octane cocktail of fact and architectural fiction.



CJ Lim, Virtually Venice: San Michele, 2004

This specially commissioned project for the Venice Architectural Biennale in 2004 celebrates and adds to the connections between Venice and China that began with the legendary story of Marco Polo's meeting with the Mongol emperor, Kublai Khan. In these portrayals of how Khan might have imagined Venice after their conversations, the city takes on aspects of the East and reconfigures itself in new architectural forms. San Michele is a place to rest tired feet.

manipulating the context of the drawing, dialectically, critically and synthetically.¹ I for one certainly look forward to his new book on *Narrative Architecture*, shortly to be published by Wiley.

Today's brand of narrative architecture is a many-headed thing and takes its numerous cues from all the above, but also from many more influences, some of which are globally important and others of which are purely local and expedient. Projects I've seen recently address a variety of conditions in and around the modern metropolis and its ethereal mythical hinterlands. They vary from concrete propositions to polemic or poetic allusions. On the domestic scale they might rejoice in the rich interplay of a couple's preoccupations, politics or craft. On the federal level it might consist of looking at an existing embassy, rereading it in terms of its embedded symbolic meaning and redesigning it in the light of contemporary views of the owner country's previous actions in relationship to war, human rights and internal politics. Other projects include the imbuing of an existing story on an actual space and architecturally playing the two off against each other. Or work within cities like

Berlin, which have terrible histories of persecution and truncation, to create zones where history is not denied and instead held in a culturally symbiotic yet new regenerative alignment.

So why now has the Lion of Narrative awakened from its, over-two-decade slumber? Like Narnia is Architecturian Winter slowly turning into spring? Is it that we cannot bear too much reality to paraphrase TS Elliot? Is it what really festers in the minds of the young: a denial of history, of the past? No, I think it is a hope for a more interesting future. They have been brought up on TV and video games after all. Maybe, just maybe, we want our stories back and we will enter a new age of architectural storytelling.

Me, well I concur with something Will Alsop said to me nearly 25 years ago. I paraphrase a bit: 'Listen son, if you have to make up stories of Noddy and Big Ears to make an architecture that I like then that's fine.' **D+**

Neil Spiller is Professor of Architecture and Digital Theory, Graduate Director of Design and Vice Dean of the Bartlett, University College London

Note

1. Nigel Coates, 'Street Signs', in John Thackara (ed), *Design after Modernism*, Thames & Hudson (London), 1988, p 100.

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Designing for Low-Carbon Lifestyles

Carpenter, shipbuilder and pioneer of sustainable living **Mukti Mitchell** collaborates with **Ken Yeang** on an article espousing the widespread adoption of low-carbon lifestyles. As well as discussing the adoption of CO₂ reductions at the individual and global levels, they look at the extent to which architectural design can facilitate lifestyle carbon reductions.

Architects are well versed in creating low-carbon buildings by reducing energy use and embodied energy. We could now ask: Can building design go further to influence people's carbon emissions from the other key lifestyle areas: transport, food, holidays and manufacturing? When considering that each of these represents around a fifth of our total carbon footprint, it becomes apparent that architectural design could have a profound impact in the move towards sustainable ways of living.

The proposed approach here is Contraction and Convergence (C&C),¹ one of the most popular strategies for global CO₂ reductions, which was conceived by the UK-based Global Commons Institute in the early 1990s for application in intergovernmental agreements such as the Kyoto Protocol. C&C advocates measuring national CO₂ emissions on a per capita basis and contracting them to a sustainable level, for example 2 tonnes per capita by 2050.² Current annual emissions for various countries are, in tonnes CO₂-equivalent (CO₂e) per capita: US 19.8; Russia 12.0; Europe 8.0; China 4.6; India and Africa 1.2.³

Carbon profiles vary widely between individuals so carbon calculators are recommended for an accurate footprint.⁴ However, the five key components of a simplified typical UK profile are: domestic heating, 2 tonnes; personal transport, 2 tonnes; food, 2 tonnes; holidays, 2 tonnes; products, 2 tonnes; total, 10 tonnes (CO₂e per person per year).⁵ To what extent can architectural design facilitate carbon reductions in lifestyle areas apart from domestic heating, and how might this be achieved? As a prerequisite of our modern life, buildings can significantly hinder or facilitate emissions cuts across the spectrum of our

activities, and good design could potentially lead to an individual halving his or her carbon footprint. Examples are given below.⁶

Transport

A commute of 24 kilometres (15 miles) in a medium-sized car emits 2.5 tonnes of CO₂ over a 235-day working year. The same journey by local bus emits 1.2 tonnes,⁷ by train 0.7 tonnes, and a car shared by two emits 1.25 tonnes per person. Therefore buildings that incorporate areas for public transport and car-share information, bicycle parking, wet clothes hanging, showers and lockers for cyclists, and a car-share scheme, could reduce transport emissions by 50 per cent without changing commute distances. Mixed-use developments of residential buildings that include workspaces eradicate commuting emissions entirely. The move to using public transport, car share, reduced distances and self-powered transport will increase health, wellbeing and leisure time, in addition to reducing mortality rates from car accidents.

Life changes involve the practice of communal collaborative services such as car sharing on demand, loose systems of leasing and sharing of equipment and tools between businesses and households, home food services and restaurants, coordinated neighbourhood delivery and pick-up services of people, food supplies and goods.

Food

Regional sourcing does not necessarily reduce CO₂ emissions. Due to heavy fuel and fertiliser use, much food from the US and the EU has a higher carbon footprint than food shipped in from Africa. This is illustrated by a parallel study from London's Cranfield University, which found that roses imported from Kenya have a lower carbon footprint than those imported from Holland.⁸

However, intensive, hand-tilled farms and market gardens do have significantly reduced footprints. Food eaten fresh avoids processing and refrigeration. Dried food requires no refrigeration and is very efficient to ship.⁹ Thus buildings that combine connectivity to

Hamzah & Yeang (sister company to Llewelyn Davies Yeang), L-Tower, 2011

L-Tower vertical building-integrated food production. Proposed design for the L-Tower showing the spirally integrated green corridor, an important multifunctional element designed to improve passive-mode performance, as well as providing important food production potential.



Alice Rumsey, Low-Carbon Transport, 2009

Modern human-powered, shared and public transport systems can reduce transport carbon footprints to a fraction of existing levels (artist's impression including the Apera electric car).



growing areas, increased storage to reduce shopping trips and unpowered cold stores in basements or on north-facing elevations to reduce refrigeration, could cut per capita emissions for food by 50 per cent without changing dietary habits.

An example of food connectivity can be seen in the L-Tower design (2009) by Hamzah & Yeang, sister company to Llewelyn Davies Yeang, which incorporates gardens in a spirally integrated green corridor stretching from the ground to the top floor. This vastly decreases the carbon emissions from acquiring fresh food, a particularly carbon-intensive practice.

Holidays

Flying 3,200 kilometres (2,000 miles) to a holiday destination emits 2.2 tonnes of CO₂e per passenger including the return flight. The equivalent distance by ferry emits 384 kilograms (846 pounds), by coach 192 kilograms (423 pounds), and by train 128 kilograms (282 pounds).¹⁰ What do we really look for in our holidays? Could some of our travel objectives be realised more effectively closer to home?

One travel motive is discovery. Others are rest, recuperation and self-discovery – which foreign holidays can fail to deliver because travel is often stressful. Buildings that can offer ‘holiday programmes’ consisting of massage, sauna, detox, sport, dance, exercise, creative activities and tranquil relaxation would encourage individuals to take some holidays close to home, massively reducing their annual CO₂ emissions while simultaneously achieving higher levels of enjoyment and rest.

Product Manufacture

Quality products from toys to power tools may cost twice as much as their cheap counterparts and have twice the embodied energy, but they often last five times as long, resulting in a life-cycle CO₂ reduction of 60 per cent. Energy-saving appliances save up to 50 per cent during use. Buildings that are fitted with permanent long-life, energy-saving appliances could save 50 per cent of product emissions, and bulk fitting would be more cost effective.

All low-power electronic devices from televisions to mobile phone chargers require transformers which are less than 50 per cent efficient and consume power 24 hours a day unless switched off at the plug. A 12-volt or 24-volt electricity infrastructure powered by local solar/water/wind collectors and running parallel to mains circuits could save 20 to 40 per cent of appliance energy.

Comfort

Environmental design starts with standards. Can we achieve a sustainable lifestyle without lowering our expected living standards? If we are prepared to lower our living standards, then to what extent would be acceptable?

A rethinking of standards of environmental comfort conditions is needed for the engineering design of heating and air-conditioning systems. Architectural design needs to start with optimising passive-mode design (bioclimatic design) followed by the optimisation of mixed-mode design.

In full-mode design, we as the users determine the level of environmental comfort that we want. For example, if we are prepared to lower the level of our internal environmental comfort conditions, having a lower heating temperature in winter and wearing warmer clothing, or the opposite in summer, we can reduce the consumption of energy by 20 to 30 per cent.

Alice Rumsey, In-House Holidays, 2009

Buildings with facilities to offer recreational holiday programmes can vastly reduce holiday carbon footprints.



Low-carbon lifestyle pioneers report that most carbon-reduction measures actually result in improved quality of life. A vibrant, healthy workforce and consumer base results in greater economic activity and affluence. Architectural design has a powerful potential to reduce national CO₂ emissions by gearing designs towards lifestyle patterns that are attractive to the individual as well as being more energy efficient. **Δ+**

Mukti Mitchell is a designer, boat builder and author. He designed the Resurgence Carbon Calculator (see www.resurgence.org/energy), the Explorer zero-emission microyacht, nominated Innovative Boat of the Year 2005 (www.mitchellyachts.co.uk), and sailed around Britain in 2007 to promote low-carbon lifestyles, endorsed by HRH The Prince of Wales, and Britain's political and environmental leaders. His guidebook is available from www.lowcarbonlifestyle.org.

Ken Yeang is a director of Llewelyn Davies Yeang in London and TR Hamzah & Yeang, its sister company, in Kuala Lumpur, Malaysia. He is the author of many articles and books on sustainable design, including *Ecodesign: A Manual for Ecological Design* (Wiley-Academy, 2006).

Notes

1. Aubrey Meyer, *Contraction & Convergence: The Global Solution to Climate Change*, Green Books (Totnes), 2000.
2. Based on UK government reductions targets of 80 per cent by 2050.
3. Figures from the United States Department of Energy, Environment Information Administration (2007), taken from Rogers, McCormick and Ridley, 'The Carbon Atlas', *Guardian*, 9 December 2008, p 21.
4. Ibid. For calculations, Mukti Mitchell recommends his own model, the

Resurgence Carbon Calculator, widely recognised as the best online, which can be freely accessed at www.resurgence.org/carboncalculator.

5. A simplified profile to give audiences an impression of typical proportions of CO₂ output from lifestyle areas, used by Mukti Mitchell during the Low Carbon Lifestyle Tour of Britain, 2007.

6. Unless otherwise stated, figures are approximations developed by Mukti Mitchell, based on five years' experience of carbon footprinting and auditing.

7. UK Government Department of the Environment, Food and Rural Affairs, 'Guidelines to Defra's GHG Conversion Factors', Annex 6 Passenger Transport, 2008, pp 7–12. See www.defra.gov.uk/environment/business/reporting/conversion-factors.htm/. These figures are based on UK average passenger occupancy levels – a full bus has much lower emissions per passenger.

8. Dr Adrian Williams, 'Comparative Study of Cut Roses for the British Market Produced in Kenya and the Netherlands', Précis Report for World Flowers, Cranfield University, 12 February 2007. See kenyan-roses.trampish.net/resources/Comparative_Study_of_Cut_Roses_Feb_2007.pdf.

9. Ships emit 10 times less CO₂ than lorries and 120 times less than planes per kilogram of cargo. CO₂e emissions in kilograms per tonne-kilometre of freight: HGVs 0.132, rail 0.021, container ships 0.014, air (long haul) 1.818. (UK DEFRA figures with a radiative forcing index (RFI) of 3 for air.) UK Government Department of the Environment, Food and Rural Affairs, op cit, pp 13–15.

10. UK DEFRA figures with an RFI of 3 to account for the increased global warming effect of high-altitude emissions. Readers may wish to note that because CO₂ is largely oxygen, an aeroplane's potential CO₂ output is much larger than its fuel-tank capacity. This is further increased by the RFI to arrive at a figure for CO₂e. RFI was estimated by the IPCC in 1999 to be in the range 2–4, and following consultations with experts including James Lovelock, Mukti Mitchell uses a factor of 3 for all footprinting calculations, which he considers to be conservative. See UK Government Department of the Environment, Food and Rural Affairs, op cit, pp 7–12.

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MCLEAN'S NUGGETS

Design It Yourself

So has the era of mass-customisation finally arrived? In the appropriately diminutive-sounding Tychy in Poland, hundreds of thousands of small cars (similar, but different) are currently rolling off the production lines. A total of 506,000 cars were produced at the plant in 2008 with cars currently coming off the assembly line every 55 seconds – cars which include both the new Fiat 500 and the new Ford Ka. Reported in the *New York Times*, Ron Harbour, an American industry consultant, with Oliver Wyman explains that: 'The ideal combination of automated robots and individual workers has been critical to Tychy's success,' and that the plant's ability to rapidly change production numbers and the specification of any given car is about the successful symbiosis of automation

and skilled worker.¹ Meanwhile, global sportswear brand Nike offers its very own design-it-yourself range of football boots and trainers under the moniker of NIKEiD.² Choosing from a range of boot and shoe 'platforms' similar to the automotive example, consumers are able to customise their shoes: change colour and details, add printed and embroidered design via the Web and receive the customised clobber direct from the factory at 38 Guangzhou Road, Foshan, China, within approximately two weeks. Within the construction industry the engineered timber sector seems to be leading the way in the useful and increasingly direct relations of design and digital file output with products like Austria's KLH cross-laminated timber product³ and Bruce Willson's neat and eminently customisable Birch Ply Facit (We Print Houses) building system.⁴ So

if volume house builders continue to prefabricate the wrong bits to cut costs and not noticeably improve quality, then the designer (architect) should take his or her fabrication business elsewhere or DIY.



A pair of custom-designed NIKEiD football boots.

Semantic Differentials

At a recent university consultation, a select group of staff were asked to partake in the generalised opinion-gathering exercise of semantic differentials.⁵ Slightly different to the agree/strongly agree nomenclature of the ordinal-polytomous questionnaire,⁶ this management game consisted of choosing between the two worlds (or was that words) of soft versus hard, austere versus friendly, good versus evil, and so on. These kinds of games, or social devices, are supposed to act as 'ice-breakers' (a management cliché) and studiously avoid the awkward territories of a conversation. In another case of semantic differentials, or in this case (non) differentials, I was recently party to the bureaucratic delights of the exam

board at a noted educational establishment in London, when the conversation (procedural semantic) had turned to plagiarism. There had been the suspicion of improper educational behaviour in relation to a piece of written work that had been submitted for examination by a specifically designed piece of software. The subsequent results suggested that 12 per cent of the said work was 'non-original', which under that institution's rules and regulations was an acceptable level of linguistic reuse, falling well below the (seemingly random or inexplicable) 30 per cent of the plagiarist. This case posed many interesting questions and difficulties. A particular problem seemed to be the software's inability to distinguish, or set

apart, the footnotes from the main body of the text. A more interesting question is whether it is possible to construct an original text and polemic through the wholesale reuse of previously wrought language and, more specifically, why are we not designing software to construct and fabricate language? In our rush to condemn the cheat who took some short cuts are we not overlooking the huge potential for new modes of communication that may articulate the thoughts and semantic differentials of the less linguistically inclined? We seem perfectly happy as designers to embrace a digitally augmented design process – so why the selective techno-Puritanism?

Behaviour Stations

In the readable legacy of art 'movements' from the late 1960s and early 1970s, it might be quite understandably difficult to acknowledge the performative dimension to some, if not all, of the sculptural work of the period. If architect Bernard Tschumi recognised this, it can be no coincidence that his first wife was Roselee Goldberg,⁷ the author of the only useful survey of the live sculpture/theatre of performance art. In Tschumi's Parc de la Villette project in Paris we see a kind of architecturalised relic of the potential of such an approach, but we may still have much to learn from the art and artists of the period who explored gesture, and new kinds of spatial relations, with implicit programmatic invention. Less concerned with the permanent architecture of new sculpture per se, these were tests, experiments and actions of ephemerality, captured usefully and deliberately by photograph. Good examples include George Trakas' Transfer Stations,⁸ Mary Miss and Alice Aycock's proto-structures, and the gesticular set pieces of Nice Style: The World's First Pose Band.⁹ Unfortunately, architecture and design seem to seldom

challenge us with any radical rethinks of behaviour space. The table/bench seating ensemble, rediscovered and rolled out from John Pawson's original Wagamama design, is an unremarkable example, as is the seat/leaning device of the bus stop. What might some real programmatic invention deliver? This may not be what something specifically looks like or how it pseudo-functions, but what something actually is and how that design may speculatively function. This reappraisal of the indeterminate might get us closer to the unfilled potential of the much and easily maligned 'multipurpose', of which the name as much as anything leads to so many programmatic and spatial disappointments. A recent project in Wolverhampton is a good example of a new, or at least souped-up, building type. The Youth Shelter by Sjölander da Cruz¹⁰ Architects in partnership with artist Gwen Heeney provides a place to hang out, sit and lean for the restless youth of a skatepark. Designed in collaboration with the young locals and organised as a part of the MADE (Midlands Architecture + the Designed Environment) initiative, the youth shelter is one of many similar projects currently under way and could be the basis for any number of new spatial and programmatic relations. **Δ+**

'McLean's Nuggets' is an ongoing technical series inspired by Will McLean and Samantha Hardingham's enthusiasm for back issues of *AD*, as explicitly explored in Hardingham's *AD* issue *The 1970s is Here and Now* (March/April 2005).

Will McLean is joint coordinator of technical studies (with Pete Silver) in the Department of Architecture at the University of Westminster. He recently co-authored, also with Pete Silver, the book *Introduction to Architectural Technology* (Laurence King, 2008).

Notes

1. Nelson D Schwartz, 'To Shrink a US Car, Chrysler Goes to Poland', *New York Times*, 14 July 2009.
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7. Roselee Goldberg, *Performance Art: From Futurism to the Present*, Thames & Hudson (London), 2001.
8. Roald Nasgaard (ed), *Structures for Behaviour: New Sculptures by Robert Morris, David Rabinowitch, Richard Serra and George Trakas*, exhibition catalogue, Art Gallery of Ontario (Toronto), p 128.
9. Goldberg, op cit, pp 177–8.
- 10 <http://www.sjolanderdacruz.co.uk/>

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The clay, soon to be brick, base of the Wolverhampton Youth Shelter project by architects Sjölander da Cruz and artist Gwen Heeney.

Dynamic Light

The Media Facades of realities:united

Valentina Croci reviews the recent work of realities:united, who first came into the spotlight in 2003 with their media facade for the Kunsthaus Graz. She highlights how recent projects, such as the Crystal Mesh for the Iluma Building in Singapore and the exterior of the C4 in Cordoba, Spain, transcend the notion of the digital facade as billboard. Lighting is dynamically applied, in order to enhance the three-dimensional experience of architecture rather than to flatten it.



realities:united, Museum X, Mönchengladbach, Germany, 2006
above: This temporary (one-year) installation was created during the restoration work on the Abteiberg Museum, on the site of the Mönchengladbach Theatre. Similar to a large urban sculpture that could also be used from the exterior, Museum X did not use a digital media facade, but instead focused on the foyer, which was fitted with lighting devices on the walls and ceiling to transform the perception of the space.

realities:united, C4, Espacio de Creación Artística Contemporánea, Cordoba, Spain, 2010

opposite: The winning project by Nieto Sobejano Architects (Madrid) integrates the solutions proposed by realities:united in the facade as a sort of light and dynamic skin of illumination along the facade facing the Rio Guadalquivir. The GRC units (glass-fibre reinforced cement), individually illuminated from the interior by compact fluorescent lights, are irregular and with varying dimensions that create variegated patterns. This is not a simple mediatic layer visible only at night, but an imposing facade that also captures attention during the day.

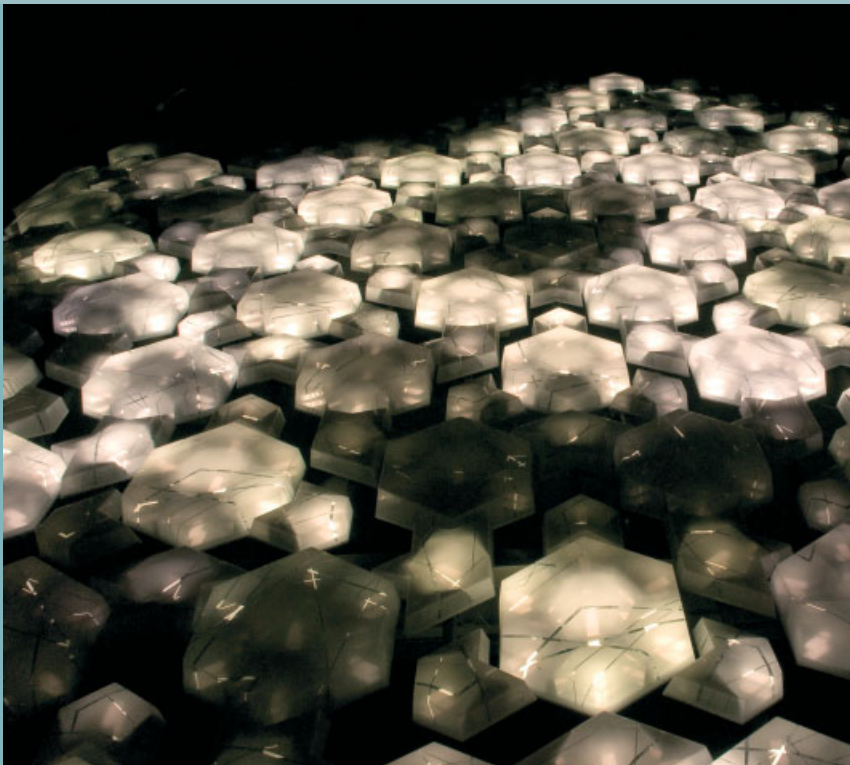


Tim and Jan Edler founded realities:united in Berlin in 2000, coming to international attention in 2003 for their contribution to the Kunsthau Graz in Austria where they used dynamic lighting to animate the external facade of the building designed by Peter Cook and Colin Fournier. After this project they continued to pursue research in the world of so-called media facades, developing their own idea of dynamic architecture. In fact, their most recent projects highlight the communicative abilities of buildings by focusing less on advertising or the construction of architectural landmarks as much as on the aesthetic exploration of spaces and architectural exteriors that are transformed through lighting design and digital technology.

'The concept of the media facade is nothing new, but the application of digital technologies has brought it back to the centre of attention. In historical architecture there are many examples of a media facade that deals with the transmission of a message and a vision through the physical building,' Tim Edler explains. These include, for instance, the Santa Maria Novella in Florence (1470) by Leon Battista Alberti, the facade of which expresses a precise division and a morphology that reinterprets the medieval tradition of autochthonous Dominican churches:

cultural references, expressed in the architectural composition, that refer back to a precise vision of the context as understood by the designer. 'The primary differentiation between the facade of yesterday and that of today is not the use of technology, but the speed with which we transfer information, above all when dealing with the succession of figures. Furthermore, the dynamic element means that architects also study the rhythm of sequences of variations,' Edler continues.

After Graz, realities:united worked on various projects that develop the same basic philosophy; first and foremost that the external surface is not a traditional envelope or a screen, it is not the support for televised images or advertising. The facade, composed of a three-dimensional grid of dynamic lights, communicates in an entirely different manner. While the facade-screen renders the architectural substrate inexistent in favour of the information presented by video, applications such as those proposed by realities:united seek the exact opposite, reinforcing the architectural experience using new compositional morphologies. 'There is often confusion between this notion and the facade covered with conventional TV media surfaces. This depends on the lack of understanding of this new approach, which has different aims and for which we are still defining an aesthetic,' Edler points out. At Graz, realities:united has progressively abandoned the regular grid that organises its luminous 'pixels' and has begun working on the dimensional scale of these units. This new approach is apparent in the Crystal Mesh (2009) for the Iluma Building in



realities:united, Crystal Mesh facade, Iluma Building, Singapore, 2009

above: An exterior surface composed of large, backlit polycarbonate crystals questions traditional perceptions of the facade and screen. The different sizes of the crystals create a special three-dimensional texture that is also visible during the day. The structure also functions as urban lighting and a ventilated facade. The Iluma Building, designed by WOHA Architects, is part of the masterplan for Singapore's new urban entertainment centre.

realities:united, Contemporary Architecture, Artistsspace gallery, New York, 2007

opposite: This minimalist installation makes reference to neon artworks of the 1970s. It is composed of a series of lights that create a display screen that projects time like a digital watch. As the only source of lighting in the space, it is also functional. Traditional lighting fixtures – industrial fluorescent lamps – were chosen for their ability to add a new content to current technology.



Singapore and the exterior of the C4 in Cordoba (in progress), where the elements of the facades are irregular in form and of different sizes. These surfaces are animated at night, creating highly effective designs; by day they define the morphology of the exteriors, transforming traditional concepts of facades and screens.

The user's perception of this kind of architecture is altered, not only because the facades assume different configurations, but also because the environment is loaded with mediatic content. Furthermore, unlike digital simulations in the virtual world, these kinds of facades can influence and modify the user's experience of the built environment. Still, the investigation of this latter issue is still in the preliminary phase. 'I am not sure that this type of experience can have an influence on the "direct" needs of the user,' Edler continues. 'At present we are investigating the aesthetic and design potentials of this type of architecture. We have yet to study the question of interactivity, because currently the contents intended by this theme are of little depth and often can be reduced to a sort of game. Most clients commission media facades to communicate the modernity of a building. When dynamic architecture has constructed its disciplinary essence, the possibilities tied to interaction will become clearer.'

Another crucial theme of realities:united's dynamic architecture, which they call 'media architecture', is the obsolescence of the technology used and the consequent ageing of buildings. 'This is a question that belongs to design. In fact, many buildings appear out of place after only a few years. The factor of technological obsolescence may, however, become an interesting aspect of design. For example, installations such as Contemporary Architecture (2007) employ approaches to lighting design that have already been surpassed and use the aesthetic of retro. This choice aims at underlining the difference between media architecture with a basic content and high-tech instruments that, if they communicate

technology in a self-referential manner, become old-tech in a short period of time. The building in Graz has, by choice, an image that is somewhat 1970s, because we did not want attention to remain focused on the high-technology characteristics of the facade,' Edler explains. Nonetheless, media architecture ages more rapidly than its traditional counterpart and to this problem is added the obsolescence of technical instruments and the relative problems of maintenance.

The projects in Singapore and Cordoba represent a significant step forward in the application of lighting and digital technology. The next step for realities:united is the design of an entire building with a dynamic quality, expanding the basic concept to the whole plan. 'We think of a building as an "acting body", where the control of the dynamism of the facade extends to the entire complex, varying the taxonomy and relationship between spaces, and conferring greater functional flexibility on the building,' says Edler. It is thus possible to hypothesise dynamic morphologies for interiors. This has been partially developed in the practice's Museum X (2006) installation in Mönchengladbach in Germany, where the spaces of the foyer were transformed into dynamic lighting instruments integrated within the architectural structure. 'In my opinion, we are progressively moving towards the change of architecture from a static discipline similar to sculpture, to something variable that is more related to choreography,' Elder concludes. This presupposition implies the reconsideration of the traditional tools of design, where the architect also becomes the director or set designer of an experience that users have in spaces with such dynamic characteristics. A multidisciplinary approach is thus required that lies along the margins between art and architecture, between a utopian vision and programmatic action, which has yet to express its full potential. **AD+**

Translated from the Italian version into English by Paul David Blackmore.

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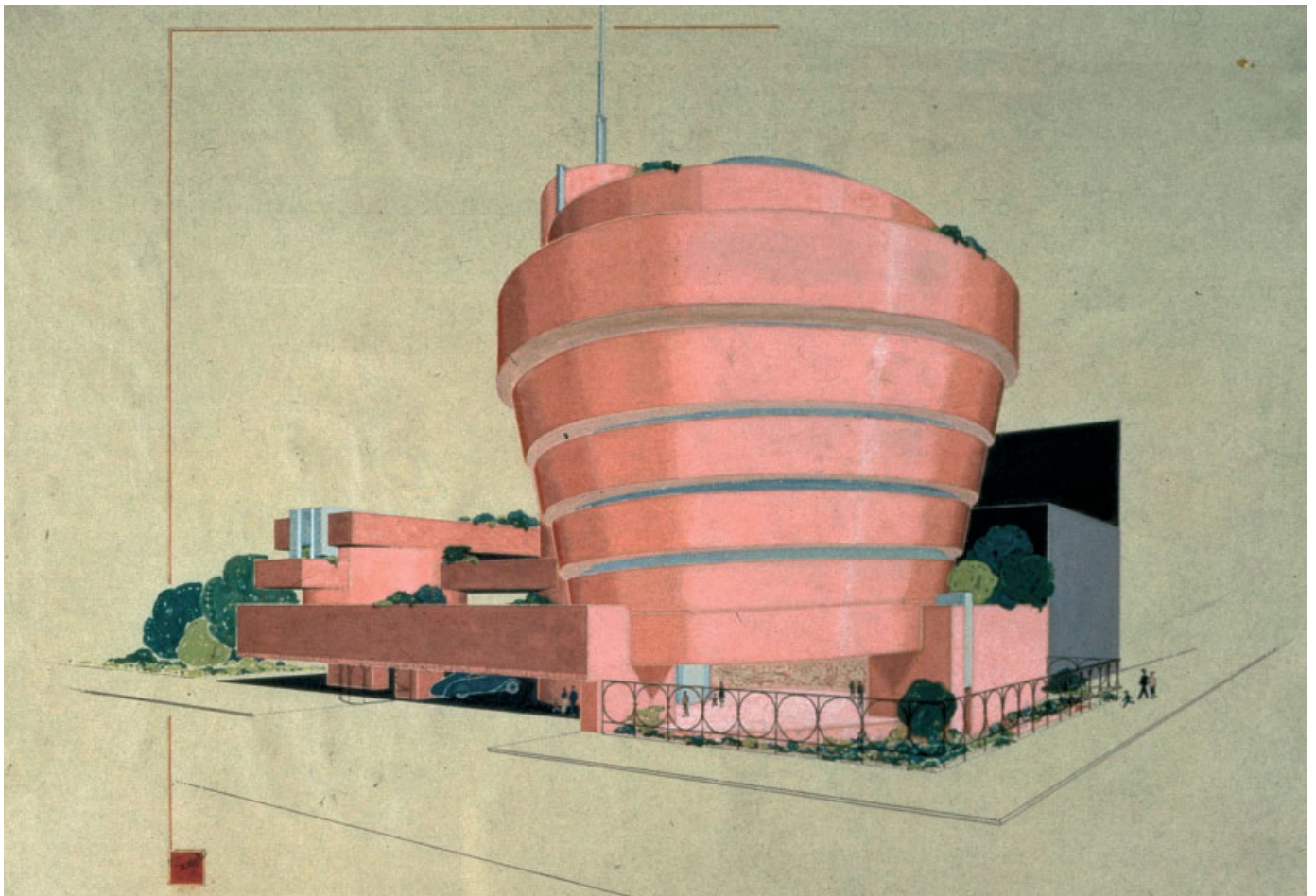
The Museum is the Exhibit

Frank Lloyd Wright's bold spiralling building on Fifth Avenue in New York City is still, 50 years after it opened, the Guggenheim's most popular attraction. Surveys show that as many as a third of the visitors come to see the building itself, rather than the exhibitions or permanent collections on view. And yet, as **Jayne Merkel** explains, the New York Guggenheim's recent retrospective exhibition of the architect's work was the museum's first

No American architect was more talented, original or influential than Frank Lloyd Wright, who lived from 1867 to 1959 and practised architecture for 72 years, so it is somewhat surprising that half a century passed before the Guggenheim Museum devoted an exhibition to his work. It held shows of Zaha Hadid in 2006 and of Frank Gehry (who designed its Bilbao branch) in 2001. That was its most popular exhibition ever. But finally, this spring, just

months before the New York building's 50th anniversary, this very selective but impressive exhibition took place, focusing primarily on public buildings and city plans, instead of on the houses which are his best known and most significant works.

Despite his fame, Frank Lloyd Wright did few public buildings. He was a maverick, unwilling to compromise enough to work with a full partner or realise many corporate or institutional commissions. He practised with a group of 'apprentices' – students and former students,



Frank Lloyd Wright, The Solomon R Guggenheim Museum, New York, 1943–59

This coloured sketch in ink and pencil on tracing paper (51 x 61 centimetres/20 x 24 inches) was one of several with which the architect experimented with different colour schemes once the overall form of the building had been determined.



Frank Lloyd Wright, 'The Reception', sketch of the interior of the Solomon R Guggenheim Museum, New York, 15 April 1958

This perspective in graphite and coloured pencil on paper shows the lower floors of the interior of the rotunda, with the circular entry area and the lower ramps that surround the drum. Although there are a few small rectangular galleries adjacent to the ramp, most of the exhibition space is on this narrow, winding, skylighted path. In 1992 an addition with considerably more traditional exhibition space, designed by Gwathmey Siegel and Associates, was built on the museum's northeast corner, roughly where Wright had projected one might eventually go, in the same vertical slab form he had once proposed.

who were more like apostles than employees – at his studio, the Taliesin Fellowship, in Arizona, where the school, with its work in the manner of Wright, still goes on, and where his archive is housed.

Wright did manage to build a wonderful light-filled, atrium-plan office building for the Larkin Company in Buffalo, New York (1902–06, demolished 1950) and another with a research tower attached for SC Johnson & Son in Racine, Wisconsin (1936–9) which is still being used. He also built a magnificent, but now threatened, Unitarian church, Unity Temple, in Oak Park, Illinois (1905–08), the Imperial Hotel in Tokyo (1913–22, demolished 1967) and the Marin County Civic Center near San Francisco (1957–62), which is still functioning. All these buildings figure prominently in the show. So do a number of little-known, unrealised projects such as the Gordon Strong Automobile Objective and Planetarium for Sugarloaf Mountain, Maryland (1924–5), a dome-shaped structure encircled by an automobile ramp and parking; Crystal City, a large complex of high-rise apartments for Washington DC (1940); the Pittsburgh Point Park Civic Center (1947); and a fanciful Plan for Greater Baghdad with an opera house and cultural centre (1957–8).

The show does include some wonderful drawings for houses and suburban development schemes, fascinating

period photographs and superb models. A new one for Wright's own property in Wisconsin, Taliesin I, shows how the land was developed over time with particular sensitivity to the topography. But the exhibition does not quite convey the number and impact of the extraordinary suburban houses he built from 1889 until his death. All over America, single-storey, open-plan houses that spread out over the land owe more to his influence than anything else. If only they had been built with the same sensitivity to site and materials as his! One thing the exhibition shows is that Wright suggested building on the corner of a plot so that the majority of the land was left open. But most American houses are plonked down in the middle, surrounded by lawns which offer little privacy or opportunity to restore the natural landscape.

The exhibition is impressive nevertheless. It took real restraint to display only 200 of the 22,000 drawings in the Frank Lloyd Wright archive, as this is one architect who was a stellar draughtsman. The show's purpose was clearly not to elucidate the architect's long and peripatetic career. Hundreds of books do that. 'Frank Lloyd Wright: From Within Outward' primarily provides the background for understanding the sensational building that is the Guggenheim Museum's New York home. It ends by showing how the building's design evolved between 1943 and 1959: from a hexagon to a spiral; from a form that truncates towards the top to one that expands as it ascends; from gold, yellow, blue and red facades to a white one; and from several shapes to one predominating cylinder. And, the curators managed to pack a good deal of material into the museum without overwhelming the most valuable object in its collection: the Frank Lloyd Wright building itself.

Wright's commission became a Guggenheim tradition. Although it was the Museum of Modern Art (MoMA) that made architecture part of its programme from the beginning and built the first modern museum in New York, an International Style structure designed by Philip Goodwin and Edward Durell Stone in 1939, it was the Guggenheim that became the most dramatic patron of architecture, first with the Frank Lloyd Wright rotunda on Fifth Avenue and then with Frank Gehry's Bilbao Guggenheim of 1997. Gehry is also designing the Guggenheim's Abu Dhabi museum. The Guggenheim in New York also commissioned a reading room from Richard Meier in 1978, a major addition from Gwathmey Siegel in 1992, a new restaurant from New York architect Andre Kikoski in 2009, and dramatic exhibition installations from Zaha Hadid in 1992 and 2006, Jean Nouvel and Frank Gehry in 2001, Michael Gabellini and Enrique Norten of TEN Arquitectos in 2004, and Jacques Grange in 2005. Although MoMA has additions by Philip Johnson, Cesar Pelli and Yoshio Taniguchi, they are all quiet background buildings intended to support and not compete with its exhibitions, a significant percentage of which have also been devoted to architecture and design. The Guggenheim has made the buildings themselves the star players. **AD+**

'Frank Lloyd Wright: From Within Outward', was at the Guggenheim Museum, New York City, from 15 May to 23 August 2009, and is at the Guggenheim Museum, Bilbao, from 21 October 2009 to 14 February 2010.

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Library of Birmingham

Howard Watson applauds Mecanoo's designs for a new library in Birmingham and the aim to bring coherence to the city centre, but questions the destruction of the nearby Central Library, an unusual Brutalist building by John Madin, which is to make way for a further retail/leisure scheme.

Mecanoo Architekten, Library of Birmingham, Birmingham, due for completion 2013

Concept design for the library with the glass facade encased in metal filigree.



right: Artist's impression of the proposed amphitheatre in front of the library's overhanging, frontal projection.

below right: Concept design for Centenary Square and the Library of Birmingham, which will be linked to the existing Birmingham Repertory Theatre (left) to form a collective centre for creativity and education.

British urban planning may often appear to be beset by extraordinary short-termism, with projects realised in seemingly blinkered isolation, regardless of an overarching rationale to solve major problems. However, Birmingham City Council has initiated a far-sighted approach with a £20 billion, 20-year 'Big City Plan' to overhaul the centre of the second largest city in Britain. At the heart of the plan to shake off Birmingham's old image as an unfocused, cultureless, concrete jungle will be the largest public library building in Europe. The council's level of ambition is typified by the appointment of Dutch architects Mecanoo Architecten, responsible for the highly acclaimed library at Delft Technical University.

Mecanoo's approach is to dismiss any idea that there should be a contemporary library typology. Consequently, the £193 million, 31,000-square-metre (333,681-square-foot) development, due to open in 2013, will be inspired by the library's specific resources, which include an enormous local archive. The architecture will also be linked to the design traditions of Birmingham and its industrial past. The receding and projecting box shapes of its glass facade will be covered with a metal filigree of overlapping circles, inspired by local ironwork, while the cubic volumes will reflect the building's neighbours on either side – the 1960s concrete Birmingham Repertory Theatre, which will also undergo some redevelopment and share a foyer with the library, and the 1930s stone Baskerville House office building. Both the outside frame and the interior rotundas play on the idea of pushing sections out from a core volume. This will aid circulation, natural light and ventilation inside, while also creating a projected balcony for viewing events on the square as well as three levels of elevated outdoor/garden areas with panoramic views.

The library will have a significant role in the reformulation of public space in the heart of the city. Francine Houben, a founding partner of Mecanoo, says that the aspiration is to 'Bring coherence. Don't add another icon – bring coherence!' She also feels that the 'responsibility to bring the public to the outside space is as important as the interior'. Consequently, Centenary Square, which sits in front of the library and its two large neighbours, will be redeveloped as a destination – currently it is just a broad pedestrian thoroughfare which



offers no sense of place. The section in front of the library will look down into an outdoor, sheltered amphitheatre below ground level. In tandem with the adjacent Symphony Hall and the Rep, the library will bring a unified cultural and social focus to the centre of the city.

Mecanoo's design for the library is both considerate and original, but the fate of the nearby Central Library leads one to be wary of the evangelism behind the plan to create a new identity for Birmingham. Local architect John Madin's building, a unique inverted ziggurat completed in 1974, may not be beloved of all but, as one of Birmingham's most famous buildings and an unusual example of British Brutalism, it is worthy of thorough consideration for redevelopment and reuse rather than obliteration. It is to make way for what Clive Dutton, Birmingham's Director of Planning and Regeneration, calls 'another Brindley Place', which, like the original Brindley Place – a canalside retail/leisure project that helped initiate a reappraisal of Birmingham 15 years ago – will be masterminded by property developers Argent. In retrospect, Brindley Place offers very little sense of architectural legacy, while its chain shops and restaurants are almost entirely devoid of uniqueness or local character. One can admire the determination to address the need for metropolitan development, but vigilance is required to ensure that the bravura does not threaten the city's established urban character and sense of place. **Δ+**

Howard Watson is an author, journalist and editor based in London. He is co-author, with Eleanor Curtis, of the new 2nd edition of *Fashion Retail* (Wiley-Academy, 2007), £34.99. See www.wiley.com. Previous books include *The Design Mix: Bars, Cocktails and Style* (2006) and *Hotel Revolution: 21st-Century Hotel Design* (2005), both also published by Wiley-Academy.

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Turkey: At the Threshold

Guest-edited by Hüllya Ertaş, Michael Hensel and Defne Sunguroğlu Hensel

All eyes are currently on Turkey with Istanbul's status as European Capital of Culture 2010. It makes it a pertinent moment to take stock and to look at Turkey's past, present and future, bringing the nation's cultural renaissance and evolution to the fore internationally. Since the early 2000s, Turkey has undergone a remarkable economic recovery, which has been accompanied by urban development and a cultural flowering. Positioned between an expanding European Union and an unstable Middle East, the country provides a fascinating interface between the Occident and the Orient. Taking into account the current political concerns with consolidating Eastern and Western cultures, Turkey is poised at a vital global crossroads:

- Tackles aspects of globalisation and the potential threat that a rapid rolling out of an overly homogenised built environment poses to rich local building traditions that are founded on specific, climatic, knowledge and cultural diversity.
- Provides an analytical approach that highlights specific aspects of Turkey's rich heritage and current design culture.
- Features work by established and emerging design practices in Turkey.
- Contributors include Tevfik Balcıoğlu, Gülsüm Baydar, Edhem Eldem, Tolga İslam, Zeynep Kezer, Uğur Tanyeli, İlhan Tekeli and Banu Tomruk.



Practice Profile Amanda Levete Architects (AL_A)

Interior Eye Jil Sander Boutique and Derek Lam Boutique, New York

Building Profile Raven Row, Spitalfields, London

Unit Factor The EmTech Wave Canopy 2009

Userscape Dynamic Light: The Media Facades of realities:united

Site Lines Mecanoo Architect's Library of Birmingham

Regular columns from Will McLean, Neil Spiller and Ken Yeang