Θέλουμε να εκφράσουμε τις θερμές μας ευχαριστίες προς τη Διεύθυνση του δημοσιογραφικού Οργανισμού «Ο Φιλελεύθερος» που έχει αναλάβει την έκδοση του βιβλίου, καθώς επίσης και του «Proteas Press Ltd» για την στήριξη και την αφιλοκερδή προσφορά για την εκτύπωση και βιβλιοδεσία του βιβλίου.
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Some tips for a J.UCY reading!

Introducing the first issue of J.UCY becomes a sort of a road-map of possibilities and potentials for the new department of Architecture of the University of Cyprus. What is to be done? J.UCY would like to contribute to the construction of a platform for production of architectural culture, rather than just be a final result. How to construct such a platform? Can such a platform work as a node between the larger architectural family and what is going on in Cyprus? Can it become a node between all those aspects that attribute a social role to the architectural becoming?

The two first gestures made by the editorial committee were to choose the name of the baby and decide upon its format.

J.UCY is the name and it has already created its funs who, we hope, will be satisfied by its first edition. J.UCY implies an importance to content, what is really inside and how juicy could be. J.UCY implies a satisfaction after being tasted and hopefully it will be so. J.UCY cannot exclude the surprise of coming in contact with the unexpected.

The format of the edition attempts to facilitate what J.UCY could imply. The raw material presented in J.UCY 01 comes from three kinds of activities, which become three parts of the edition with different colours. The "white", the "light green" and the "pink". Presenting the different origins of the raw material on different colour pages, their mixing is allowed, thus giving multiple reading possibilities of J.UCY.

The first part, with white colour, is from the pedagogical work done during the first two years of the Department’s life (2005-2007): the work done through the various program courses are presented. There is more emphasis given to the main design studios of each semester, becoming a sort of a melting pot for the rest of the courses. The second one, with green colour, comes from the Cyprus Architectural Lecture Series and Events in which the Department is a partner with the society of architects in Cyprus, (Panayiotis Tournikiotis lecture on “being in the mind of the architect” and the exhibition on the work of Panos Koulерmos). The third one, with pink colour, is about an effort to put together articles and projects from people within and outside the Department.
of Architecture. The editorial committee thought of inviting the members of the advisory committee of the Department and other collaborators to put on paper their points of view, next to those of the academic faculty, about the role of architectural education in the contemporary society. New departments of architecture are not created that often, thus the role of each new one becomes a unique opportunity.

The third part includes also invited projects both from Cyprus and abroad: the first prizes of the State Architectural Awards of Cyprus from the years 2004 and 2007, (a public promenade in Larnaca by Margarita Danou and Sevina Zesimou /2004 and a school building in Nicosia by Zenonas and Christina Sierepekis -2007) published next to two Europan projects (a mixed development in Groningen Holland by S333 and a residential project in Toledo Spain by Carlos Arroyo) which are implemented or being implemented.

But does having named the baby and having given a format to the raw material described above permit to this edition to assume the role of a node in architectural production culture?

Concerning the upscaling dynamics, one could refer to facilitating the mobility of knowledge about architecture from a small local scale to a larger translocal one. This is done first of all by having J.UCY in a bilingual format. It is amazing to see how a simple translation of things mobilizes and influences knowledge around the globe. There are a lot of examples of such simple acts. One is mentioned by Panayiotis Tournikiotis who talks in depth in this edition, about the translation of Le Corbusier's "Vers une Architecture" to "Towards a New Architecture" when the translator decided that the world "new" had to be added to the title, changing, as he mentions, a lot more things in the book that the translator could ever have thought about. A second way of upscaling is to publish important architectural projects from Cyprus next to significant projects from other countries. A third way of upscaling is through student work. The efforts of students and architects of Architecture. The editorial committee thought of inviting the members of the advisory committee of the Department and other collaborators to put on paper their points of view, next to those of the academic faculty, about the role of architectural education in the contemporary society. New departments of architecture are not created that often, thus the role of each new one becomes a unique opportunity.

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tutors of a small architectural department are to be exposed onto international networks of architecture. In fact, the students’ work is part of a hybrid outcome of upscaling and downscaling dynamics. International pedagogical methods influence approaches on local sites and geographies and hopefully vice versa.

The downscaling dynamics refer to the effort of J.UCY as a sort of a port which allows things of architectural production of a larger scale, that of Europe and that of the world, to “touch down” on Cyprus and interact with what is going on around the island. The two parts of J.UCY, with green and pink colour, are directed to this aim. The Cyprus Architectural Lecture Series and exhibitions have become a reference point of such downscaling. Lectures like those of Panayiotis Tournikiotis, Peter Cook, Pratt’s dean Thomas Hanrahan, Pierre Von Meiss, are some examples. J.UCY presents a small specimen of them. Through the juxtaposition of diverse articles about architectural education in the part on pink colour pages one can witness all sorts of references and ideas that can refer both to the larger architectural community as well as that of Cyprus.

Having named the journal, given a format to the raw material and having claimed to work towards the construction of an architectural cultural node is nothing but the expression of intentions. Hopefully these will begin to take flesh and bones when you immerge into J.UCY 01.

For the editorial committee
Socrates Stratis, editor in chief
Dr. architect, urbanist

O μετασχηματισμός των δυναμικών από την παγκόσμια στην μικρή κλίμακα σχετίζεται με την προσπάθεια του J.UCY να λειτουργήσει ως ένα είδος «εισόδου» που θα επιτρέψει στις μεγάλης κλίμακας αρχιτεκτονικές εξελίξεις, αυτές που σημειώνονται στο Ευρωπαϊκό και παγκόσμιο επίπεδο, να «συνδέθουν» με την πραγματικότητα της Κύπρου και να δημιουργήσουν μια σχέση αλληλεπίδρασης με αυτή. Αυτός είναι και ο στόχος των δύο τελευταίων ενοτήτων της έκδοσης (με πράσινο και ροζ χρώμα). Η Σειρά Αρχιτεκτονικών Διαλέξεων Κύπρου και οι διάφορες εκδηλώσεις έχουν γίνει πλέον σημείο αναφοράς αυτής της προσπάθειας. Ενδεικτικά παραδείγματα της αποτελούν διαλέξεις όπως έκεινες του Παναγιώτη Τουρνικιώτη, του Peter Cook, του Thomas Hanrahan, κοσμήτορα του Ινστιτούτου Pratt, και του Pierre Von Meiss. Στο πρώτο τεύχος του J.UCY παρουσιάζεται ένα μικρό δείγμα αυτών των διαλέξεων. Μέσω της ανταποφυλακής ποικίλων άρθρων με θέμα την αρχιτεκτονική εκπαίδευση στην τρίτη ενότητα της έκδοσης (με χρώμα ροζ), μπορεί κανείς να παρακολουθήσει ένα πλήθος ιδεών και αναφορών που αφορούν τόσο την ευρύτερη κοινότητα της αρχιτεκτονικής όσο και εκείνη της Κύπρου.

Φυσικά, το να βαφτίσει κανείς μια περιοδική εκδόση, το να έχει καταλήξει στην τελική της μορφή, να έχει επιλέξει την όλη και να έχει δηλώσει ως στόχο της δημιουργία ενός κομβικού σημείου στο πλαίσιο της αρχιτεκτονικής κουλτούρας δεν συνιστά πάρα μια έκφραση των προθέσεων του. Η ελπίδα μας είναι πως οι προθέσεις αυτές θα πάρουν σάρκα και οστά και οι διάφορες εκδηλώσεις που αφορούν τόσο την ευρύτερη κοινότητα της αρχιτεκτονικής όσο και εκείνη της Κύπρου.

Εκ μέρους της συντακτικής επιτροπής,
Σωκράτης Στρατής, αρχισυντάκτης
Δρ. αρχιτέκτονας, πολεοδόμος,
THE POWER OF ARCHITECTURE IN A DIVIDED LAND

It has only been three and a half years since the Department of Architecture at the University of Cyprus admitted its first students. And although the time period in question is not long enough for us to tell whether in fact our goals have been fulfilled, the wide variety of ground-breaking activities taken up by our students in this field sufficiently proves that what we aimed for back then was right on the mark.

When the University of Cyprus decided to create a Department of Architecture as part of the Faculty of Engineering, we were fully aware of the fact that this was not going to be yet another higher education program. Of course, we are in no way inclined to dismiss the existence of an educational program as somehow not significant enough. What we are actually saying is that our aim in creating this new academic department went far beyond the common practice of ensuring the development and growth of an academic institution. Our aim was rather to unleash a fierce attack on what was happening among a handful of social partners and professionals in the field. So although our architectural environment was rich and pluralistic in character, although it moreover attested to a positive influence of European building systems and materials, we unfortunately proved inadequate in terms of hierarchically classifying our scientific tools and creating an archive of our architectural heritage. Nevertheless, something was missing. And that was a multilateral dialogue on the complex issue of urban and rural planning.

But to better present the argument, we must first take a look at economic factors. The economy of Cyprus is truly thriving as it has enjoyed a wholesome growth rate of 4% over the last decade. Construction contributes a good 10% of the gross national product, tourism enjoys a wholesome growth rate of 4% over the last decade. Construction contributes a good 10% of the gross national product, tourism enjoys a wholesome growth rate of 4% over the last decade. The economy of Cyprus is truly thriving as it has enjoyed a wholesome growth rate of 4% over the last decade. What we are actually saying is that our aim in creating this new academic department went far beyond the common practice of ensuring the development and growth of an academic institution. Our aim was rather to unleash a fierce attack on what was happening among a handful of social partners and professionals in the field. So although our architectural environment was rich and pluralistic in character, although it moreover attested to a positive influence of European building systems and materials, we unfortunately proved inadequate in terms of hierarchically classifying our scientific tools and creating an archive of our architectural heritage. Nevertheless, something was missing. And that was a multilateral dialogue on the complex issue of urban and rural planning.

With admirable diligence and attention to detail state and local authorities embarked upon the crucial and rigorous task of outlining a model of building development. A key role in this effort was held by a group of conscientious and proficient architects, who had received their education in some of the most prestigious academic institutions of Greece, Europe and the USA.

Nevertheless, something was missing. And that was a multilateral dialogue on the complex issue of urban and rural planning. Vital though it was, this dialogue was either non-existent, or partly only taking place among a handful of social partners and professionals in the field. So although our architectural environment was rich and pluralistic in character, although it moreover attested to a positive influence of European building systems and materials, we unfortunately proved inadequate in terms of hierarchically classifying our scientific tools and creating an archive of our architectural structures. What is more, an assessment of contemporary methods, systems and materials was sadly absent. Architecture poses many challenges to which there may indeed be more than one aspect. It is furthermore generally acknowledged that the role of the architect is not only to guarantee but also to strike a balance between the following conditions: architects must uphold the tradition of the past, adapt to the present and design the future; they must respect the environment and allow culture its vital space; they must trace the local amidst the global, be aware of diversity and treat it has only been three and a half years since the Department of Architecture at the University of Cyprus admitted its first students. And although the time period in question is not long enough for us to tell whether in fact our goals have been fulfilled, the wide variety of ground-breaking activities taken up by our students in this field sufficiently proves that what we aimed for back then was right on the mark.

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similarity with deference. Architecture is a science of novelty; it is a creative practice that both teaches and entertains.

In the case of Cyprus, the dialogue that is indispensable if these conditions -these challenges- are to coexist in harmony was unfortunately absent.

To put the matter differently: if, as they quite wisely say, architecture is the stage upon which unfolds the drama of human life, then there was no script for the production we staged in Cyprus.

Taking all the above into account, we envisioned a future in which the University’s Department of Architecture would have a key role in writing this script of challenges. How indeed would this be possible?

The answer to this question is: by providing the necessary theoretical and practical guidelines through an investigation of scientific methods and research in the field of architectural design, but also by creating a platform for dialogue, for critical discussion and exchange of views. The desired result should be an interbreeding, a cross-fertilization of ideas that will ultimately give birth to the script of architecture in this land.

To avoid inflexibility, our script will not have the form of a dogma, of an arrogant canon, but rather that of a unified set of generic rules and principles, which aims to create a system of the generally accepted methods and practices in the building industry and to allow for the creation of aesthetically sound buildings. Our vision of the Department of Architecture is that of a floor for the expression of diversity among professional architects and academics in the field, state and local planners and, of course, the public; a floor where all voices can be heard, exchanging views in harmony.

We hope that future generations of Cypriots will be able to perceive our architectural heritage as the product of a finely tuned orchestra, where every artist is part of a harmonious whole, while still preserving his/her individual identity. Combined, these two elements of team spirit and personal worth will strum a tune that pleases the public ear, hopefully putting an end to the contemporary cacophony of neighborhoods that are seemingly functional yet chaotic in essence.

As far as introductions go, this may have been longer than is usually expected, but it was necessary for the purpose of discussing the point in question.

We feel that the launch of the Journal of the Department of Architecture is an important step in the direction of bringing together this finely tuned orchestra in the field, which is after all everyone’s wish. This scientific publication, one of the Department’s initiatives, is the most recent in a long line of activities that aim not only to present the program’s particular academic choices – the program’s specific curriculum, its identity in other words – but also to promote a fruitful dialogue on architecture related issues.

Dostoyevsky, in the peripatetic of the Kúpro the élite of the anagkàsios diálogo us, αποκτάεται. Οι αρχιτεκτονικές αποφάσεις, η δημιουργία που διδάσκει αλλά και διασχίζεται.

Για να το θέσουμε διαφορετικά, αν η αρχιτεκτονική αποτελεί τη σκηνή της ανθρώπινης ζωής, όπως αυτή είχε λειτουργεί έτος τότε στην Κύπρο κάναμε παράσταση χωρίς σενάριο.

Έχοντας αυτό υπόψη μας, οραματιστήκαμε ένα μέλλον, όπου το Τμήμα της Αρχιτεκτονικής του Πανεπιστημίου θα αποτελούσε μια σημαντική συνεισφορά στη δημιουργία αυτού του σκηνή των προκλήσεων που προαναφέραμε. Και πώς θα γίνει αυτό?

Με την παροχή ακαδημαϊκών αλλά και επαγγελματικών κατευθυντήριων γραμμών μέσα από επιστημονικές μεθόδους και έρευνες βασισμένες στον αρχιτεκτονικό σχεδιασμό, αλλά επίσης και με τη δημιουργία πλατφόρμας διάλογου, συζητήσεων, ανταλλαγής αποφάσεων. Το αποτέλεσμα που θα θέλαμε είναι μια διασταύρωση, μια γνωμοσύνη ιδεών που θα οδηγήσουν στο σενάριο της αρχιτεκτονικής στη χώρα μας.

Και για να μην είμαστε απολύτοι, δεν θα είναι ένα δογματικό σενάριο γεμάτο αλαζονεία, αλλά ένα ενιαίο κείμενο κάνοντας και αξεσουάρ, που θα στοχεύει στην κωδικοποίηση γενικού ακαδημαϊκού και επαγγελματικού σχεδιασμού και πρακτικών στην οικοδομική βιομηχανία, κτισμάτων που θα αναπτυχθεί την αισθητική. Οραματιστήκαμε το Τμήμα Αρχιτεκτονικής ως το βήμα της διαφορετικότητας των επαγγελματιών, των ακαδημαϊκών του κλάδου, των κυβερνητικών και δημοτικών σχεδιαστών αλλά και του κοινού βέβαια. Ένα βήμα στο οποίο θα ακούγονται όλες οι φωνές, ενωμένες, να αναταλάνουν αποφάσεις.

Θα θέλαμε τις μελλοντικές γενεές των Κυπρίων να αντικρύζουν την αρχιτεκτονική μας κληρονομιά ως προϊόν μιας καλοκουρδισμένης αρχής, όπου ο κάθε καλλιτέχνης αποτελεί αρχιτεκτονικό μέρος του συνόλου, αλλά παράλληλα δεν εγκαταλείπει και τη μοναδική του ανεξαρτησία. Μαζί τα δύο στοιχεία, τη διαφορετικότητα των επαγγελματιών, των ακαδημαϊκών του κλάδου, των κυβερνητικών και δημοτικών σχεδιαστών αλλά και του κοινού βέβαια. Ένα βήμα στο οποίο θα ακούγονται όλες οι φωνές, ενωμένες, να αναταλάνουν αποφάσεις.

Η έκδοση του περιοδικού του Τμήματος Αρχιτεκτονικής, θεωρούμε, πως συνιστά ένα σημαντικό βήμα στη δημιουργία αυτής της καλοκουρδισμένης αρχής, για τον τομέα, όπως άλλωστε επιθυμούμε. Η επιστημονική αυτή έκδοση, πρωτοβουλία του Τμήματος, είναι μόνο η τελευταία από πολλές δραστηριότητες, που δεν έχουν μόνο σκοπό να παρουσιάσουμε τις ακαδημαϊκές επιλογές που παρέχουμε στο πρόγραμμα, την ταυτότητα δηλαδή, την ώρα, αλλά και να προωθήσουμε ένα παραγωγικό διάλογο επί αρχιτεκτονικών θεμάτων.
The regular seminars, the numerous international conferences that have already been organized, the groundbreaking events and exhibitions of the work of both students and academic staff have attracted internationally acclaimed architects and have led to the emergence of a local community of professionals and academics in the field of architecture who engage in creative communication in their attempt to express a common vision.

Many are the events that have helped promote this cause. The international conference on the life and work of distinguished Cypriot architect Panos Koulermos is illustrative of this effort, as is the conference on contemporary steel constructions, organized in collaboration with the Department of Civil and Environmental Engineering, and the conference that sought to shed light on the many factors at play within the building industry (such as culture, for example), which determine the face of contemporary Cyprus, a state confronted with serious political issues, whose capital is still divided. We should also mention the international student workshop on contemporary timber structures, co-organized with the Cyprus Architects Association.

In the context of the latter, the presentation of the model for the new Freedom Square in Nicosia, one of the many proposals for a reconstruction of the city’s urban core, met with great success as the event helped activate the process by which the public experiences and perceives architecture.

The event in question yielded some very hopeful insights: it pointed to a shared vision underlying discussions on urban planning in the historical centre of Nicosia, which aim to promote development of a specific field of knowledge.

However, the most important act of resistance, one that directly challenges the architectural status quo, was perhaps the University’s decision to grant the request of the Department of Architecture that it be based at the heart of Old Nicosia, within the city walls, barely a breath away from the demilitarized zone, from the green line that slashes through the city.

We hope that a building situated somewhere along the dead zone will soon be offered (by the state, the city of Nicosia and the Church of Cyprus) to our staff and students. This would in itself be an act of historic significance guaranteeing the department’s real, physical presence in this context: a fist to crack the wall that separates the island’s two communities at the heart of the city that continues to bleed. Cracks in the wall of Nicosia will not thus be the long term outcome of the power of sword, but of the far greater power of the pen and of its creative use.

Recognizing the potential influence of the journal you are now holding and confident as I am that you will enjoy its content, I wish all of you readers a “hearty appetite.” I warmly congratulate the Department of Architecture on this ambitious and praiseworthy initiative.

The syvnaa sevinária, ta poludritima dievthi svnédria pou eîoun hêde oragwvnei, oi prwtpoimopoißes ekdhliwseis kai oi ekdèseis apo tous foistîtes kai to akadámiakó proswopikó, eîoun proseklyseis dievthoi emvélēs arxtikêteinos kai to apotelēmà touz eîoun he deimwurhia miais topikís koinwnias epagwglamath kai akadámiákwvwn tou arxhitektonikou kladóus, oi opoiôs eîoun mia paragwghikí epikeinwnia kai prospáthous na ekfrásoun ena koivn órama.

Prôs to skopò auto suvèvalan polles ekdhliwseis. Gi paràdègema to dievthi smýpso kai he ekdhseis gia ton xwri kai to érgo tou fhmiavménou Kýprou arxtikénta Pâno Koulèrmos, to svnédrio gia ta svýgkrines metaxikíes katakesíes se suyneragwghia me to týma Polwktikôn Mhgnikívwn kai Mhgnikívwn Peribálλontov, kathî kai to svnédrio pou efere sto fwsis ta polles ptychi stis oikodómikís biamhgniasís (ópws he kouvktóu) pou autè he stigmí kathorízen to svýghrona Kýpro mé ta safará polítiká phrblmatá kai to miromagnè, akôm, prweítosú swas. Kai na mh lhmogwngoume kai to dievthi foistîtes eragastíri pou svýghrones òlunes katakesíes, pou svndiorgwúnwhe me to Sulólo Arxhitektonón Kýprou.

Sto pláiói stis têleutias dhrásstwptíphtas pou anaférwme, he parousiásiasthe tou makedías gia th néa pláteia Elênvthrías stis Leukwstis, sýmeiws me megyli epituxía, ws mia apo ta polles prospáthées gia ton anáplasa ton purhwna tou plúos. Kai autò mésa apo thn enepagwghia tis emepírias kai tis antilhpsiis ths arxhitektonikis apo to koivn.

Apó thn ekdhliwsi, próspeeki katá polè klpdòforo. Enas àzoun koinou óramatos pou affrèra ta svýthtaías gia thn polleodómbia ths istóriskhs karhías ths Leukwskias, me stócho na sthriçhse he anáptuhi enós svygenkrímewn tóme gnwsíwn.

Ostósos, he pio sýmhtantiki próáa antístasisas kai katá métopwv enúdea sto arxhitektonikó katestetménno, òhan edvenómewn, he apoqásiasthe tou Panaepisthmitou Kýprou, metá apo áttima tou Tmímatos Arxhitektonikis, ópws to týma stegastei sthn karhía ths entos thn teçewn Leukwskias, mia anása apo thn apostraptrikopoiwménh Zónh, thn prásias gramíme pou plhnwnei thn prwteúswsa.

Eplìzwe mì o suýntomà tha paraxhirméthi kàpio ktpdró (apò to krádos, to Dhm Leukwskias kai thn Ekkhliasia ths Kýprou), sto prwopwskó kai touz foistîtes mas, to otopio tha brískaste kàti mhkhs ths nekhrís Zónhs. Auth tha ìa mìh fushikí, mìa pragmàtikí parousiá, pou tha aposéulwse próáa istóriskhs sýmhnias, mìa gráthia pou tha anoihei rwmíes sto téchous pou chríwei ths dwó koínthites tou vnhstí, sthn karhía ths plýhs pou amhrarhgh. H démurewghi rwmimwn sto téchous ths Leukwskias deñ tha exatríta apo th dýnmova tou staðiwmou pou tha katátgrev th téchous makropróstasma. Antítheá, o rwmíes tha próskekun apo thn polè megálutepere apostraptrikopoiwménta ths démurewghkis grafías.

Htanantà antilhpsi ths isxhúsos thn periódikou pou ékei sto xhriá sas, thèlìa na euqíthi se ólous tous anagwngástes, ìaíli órzei kai autì giatí pragmatikà tha apoalósoсте to periechuméno tou. Ta thèrma mou sygyrhrptíria sto Tmíma Arxhitektonikis gia autì th filódoxei kai axèpantí prwtobwliá.
The primary objective of Architectural Studio 201 is the study of an evolving architectural program through its translation and transition from a structure characterized by its temporary and transitory nature to one which is more permanently anchored at a specific location. Central to this exploration is the understanding of the changing spatial and tectonic perception that defines the different stages in the evolution of the proposed structure, which is based in turn on a number of thematic sessions, such as: the study of scale, visual balance and rhythm; the disposition of program and use and their spatial characteristics; integration of structure and methods of construction and assembly; the materials palette and the texture and composition of the building envelope. Consequently these thematic investigations will help define a methodology that aspires at the translation of a concept to space and the transition of space to place.

The framework in which the above mentioned pedagogical objectives will be investigated engages the students, in their first exercise, to propose a kit-of-parts for the construction of a temporary and transitory information kiosk, for a traveling exhibit housing representative work by the students of the Architecture Program at UCy. The kiosk and the exhibit therein will be mobile and they are to be transported in two conventional shipping containers, which will have the ability to be transformed on-site, as long as their structural integrity is not compromised. In the following exercise the students are asked to transplant their generative concept and adaptively reuse components from their containers in the construction of a more permanent satellite of the Architecture Program on a selected site at the main university campus. At this stage the students are given additional programmatic and site requirements and an increased material palette. This increased material palette coincides with the use of specific materials and methods of construction, presented to the students in related coursework during this academic year.

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ARH 201 (MAIN DESIGN STUDIO) PEDAGOGICAL OBJECTIVES

18-21> GEORGE KALLIS ΓΙΩΡΓΟΣ ΚΑΛΛΗΣ

22> ANASTASIA AGGELIDOU ΑΝΑΣΤΑΣΙΑ ΑΓΓΕΛΙΔΟΥ
The aim of this design studio is the revisiting of the public / private relations in nodal scales which bring together the infrastructure scale, with that of the living / inhabiting. Which new forms of living are possible and how do they reflect in the architectural design? It was important for the studio to investigate morphogenetic relations like that of public / private in order to make the students aware of a continuous interaction between the forces present in the urban environment and the architectural elements produced by them.

Within this logic, the student were encouraged to reexamine ready made notions like possibly that of living, by transferring the small scale of living within the extra large scale of an urban infrastructure, similar to that of a shopping centre. The main design theme was the insertion of a small business with living spaces in the Orphanides Hypermarket in Nicosia.

The studio was divided in four stages with the students constructing their way from one stage to the following stage. This was aided by the use of the public / private notion as a vehicle for understanding the world in which they are immersed.

For the third stage the students were invited to articulate a framework of directions and intentions, related to the preferable public / private relations for the new condition of the insertion of the three functions of the case studies in the Orphanides Hypermarket. The fourth stage was in fact, the design of such an insert following the framework of intentions.

The results were really good, with the students developing the ability of shifting continuously from the specific (the “clients” had specific characters and habits) to the general, from the extra small scale to the extra large one of a shopping centre. The students proved to be creative even by being exposed to a complex, heterogeneous environment. It is in fact such an environment that characterizes of the contemporary urban world.

For more details about the design studio see the texts by Socrates Stratis, “Intercosmics” in the same edition.
1> MELISSA PASTRY SHOP PHOTO BY THEOULA EYZONA
ΖΑΧΑΡΟΠΛΑΣΤΕΙΟ ΜΕΛΙΣΣΑ, ΦΩΤΟΓΡΑΦΙΑ ΘΕΟΥΛΑ ΕΥΖΟΝΑ

2> THE FLYING COFFEE SHOP PHOTO BY MARIA MATTHEOU
ΤΟ ΙΠΤΑΜΕΝΟ ΚΑΦΕΝΕΙΟ, ΦΩΤΟΓΡΑΦΙΑ ΜΑΡΙΑ ΜΑΤΘΑΙΟΥ

3> MR ARGYROS TAILOR SHOP PHOTO BY CHRISTOS PASADAKIS
ΡΑΦΕΙΟ Κ. ΑΡΓΥΡΟΥ, ΦΩΤΟΓΡΑΦΙΑ ΧΡΙΣΤΟΣ ΠΑΣΑΔΑΚΗΣ

4> ORPHANIDES HYPERMARKET PHOTO BY MARIA MATTHEOU
ΥΠΕΡΑΓΟΡΑ ΟΡΦΑΝΙΔΗ, ΦΩΤΟΓΡΑΦΙΑ ΜΑΡΙΑ ΜΑΤΘΑΙΟΥ

5> DOCUMENTING IN SECTION THE MELISSA PASTRY SHOP BY KATERINA NEOHYTOU
ΤΟΜΗ ΤΟΥ ΖΑΧΑΡΟΠΛΑΣΤΕΙΟΥ ΜΕΛΙΣΣΑ, ΚΑΤΕΡΙΝΑ ΝΕΟΥΦΤΟΥ
6> FINAL PROJECT DRAWING - PASTRY SHOP, ANASTASIA AGGELIDOU
ΤΕΛΙΚΑ ΣΧΕΔΙΑ ΤΟΥ ΖΑΧΑΡΟΠΛΑΣΤΕΙΟΥ, ΑΝΑΣΤΑΣΙΑ ΑΓΓΕΛΙΔΟΥ

7> FINAL PROJECT DRAWING - TAILOR SHOP, CHRISTOS PASADAKIS
ΤΕΛΙΚΑ ΣΧΕΔΙΑ ΤΟΥ ΡΑΦΕΙΟΥ, ΧΡΙΣΤΟΣ ΠΑΣΑΔΑΚΗΣ
FINAL PROJECT DRAWING - PASTRY SHOP, GEORGE KALLIS. ΤΕΛΙΚΑ ΣΧΕΔΙΑ ΤΟΥ ΖΑΧΑΡΟΠΛΑΣΤΕΙΟΥ, ΓΙΩΡΓΟΣ ΚΑΛΛΗΣ.

MAKING DIAGRAMS OF THE PUBLIC/PRIVATE OF PASTRY SHOP, GEORGE KALLIS. ΣΧΕΔΙΑΓΡΑΜΜΑΤΑ ΤΟΥ ΔΗΜΟΣΙΟΥ / ΙΔΙΩΤΙΚΟΥ ΤΟΥ ΖΑΧΑΡΟΠΛΑΣΤΕΙΟΥ, ΓΙΩΡΓΟΣ ΚΑΛΛΗΣ.
10> MAKING DIAGRAMS ABOUT THE EXTENSION IN THE CITY BY THE FLYING COFFEE SHOP, MARIA MATTHEOU.  
ΣΧΕΔΙΑΓΡΑΜΜΑΤΑ ΓΙΑ ΕΠΕΚΤΑΣΗ ΣΤΗ ΠΟΛΗ ΑΠΟ ΤΟ ΙΠΤΑΜΕΝΟ ΚΑΦΕΝΕΙΟ ΑΠΟ ΜΑΡΙΑ ΜΑΤΘΕΟΥ.

11> IMAGE 16, GEORGE KALLIS
ΕΙΚΟΝΑ 16, ΓΙΩΡΓΟΣ ΚΑΛΛΗΣ

12> SUPERIMPOSING THE EXTRA SMALL OF THE INSERT WITH THE EXTRA LARGE OF THE HYPERMARKET, THEOULA EVZONA
ΕΠΑΛΛΗΛΙΑ ΜΕΤΑΞΥ ΤΟΥ ΕΞΑΙΡΕΤΙΚΑ ΜΙΚΡΟΥ ΕΝΘΕΤΟΥ ΜΕ ΤΗΝ ΜΕΓΑΛΗ ΚΛΙΜΑΚΑ ΤΗΣ ΥΠΕΡΑΓΟΡΑΣ ΟΡΦΑΝΙΩΝ, ΘΕΟΥΛΑ ΕΥΖΩΝΑ

13> SUPERIMPOSING THE INSERT OF THE PASTRY SHOP ONTO THE SUPERMARKET ORGANISATION, THEOULA EVZONA
ΤΟΠΟΘΕΤΩΝΤΑΣ ΤΟ ΕΝΘΕΤΟ "ΖΑΧΑΡΟΠΛΑΤΕΙΟ" ΣΕ ΣΧέΣΗ ΜΕ ΤΗν ΟΡΓΑΝΩΣΗ ΤΗΣ ΥΠΕΡΑΓΟΡΑΣ, ΘΕΟΥΛΑ ΕΥΖΩΝΑ

14-17> PROJECT SITE MODEL ORPHANIDES HYPERMARKET
ΜΑΚΕΤΑ ΠΕΡΙΟΧΗΣ ΜΕΛΕΤΗΣ (ΥΠΕΡΑΓΟΡΑ ΟΡΦΑΝΩΝ)
TEXT START

18 PUBLIC / PRIVATE ANALYSIS, MICHALIS MINA
ANALYΣΗ ΔΗΜΟΣΙΟΥ / ΙΔΙΩΤΙΚΟΥ, ΜΙΧΑΛΗΣ ΜΗΝΑ

19 FINAL PROJECT MODEL - PASTRY SHOP, ANASTASIA AGGELIDOU
ΤΕΛΙΚΗ ΜΑΚΕΤΑ - ΤΟ ΖΑΧΑΡΟΠΛΑΣΤΕΙΟ, ΑΝΑΣΤΑΣΙΑ ΑΓΓΕΛΙΔΟΥ

20 FINAL PROJECT MODEL - COFFEE SHOP, CHRISTINA ARMOSTI
ΤΕΛΙΚΗ ΜΑΚΕΤΑ - ΤΟ ΚΑΦΕΝΕΙΟ, ΧΡΙΣΤΙΝΑ ΑΡΜΟΣΤΗ

21 FINAL PROJECT MODEL - TAILOR SHOP BY ARGYRO STYLIANOU
ΤΕΛΙΚΗ ΜΑΚΕΤΑ - ΤΟ ΡΑΦΕΙΟΥ, ΑΡΓΥΡΩ ΣΤΥΛΙΑΝΟΥ

22 FINAL PROJECT MODEL - TAILOR SHOP BY CHRISTOS PASADAKIS
ΤΕΛΙΚΗ ΜΑΚΕΤΑ - ΤΟ ΡΑΦΕΙΟ, ΧΡΙΣΤΟΣ ΠΑΣΑΔΑΚΗΣ

TEXT END
ΑΡΧΙΤΕΚΤΟΝΙΚΟΣ ΣΧΕΔΙΑΣΜΟΣ ΙΙ

ARH 101 (MAIN DESIGN STUDIO)  ARCHITECTURAL DESIGN II

The pedagogical goals in this second semester of architectural design education include the ability to: analyse the context of a project and discover relationships between the various parameters, select a site and critically account for the process, develop a route through a series of interior spaces designed for purposes which require specific lighting conditions, and collaborate in order to group a number of initially independent buildings. The students are led through a discovery process not only about the specific site under investigation, but about the way they themselves perceive, think and conceptualize, encouraging a more complex coordination between these different yet interdependent faculties.

A strip of Cyprus 4km * 15 km is initially introduced to the students through maps and aerial photographs. Each quarter of the strip is allocated to a team of four. Each team is asked to build a rough clay model of its own segment, based on this second hand information but without tracing the contours or measuring the height. A site is then selected where a ‘group’ of pavilions will be situated. Different kinds of information are produced in layers, the superimposition of which reveals relationships between parameters otherwise kept apart by the very form the initial information is given.

After presenting their analyses, clay model, and selection of site, the students visit the site, talk to locals and complement their observations with a more in depth research. Based on this first-hand experience of the area, the site selected may be rejected or confirmed.

The next part asks each student to design a pavilion for exhibiting sculptures, paintings, texts or treasures. The site for this stage is taken to be flat while the overall pavilion dimensions can be a cube of 10.2*10.2*10.2 m or a rectangular volume of 7.2*14.4*10.2 m. And while this first pavilion is not situated on any specific site, its design is based on a certain relationship with the sun path. Each team is expected to have one pavilion of each type.

The next and final stage involves the grouping and positioning of the four pavilions on the specific site selected. The proposal is expected to address the characteristics of the area in one way or other, while the grouping strategy chosen needs to serve the main concept the team came up with after analysing the givens and after they have defined their goals (the pedagogy behind the course is explained further in the essay on first year teaching in this issue).

The pedagogical goals in this second semester of architectural design education include the ability to: analyse the context of a project and discover relationships between the various parameters, select a site and critically account for the process, develop a route through a series of interior spaces designed for purposes which require specific lighting conditions, and collaborate in order to group a number of initially independent buildings. The students are led through a discovery process not only about the specific site under investigation, but about the way they themselves perceive, think and conceptualize, encouraging a more complex coordination between these different yet interdependent faculties.
1> WORKING MODEL. NATALI MITSINGA ΜΑΚΕΤΑ ΕΡΓΑΣΙΑΣ ΝΑΤΑΛΥ ΜΙΤΣΙΓΓΑ

2> WORKING MODEL. CHRISTOS PASADAČΗΣ ΜΑΚΕΤΑ ΕΡΓΑΣΙΑΣ ΧΡΗΣΤΟΣ ΠΑΣΑΔΑΚΗΣ

3-4> WORKING MODEL. ANASTASIA ANGELIDOU ΜΑΚΕΤΑ ΕΡΓΑΣΙΑΣ ΑΝΑΣΤΑΣΙΑ ΑΓΓΕΛΙΔΟΥ

5> GROUPING OF PAVILIONS. GROUP: CHRISTOS PASADAČΗΣ, ANASTASIA ANGELIDOU ΟΜΑΔΟΠΟΙΗΣΗ ΑΤΟΜΙΚΩΝ ΠΑΒΙΛΙΩΝ. ΟΜΑΔΑ: ΧΡΗΣΤΟΣ ΠΑΣΑΔΑΚΗΣ, ΑΝΑΣΤΑΣΙΑ ΑΓΓΕΛΙΔΟΥ

6-10> GROUPING OF PAVILIONS. GROUP: GEORGE KALLIS, MARIA MATHEOU, MARIA ANASTASIOU ΟΜΑΔΟΠΟΙΗΣΗ ΑΤΟΜΙΚΩΝ ΠΑΒΙΛΙΩΝ. ΟΜΑΔΑ: ΓΕΩΡΓΟΣ ΚΑΛΛΗΣ, ΜΑΡΙΑ ΜΑΤΘΕΙΟΥ, ΜΑΡΙΑ ΑΝΑΣΤΑΣΙΟΥ

11-15> INDIVIDUAL PAVILION. CHRISTOS PASADAČΗΣ ΑΤΟΜΙΚΟ ΠΑΒΙΛΙΟΝ. ΧΡΗΣΤΟΣ ΠΑΣΑΔΑΚΗΣ
INDIVIDUAL PAVILION. GEORGE KALLIS. ΑΤΟΜΙΚΟ PAVILION. ΓΙΩΡΓΟΣ ΚΑΛΛΗΣ.
20> INDIVIDUAL PAVILION. IOANNA THEODOSIOU. ΙΟΑΝΝΑ ΘΕΟΔΟΣΙΟΥ

21> GROUPING OF PAVILIONS. GROUP: IOANNA THEODOSIOU, ANNA MICHAELIDOU, ANDRI ROUIS HARISIOU, ELENI SPANOU
ΟΜΑΔΑ: ΙΟΑΝΝΑ ΘΕΟΔΟΣΙΟΥ, ΑΝΝΑ ΜΙΧΑΗΛΙΔΟΥ, ΑΝΤΡΗ ΧΑΡΙΣΙΟΥ ΑΝΤΡΗ, ΕΛΕΝΗ ΣΠΑΝΟΥ

22> GROUPING OF PAVILIONS. GROUP: MARIA GABRIEL, ANDRI PANAGIDOU, KONSTANTINOS MARKOU
ΟΜΑΔΑ: ΓΑΙΒΡΗΛ ΜΑΡΙΑ, ΑΝΤΡΗ ΠΑΝΑΓΙΔΟΥ, ΚΩΝΣΤΑΝΤΙΝΟΣ ΜΑΡΚΟΥ

23-24> GROUPING OF PAVILIONS. GROUP: TASOS IOANNOU, ANNA-KLARA VELTISTA, DEMETRA XATZIPAVLI, GIORINTA MOUHO
ΟΜΑΔΑ: ΤΑΣΟΣ ΙΟΑΝΝΟΥ, ΑΝΝΑ-ΚΛΑΡΑ ΒΕΛΤΣΙΣΤΑ, ΔΗΜΗΤΡΑ ΧΑΤΖΗΠΑΥΛΗ, ΓΙΟΡΙΝΤΑ ΜΟΥΧΟ

25> WORKING MODEL. ELENA GENNARI. ΜΑΚΕΤΑ ΕΡΓΑΣΙΑΣ ΕΛΕΝΑΣ ΓΕΝΝΑΡΗ

26> GROUPING OF PAVILIONS. GROUP: ANDRI PANTELIDOU, ELLADA MESVELJANI, THEODORA SOULOUNIA, ELENA GENNARI
ΟΜΑΔΑ: ΑΝΤΡΗ ΠΑΝΤΕΛΙΔΟΥ, ΕΛΛΑΔΑ ΜΕΣΒΕΛΙΑΝΗ, ΘΕΟΔΩΡΑ ΣΟΥΛΟΥΝΙΑ, ΕΛΕΝΑ ΓΕΝΝΑΡΗ
Keeping the basic structure of the course as taught the year before by Professor Theo David and Marios Christodoulides, the first exercise asks the student to rethink binary relationships such as up-down, in-out, high-low, we-others, solid-liquid etc. and discover the greys in-between. The examples were to be discovered in the city centre where the Department is located. The students were encouraged to experience the city and then decide what arouses their interest rather than base their choice on simply thinking about the topic.

The second exercise asked the student to choose a painting by a Cypriot artist, analyse its characteristics and create a new work that ‘comments’ in a creative way on its qualities.

The third exercise involved the creation of a three-dimensional piece of given dimensions, based on the outcome of the previous exercise. Similarly, this last product served as the starting point of the fourth and last exercise which asked for an architectural/urban intervention in the city fabric. Some students decided to bridge the gap between the moat and the bridge, which connects the walled city with the new.

Some created street furniture while others adopted a more sculptural approach. For this last part, the whole class had to collaborate in order to build a base model of the site which was selected by the instructors and within which each student could decide on how to intervene.

The main objective of this series of tasks was to encourage the students to begin to think in syntactic terms in order to discover existing relationships and/or suggest new ones. In the meantime, they were also encouraged to observe and experience their environment more consciously, to use abstraction as a design tool, to shift from two to three dimensions, to understand the importance of the medium used and to work in teams (the pedagogy behind the course is explained in the essay on first year teaching in this issue).
1-4, 7-8> FROM THE ORIGINAL PAINTING TO THE URBAN INTERVENTION. PROJECT BY ANDRI PANAGIDOU
ΑΠΌ ΤΟΝ ΑΡΧΙΚΟ ΠΙΝΑΚΑ ΣΤΗΝ ΑΣΤΙΚΗ ΕΠΕΜΒΑΣΗ. ΕΡΓΑΣΙΑ ΑΝΤΡΗΣ ΠΑΝΑΓΙΔΟΥ

5> THREE-DIMENSIONAL COMPOSITION. ANNA MICHAELIDOU ΤΡΙΣΔΑΣΤΑΤΗ ΣΥΝΘΕΣΗ. ΑΝΝΑ ΜΙΧΑΗΛΙΔΟΥ

6> THREE-DIMENSIONAL COMPOSITION. TASOS IOANNOU ΤΡΙΣΔΑΣΤΑΤΗ ΣΥΝΘΕΣΗ. ΤΑΣΟΣ ΙΟΑΝΝΟΥ

9> THREE-DIMENSIONAL COMPOSITION. ELLADA MESVELIANI ΤΡΙΣΔΑΣΤΑΤΗ ΣΥΝΘΕΣΗ. ΕΛΛΑΔΑ ΜΕΣΒΕΛΙΑΝΗ

10> THREE-DIMENSIONAL COMPOSITION. ELENA GENNARI ΤΡΙΣΔΑΣΤΑΤΗ ΣΥΝΘΕΣΗ. ΕΛΕΝΑ ΓΕΝΝΑΡΗ

11> THREE-DIMENSIONAL COMPOSITION. MARIA GABRIEL ΤΡΙΣΔΑΣΤΑΤΗ ΣΥΝΘΕΣΗ. ΜΑΡΙΑ ΓΑΒΡΙΗΛ

12> URBAN INTERVENTION. TASOS IOANNOU ΑΣΤΙΚΗ ΠΑΡΕΜΒΑΣΗ. ΤΑΣΟΣ ΙΟΑΝΝΟΥ

13> URBAN INTERVENTION. KONSTANTINA HATZIKOSTA ΑΣΤΙΚΗ ΠΑΡΕΜΒΑΣΗ. ΚΩΝΣΤΑΝΤΙΝΑ ΧΑΤΖΗΚΩΣΤΑ

14> SKETCH OF URBAN INTERVENTION. ANNA MICHAELIDOU ΣΚΙΤΣΟ ΑΣΤΙΚΗΣ ΠΑΡΕΜΒΑΣΗΣ. ΑΝΝΑ ΜΙΧΑΗΛΙΔΟΥ
Threshold: Point of entry, a beginning or a transition, physical or psychological

The aim of this Architecture studio was to create the circumstances through which the students would be able to attain and develop the capability to define a personal thought process, which can lead to the conception and development of a unique architecture without any dependence on prejudice, habits, techniques or established typologies. The aim was, through a process of research and analysis to bring to life a work of architecture that simultaneously expresses theoretical positions but also practical concerns.

Through the challenge of the themes framework, the students had to engage in the definition of a brief for a specific site accompanied by a parallel formal exploration based on an architecture language, which they needed to define themselves, through abstract exercises. Their research should have culminated in a concise architectural statement, redefining the ways of connecting (with) the urban fabric and superimposing a new meaning to the programmatic elements. The exercises had to demonstrate that architecture is art but also the technology of construction.

“We will examine the passage of Ledra Street as a symbol, a point of transformation of the existing urban environment, as a place of encounter and communication and as a reflection of the history of the place. A passage through a space where time stood still.”

It was important that the students gradually introduced the fundamental values of design, but also to discuss the topic in the broader cultural context. To achieve that, the creative process had as a starting point a series of abstract two dimensional, followed by three-dimensional architectural exercises that were based on the interpretation of meaning and form of works from Cypriot artists. As a result they were able to create an architectural language which would offer a frame of operation in tackling the primary architectural problem at hand. This would lead to a result that was architecturally cohesive, but also responded to the specifics of the architectural question on site.

The design studio offered the opportunity to students to consider architecture and its creation from a historical, cultural, social and technological perspective. The purpose was for them to be able to structure their thoughts in a tangible form, incorporating space appropriate for human habitation and stimulating the human experience, interaction and social encounter.

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ARH 100 (MAIN DESIGN STUDIO) THRESHOLD AS A PASSAGE: LEDRA STREET NICOSIA

8-13> EIRINI ASIMAKOPOULOU
ΕΙΡΗΝΗ ΑΣΗΜΑΚΟΠΟΥΛΟΥ

14> NATALY MITSIGA
ΝΑΤΑΛΥ ΜΙΤΣΙΓΑ
15-17> GEORGE KALLIS
ΓΙΩΡΓΟΣ ΚΑΛΛΗΣ

18-20> ANNA EVRIPIDOU
ΑΝΝΑ ΕΥΡΙΠΙΔΟΥ
Introduction
And this is the real question: how does one begin teaching something that has no single beginning or origin, no one end or telos and is not the work of one individual, nor is it created for one specific person?

One probable answer is: start with the basics. The problem of course is then displaced to the question: what are the basics? The answer to such a question presupposes a categorization or prioritization which is again based on some sort of preconceived hierarchy, a setup clearly having an initial stage or base, a middle body, perhaps, and a superstructure or end result. How then does one go about making these distinctions? The basics can only be identified in relation to something that follows, perhaps in the form of a desired result. Could the basics and the end result be decided on, based on their relationship with a desired middle? Yes if one adopts Cavafy’s position in the poem ‘Ithaca’ which values the journey more than the destination. Still, deciding on what the end result and the middle are, based on what the desired basics are, seems to make less sense since, in such a case, after completing the basics the rest seems superfluous. In other words, the basics tend to serve something, a process or result, which comes after them.

Naturally, the first year of architectural education comes before what comes next in a temporal and pedagogical sense. It may thus be considered as basic. The question then becomes: what is exactly what comes next in a temporal and pedagogical sense. It may thus give way to making these distinctions. The basics can only be identified in relation to something that follows, perhaps in the form of a desired result. Could the basics and the end result be decided on, based on their relationship with a desired middle? Yes if one adopts Cavafy’s position in the poem ‘Ithaca’ which values the journey more than the destination. Still, deciding on what the end result and the middle are, based on what the desired basics are, seems to make less sense since, in such a case, after completing the basics the rest seems superfluous. In other words, the basics tend to serve something, a process or result, which comes after them.

The new question then is: what is a whole and what is a piece? A whole implies an integrity or autonomy, qualities a piece lacks. Or does it? If one considers a fractal, the piece has the same qualities as the whole. A piece of a cauliflower does not defer from the whole in quality but in quantity and size. Similarly, a pattern or texture also renders difficult the distinction between the piece and the whole, especially if this is the result of a process involving layers: why assume that what is observed is a complete whole and not an incomplete piece which makes sense only when connected sequentially to the rest of the similarly fragmented pieces? Is the whole architectural education, in other words, a whole made up of pieces linearly assembled? Or is it more of an entity which is the intermediate stage before more layers are added?

A whole, as well as a piece for that matter, is rendered as such by recognition or identification. Such an act depends on past knowledge or memory, unless the rules by which the piece is rendered a piece and a whole is identified as a whole are given on the spot, within the work itself and not dictated by past experiences, practices or discourses. Is such independence desirable? Yes, if the task
of architectural education is seen as training the student to break from the status quo and be as innovative as possible in order to address effectively his or her role when responding to the challenges of an ever evolving society. No, if it is seen as giving the student already tried recipes to satisfy the clear and well defined needs of a stable society, a scenario far removed from what is actually the case.

Neither of the two extreme roles is desirable. Architecture is a product as well as a reaction to what exists. Neither serving and perpetuating the status quo, nor ignoring totally what already exists will help the architect function. For any true contribution, an architect has to play freely and construct a new form. And that only momentarily, in other words to be an aesthetic experience in the Kantian sense: to allow for the faculties of understanding and imagination to work, to be an aesthetic experience in the Kantian sense: to allow for the faculties of understanding and imagination to work, to help the architect function. For any true contribution, an architect has to play freely and construct a new form.

Perhaps the first challenge, before any kind of dialogue can take place, is the need for a common medium of communication. As Donald Schön’s research has shown, the studio teacher and the student of design are in a dynamic state of bargaining in an attempt to communicate with each other. The medium through which this is attempted is not one but many: the language manifested vocally how to construct a visual language, focusing on syntax rather than abstraction in order to deal with complexity.

An important clarification that needs to be made is that the Communication Media course is taught as an integral part of the teaching of design. Consequently, the act of recording an existing spatial or formal entity through sketching is not just an exercise in examining the capabilities of a specific medium, always regarding the capabilities of a specific medium, always regarding the

and while the medium may not be entirely the conveyed message, the medium cannot but be part of the message it conveys. If the medium were just a carrier of something more important, then translation would be possible between media, rendering the more demanding ones, in matter, quantity or energy, unnecessary.


In other words, the student is encouraged to see the different opportunities each medium offers; not only in communicating with others about one’s own design ideas and concepts but as an integral part of the design investigation itself. A sketch in pencil cannot but reveal or suggest a different aspect of an idea than a sketch in charcoal. Furthermore, it is also stressed that each student should build his or her own personal relationship with each medium, since what works for one designer may not work for another.

Learning how to construct a visual language is tied up with focusing on syntax rather than isolated ‘elements’ or on one given semiotic code. The greatest challenge for most students is getting over the urge to draw a small part in detail, and with the extensive use of the eraser, before a layout has been sketched for the whole composition. They are thus encouraged to develop a more syntactic approach through exercises which last a few seconds or minutes and in media which do not allow erasing and do not encourage the student to focus on fine details. Such media are the soft pencil, the marker and the charcoal.

Intermediate critiques during an exercise attempt to explain to the students what is meant by a visual language. What is stressed is that there is no one specific technique or formal code that is privileged over others and that they themselves set the rules by which their work is judged as formally consistent or not. The terminology and language used to discuss the work also intends to familiarize them with a way of looking rather than a way of rationalizing, a way of thinking about relationships rather than a way of translating the visual into a verbal linear narrative. The intentional emphasis on the syntactic aspect is due to the fact that students do tend to ignore it and concentrate on the identity of specific elements in a composition and not so much on the relationships, spatial as well as formal, that hold the composition together.

Not unrelated to the above, is teaching them how to use abstraction in order to deal with complexity, a necessary skill in design. An important distinction to be made is between mimesis and representation. Mimesis implies uncritical recording or reproducing while representation is used to refer more to an interpretive process in accounting for a visual experience. Thus, rather than trying to portray what it is assumed that everyone else sees and expects, it is emphasized that sketching should be more of a creative task which reveals aspects of reality that are otherwise hidden or tend to go unnoticed. Rather than a necessary evil due to our inability to ‘photograph’ reality through drawing, abstraction is valued as a tool for focusing on the essence of a perceived situation. Understanding and accepting the existence of choice and the implications of such a position, open up the path to a more creative interaction between the design process and its context.

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Teaching design studio
A substantial portion of the time and energy in teaching design to students in first year cannot or should not be consumed in negotiating the essence of the act of designing itself. The not yet initiated, together with those trained to reflect, are the two groups which can participate more effectively in such an enterprise: the first due to a freshness which comes with 'ignorance', the second due to the coupling of practical experience and the ability to look from a distance, a skill which comes from cultivating a theoretical approach as well. In the first year design studio environment both of the mentioned groups are present; the need of the teacher to communicate with the student and vice versa, acts as a catalyst in such an enterprise.

Architectural design is described as a process which evolves in stages: analysing the givens, defining the goals, developing a proposal. Here too, as in the case of the basic, the middle and the end result, discussed regarding architectural education in general, the challenge is how to allow for each of these related but different tasks to strongly influence each other without allowing anyone of them to cancel out one or all of the others. In other words, the givens cannot totally dictate what the proposal is, yet the proposal should not be formed without taking into consideration the givens or the formulated goal.

Still, there tends to be a sequential relationship between these three tasks: the analysis of the givens comes first, the definition of a goal follows while the design of a proposal comes last. Should it be so though, if none of the three tasks should be allowed to determine the other? If the process freezes a stage after extracting what it needs for the next stage, then how can predetermination be avoided? Could it be that at any point in the design process, all three tasks need to simultaneously go on, admittedly in different degrees or intensities? In other words, while a task may start earlier than another, it nevertheless remains open and operational during the whole period of design, influencing and being influenced by the other tasks carried out. Thus the analysis of the givens may be

As has already been mentioned, the communication between the instructor and the student in their interaction regarding design may be physically manifested through the materiality of paper and marks on it, but it extends to other dimensions which include the language manifested vocally or through the body in the form of hand gestures or facial expressions. And while design is taught in another course, the nature of designing is inevitably central to the media communication course. The opposite holds as well: learning how to design cannot but involve specific media and the way these are involved in the process of designing itself.

Classifying the architectural synthesis
The architectural synthesis is a process which evolves in stages: analysing the givens, defining the goals, developing a proposal. In the first year design studio environment both of the mentioned groups are present; the need of the teacher to communicate with the student and vice versa, acts as a catalyst in such an enterprise.

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rethought even after the goal has been defined, or when the proposal is beginning to acquire shape and form, while the proposal will in turn be influenced by a similar dialogue between ‘earlier’ stages, and so on.

As in the case of sketching or drawing, the student is thus encouraged to oscillate between the three stages rather than freeze the first and then go to the next one. Furthermore, the project is confronted as a configuration, a totality where any change in one part has an impact on the rest. In other words, just like with a sketch, the whole area or domain under investigation is considered as a complex system of relationships rather than an inert background on which to position some objects or designed entities. In this first semester of architectural education, the creation of patterns or textures which gain their validity from their own inherent rules and characteristics is thus emphasized over the design of objects which depend on semiotics and other external codes for their identity and meaning (please see section on first semester design work in this issue).

This form of fluidity emphasizes the process, and the spatial and formal relationships rather than the identity of objects in design. The same attitude is carried over to the design studio of the second semester where the end product of the first exercise becomes a ‘layer’ for the creation of a new ‘finished’ entity of the second exercise which in turn becomes the basic ‘layer’ for the creation of a third product (please see section on first semester design work in this issue). These layers of information are literally superimposed, just like the plans of a building, thus creating new layers of information by discovering relationships between parameters found in different layers. One of the techniques used is that of shuffling, changing that is the order of the layers thus allowing for connections between adjacent layers to become clearer.

**Grounding design choices: at the very core of architectural epistemology**

Any design proposal is the result of a series, or perhaps better, a network of choices. Unlike the architects in the Modern movement who managed, at least for a while, to persuade themselves and society that they were only the midwives who helped in giving material manifestation to the Spirit of the Age, no such claim can be given, let alone defended, by today’s designers. And while it may now be viewed differently, grounding one’s decision making, in one way or other, still remains one of the toughest challenges in the practice, let alone in the teaching of architectural design.

As has already been mentioned, both the teaching of sketching and drawing, as well as the teaching of architectural design, encourage a configurational approach where the validity of any part, section

...
or entity in the composition is derived from its relationships with everything else within the project, rather than on external systems of signification. In other words, rather than looking for a grand narrative, necessarily located outside the specific context which it overrides, a narrative that is which distributes identities and object-hoods in nicely packaged parcels, what is sought is more of a local code. Local not in a geographical sense but in the sense that it is contained within the project itself, not for creating a clear gestalt system of identifiable forms within a background but for generating what resembles a pattern that may include nodes but is mostly characterised by links between the nodes, both formally as well as spatially.

One old method of giving validity to half of the composition formally in such a local sense was to duplicate it, thus creating a symmetrical arrangement. A version of it was achieved by repeating a smaller element or section many times thus creating a rhythm, another equally old tactic. Then came the notion of balance through a more sophisticated arrangement of forms which in Postmodernism becomes a collage of unrelated fragments, in deconstruction a faulted whole, and in more recent times a folded sensuous flow. And while each of these models has its advantages and disadvantages as a tactic in design, the discussion of which is not the topic of this essay, the way the media course and the design studio are taught, especially in the first semester, both encourage the use of the technique of layering for the creation and analysis of relationships in all stages and aspects of the design process: from the way a medium is used in communicating ideas and intentions, to the way the context is analysed and relational sketches eventually evolve into architectural proposals.

Such a methodology seems appropriate at least during this first phase of architectural education since it discourages some potentially dangerous tendencies a newcomer to the field tends to have. One such tendency is the fear of the blank piece of paper and the ‘correctness’ of every mark on it, while another is the suffocating preciousness of any one single analysis or scheme. Both are undermined by the practice of superposition and simultaneous consideration. A further challenge is going from the analytical sketches which express the context and the program required for a specific project to the actual architectural entity itself. Having a layered arrangement of all these different sets of information does not easily permit a short-circuit which allows one analytical sketch to be directly translated formally into a design proposal.

The technique of layering may share some characteristics but is not the same as the Deluezean concept of the fold. It is also more similar with the layering technique used by Bernard Tschumi in La Vilette rather than the approach used by Peter Cook in his Layered City Scheme.
City Scheme. At the theoretical level it can be seen as a critique of the concept of collage and a new way of approaching design. Rather than encouraging identities based on boundaries and adjacencies, it promotes a more dynamic ever changing framework through which co-presence implies synchronicity rather than mere juxtaposition.

**Architecture as not just another culture**

An attitude, or ability for that matter, needs to be cultivated from an early stage in order to become part of the way a person operates. And rather than a disposition that can be demanded or dictated, the need to reflect or theorize can only be cultivated by encouraging ecstasy or displacement from one's own position. As the Turkish writer Ohran Pamuk describes, even drawing from life, by having that is the object in front of you, you still have, however momentarily, to remove your eyes from the object in order to look at the paper and draw. If done well, theory neither follows nor leads practice but, as Deleuze claims, these two activities are in a relationship of continuous relay. And as developments in Epistemology tell us, even the hardest of sciences depend not only on logic and deductive reasoning but on intuition, chance and the social milieu they operate on. Why shouldn't architecture?

Yet Architecture should not be addressing cultural issues by operating as just another culture. I believe that a challenge in today's architectural education is to have a more reflective and critical attitude regarding the very position we as professionals assume within the broader scheme of things. By this I do not mean turning design into a positivistic kind of activity by basing everything on a rigid methodology and a false faith on what appears as scientific, or a revival of the belief in architectural determinism. What I do mean is becoming more aware of our role as cultural agents, of the tools we have at our disposal for encouraging or accommodating some phenomena, social or natural, while discouraging others, and of the responsibility such a role entails. Our agenda cannot be dictated by our membership in one specific culture nor by the uncritically accepted ideology that such a situation implies. In other words, rather than accepting as dogma an inherited ideology, whether by belonging in a society or in a professional body, it is crucial to choose an ideology after awareness and critical consideration of the choices present, and bear all the ethical and other consequences such a position implies.

**Theorization as not just another culture**

In a society or in a professional body, it is crucial to choose an ideology after awareness and critical consideration of the choices present, and bear all the ethical and other consequences such a position implies.

**CHRISTOS HADJICHRISTOS**

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2 Pamuk Ohran, "My name in Red", translated by Erdag Göknar, Faber & Faber Ltd., 2007, London UK

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Introduction or looking at “intercosmics” through the “cosmicomics”:

When Italo Calvino was discovering the literature limits of cosmic theories, he pursued it through the construction of imaginary everyday lives: In “Cosmicomics” he describes, amongst other stories, “human” everyday lives on planet Earth during that period when the Moon was just separated from the Earth and subsequently its orbit was too close creating all sorts of “intercosmic” paradoxes. It is on such a paradox that the story of the Distance of the Moon is based on: a group of friends yielding to a complex environment, heterogeneous, hybrid, amalgam of such “cosmoses” which are interrelated, interdependent, creating all sorts of “intercosmic” nodes. Nobody dared of course, to collect this cheese by going on the Moon, even if it was close enough for a jump. Except, this gang of friends who discovered an “intercosmic node” where the Moon was approaching at its closest distance to Earth. That was a point in the sea, where the tide was reaching up to the Moon’s surface. The friends would wait patiently in their boats until that moment of the right distance. Then, some of them would climb up the ladders held by the rest of the group in the boats. The Moon would attract that person to its surface when arriving at the last step of the ladder. She or he would collect as much moon cheese as possible and throw it towards the rest of the group. That meant that the person on the Moon should have been back to the ladder before the Moon would have moved away from Earth. Otherwise, she or he would have to spend a month up on the cosmos of the Moon, until regaining the “intercosmic node” position. This created indeed, a continuous stress to the group of friends, attempting to collect as much cheese as possible during the activation of the “intercosmic node”.

Usually, the notion of cosmos is used in the singular tense. Any search for its characteristics is done through this logic of singularity. When one begins to refer to “cosmoses” in plural tense, with distinct characteristics and logics, then there is a need to search for “intercosmic nodes” and for those areas of their activation, as described above in literature.

One can assume that the contemporary globalised society is an amalgam of such “cosmoses” which are interrelated, interdependent yielding to a complex environment, heterogeneous, hybrid, uncertain, dynamic. It is an environment which is hard to comprehend.

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1 This text is based on a lecture given by Socrates Stratis, in the Lecture Series of the Department of Architecture of the University of Cyprus.
3 The author attempts to define the concept of “intercosmics” by using the story of the Distance of the Moon in “Cosmicomics”
STUDENTS FOLLOWING THE REHEARSAL OF THE CYPRUS STATE ORCHESTRA

ΦΩΤ. 1> ΦΟΙΤΗΤΕΣ ΠΑΡΑΚΟΛΟΥΘΟΥΝ ΤΙΣ ΠΡΟΒΕΣ ΤΗΣ ΚΡΑΤΙΚΗΣ ΟΡΧΗΣΤΡΑΣ ΚΥΠΡΟΥ
hand, especially when one is used to function within the framework of a unique “cosmos”.

This text is concentrated on such a complex environment, touching upon issues of education and practice of the contemporary architect. The text attempts to talk about the ways with which the architect can continue to be creative and innovative in such environments and how she / he could profit from possible “intercosmic nodes”.

1. Defining the notion of “cosmos” in the architectural domain

The “cosmoses” related to architecture and the city could be viewed through three categories4: the physical, the temporal and the pragmatic cosmoses. In this text, there will be an investigation about the ways architectural education and practice could concentrate on the creation of relations between these sorts of cosmoses and participate upon the making of an “intercosmic” culture. In which ways could the architect activate “intercosmic” nodes and therefore reconnect, translate, encourage, facilitate the design process and its implementation?

Concerning the three categories of “cosmoses” which relate to the architectural and urban domain one could include the following: firstly, concerning the physical cosmoses one could include the cosmoses of space organisation, of scale, of building and space typology and morphology, of topography, of nature etc. Secondly, concerning the temporal cosmoses one could include the cosmoses of uses, of function, of memories. Plus, those concerning experiential issues, as well as anthropological ones. The third category is that of pragmatic cosmoses in which one could include the cosmoses of project methods, of project actors involved, of regulations and modes of development etc. It is in fact, a catalogue which is updated continuously.

2. Defining the notion of the “project”

It is very crucial to define the notion of the “project”5 in this case. The text attempts to talk about the ways with which the architect can continue to be creative and innovative in such environments and how she / he could profit from possible “intercosmic nodes”. The “cosmoses” related to architecture and the city could be viewed through three categories4: the physical, the temporal and the pragmatic cosmoses. In this text, there will be an investigation about the ways architectural education and practice could concentrate on the creation of relations between these sorts of cosmoses and participate upon the making of an “intercosmic” culture. In which ways could the architect activate “intercosmic” nodes and therefore reconnect, translate, encourage, facilitate the design process and its implementation?

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since it is usually used in architecture as that of the physical object projected.

The way it is defined for the purpose of this text is in fact, that of a hybrid form of action between analysis and proposition. It is a form of action in which means and ends are interrelated. There are the possible and plausible directions formulated in relationship to the project actors.

In this way the system of actors is decisive on the making of the project. Usually such actors work independently and isolated within their own “cosmoses” with their own communication tools. It is not really certain that when they come together on the occasion of a project making they would achieve any degree of communication. The construction of adaptive communication tools6, a sort of a constructive method in order to create a common ground of communicating is crucial.

Another important issue is that the “project” becoming depends on the interrelation of its parts in a non linear way. There is a continuous influence between the project parts and its actors creating thus, a complex dynamic process.

What is very crucial in this case is that within the project based logic there are built in mechanisms of “cosmos” evaluation which allow the construction of the possible actions, readjustment of possible directions and means. The notion of “cosmos” becomes central going therefore, beyond the physical characteristics of a space, like scale, morphology and typology, into social, anthropological, cultural characteristics that define any society.

3. Shifting the centre of interest of architectural education – a hypothesis

Through this text, it is proposed that the architectural education should go beyond the physical object to be constructed into the education of processes and conditions that formulate the final project outcome. Which then would be the education of an “architect oποία σκοποί και μέσα υλοποίησης είναι αλληλενδέτα. Υπάρχουν οι πιθανές κατευθύνσεις και οι πραγματοποιήσιμες κατευθύνσεις που διαμορφώνονται σε δυναμική σχέση με τους εμπλεκόμενους φορείς στο σχεδιασμό.

Σε αυτή την περίπτωση το σύστημα φορέων είναι καύριο για το γίγνεσθαι του σχεδιασμού. Συνήθως αυτοί οι φορείς λειτουργούν αυτόνομα και απομονωμένα μέσα στους δικούς τους «κόσμους» με τα δικά τους επικοινωνιακά εργαλεία. Δεν είναι καθόλου δεδομένο ότι, όταν βρεθούν μαζί σε μια διαδικασία σχεδιασμού (αρχιτεκτονικό ή άλλου), θα καταφέρουν να επικοινωνήσουν μεταξύ τους. Η κατασκευή προσαρμοσμένων επικοινωνιακών εργαλείων γίνεται σημαντικότερη παρά ποτέ.

Ένα άλλο σημαντικό σημείο σ’ αυτή τη λογική σχεδιασμού είναι η μη γραμμική διαδικασία, μέσα από την οποία υλοποιείται. Υπάρχει συνεχής αλληλεγγύη μεταξύ όλων των τμημάτων του σχεδιασμού και των εμπλεκόμενων φορέων, δημιουργώντας μια πολυσύνθετη, δυναμική διαδικασία.

Χρειάζεται επίσης να αναφερθεί ότι μέσα στη λογική του σχεδιασμού υπάρχουν ενσωματωμένοι μηχανισμοί αξιολόγησης των διαφόρων «κόσμων», μέσα στους οποίους διαδραματίζεται ο σχεδιασμός. Μέσα από τη συνεχή επαναλειτουργία διαμορφώνονται πιθανές δράσεις, αναπροσαρμόζονται κατευθύνσεις και μέσα υλοποίησης τους. Η έννοια του «κόσμου» παίρνει κεντρικό ρόλο και δεν αναφέρεται πλέον μόνο στα φυσικά χαρακτηριστικά ενός χώρου, όπως η κλίμακα, η μορφολογία, η τυπολογία, κλπ., αλλά επεκτείνεται στα κοινωνικά, ανθρωπολογικά, οικονομικά, πολιτισμικά χαρακτηριστικά που καθορίζουν κάθε κοινωνία.

3. Μετατοπίζοντας το κέντρο βάρους της αρχιτεκτονικής παιδείας - μια υπόθεση

Προτείνεται μέσα από το συγκεκριμένο κείμενο, όπως η αρχιτεκτονική παιδεία διευρύνεται από την παιδεία γύρω από το φυσικό αντικείμενο για κατασκευή, στην παιδεία γύρω από τις διαδικασίες / συνθήκες που διαμορφώνουν το τελικό αποτέλεσμα του σχεδιασμού. Ποια είναι η παιδεία λοιπόν του «αρχιτέκτονα διαδικασιών / συνθηκών», και πως βοηθά η «διακοσμικότητα»; Σήμερα τέτοια παιδεία διευρύνει το ρόλο του αρχιτέκτονα σε ένα ρόλο πιο κοινωνικό, συλλογικό, επιτρέποντας τη συνεχή αναπροσαρμογή του στις μεταβολές που προκύπτουν από ένα πολυσύνθετο περιβάλλον, με τη συνεχή ενεργοποίηση «διακοσμικών κόμβων».

University of Paris 8, France, April 2005. Some of them are:
Prost, Robert, Concevoir, Inventer, Créer, sous la direction de, Editions L'Harmattan, Paris 1995

6 Schon Donald, cited in Christophe Midler, Organiser la création: l’exemple du projet Twingo (Organising the creation : the Twingo project exemple), pp. 219- 238, in Robert Prost, Concevoir, Inventer, Créer.
of conditions” and how the concept of “intercosmics” could aid? For sure such education enlarges the role of the architect into a more social oriented, collective allowing the continuous readjustment in relation to the changes of a complex environment through the activation of “intercosmic nodes”.

How then the “intercosmic culture of an architect of conditions could be constructed? How could the architect activate “intercosmic nodes” facilitating, reconnecting, encouraging, translating towards the making of a project? How could the architect manage such “intercosmic issues” allowing him / her to work towards the design of conditions rather than the design of physical objects?

4. Examples of “architecture of conditions” – between teaching and practice.

For the purpose of this text there are some examples from my work in the teaching and practice domain. “Intercosmic” forms are described in the project making and their influence on the final outcome. In this manner, there is an attempt to describe ways of interrelating teaching and practice feeding the domain of architectural research. The produced knowledge is channelled back to teaching and practice. It is in fact a sort of reflective process7 that demonstrates the interdependence between teaching, practice and research.

Concerning the teaching part, there are two examples about studios taught in the year 2006 – 2007 in the Department of Architecture, University of Cyprus. The first example is about a studio with first year students which has run twice so far. The second example is about a main design studio with second year students and has run only once.

Concerning the practice part, the examples are about two projects in which I had participated and are about the investigation of the limits of design within the logic described above. In fact, they are investigations under a general theme that we have called with my partners as “Architecture of Emergency”, attempting to connect the role of design with the broader social and political context, by activating “intercosmic” nodes.

4.1. The education of an “architect of conditions”. A studio about means of communication in Architecture (ARCH 121)

As mentioned above a major prerequisite for the architecture of conditions is the ability of the architect firstly, to propose adaptive

4.4.1. Η παιδαγωγική ενός “αρχιτέκτονα συνθηκών”. Εργαστήριο μέσων επικοινωνιών στην Αρχιτεκτονική (ARCH 121)

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communication tools so that the various project actors are able to participate into the design process. Secondly, the architect should be able to translate / transpose the knowledge acquired from the procedure into proposals.

It has been considered therefore, important at the beginning of the architectural studies to investigate means of communication beyond those that represent physical objects and spaces. What sort of means of communication can document / represent relations? The concept of “performance” became the main theme of the studio since it is about the performative aspect of relations, a notion that could be applied in the design process. As a case study, three musical instrument were chosen (flute, clarinet, trumpet), considered to be objects directly related to their performative characteristics.

The students were encouraged to search ways of documenting performance by coming in touch with the “cosmos” of the musical instruments. They were divided into three groups, one for each musical instrument, and documented initially the physical characteristics of the instruments. The next step was to concentrate on ways of documenting time through the relations of the musical instrument, the orchestra, the musician. The students followed the rehearsal of Cyprus state Orchestra as well as the main performance (image 1).

For the studio purposes the concept of performance was considered to be a system of relations between various articulation points between the musical instrument and its “cosmos”. For example, the musician’s lips and the trumpet’s mouthpiece, or the air breathed out of the musician’s mouth and the buttons. Those articulation points expanded the musical instrument up to the physical space of the orchestra space itself. Mapping the articulation points, has been taken place through the students’ observation as well as interviews done with the musicians of the State Orchestra. That was a first contact with a professional of that kind.
The next step was to design a "case" for a preferable articulation point after a further study of the "cosmos" of the musical instrument. The students were encouraged to bring their own case references (a raincoat, a shoe, a cd, a usb, a glove etc). They succeeded into translating the main characteristics of these cases into those for the articulation points of the instruments under study (images 3,4,5,6).

The result of this studio was the creation of micro-stories about relationships very different amongst the students. They discovered ways of representing these stories in relationship to space and time. They succeeded to manage information through the lens of "performance" and they realised the importance of coherence in those micro-stories.

Architectural Design Studio

The purpose of this studio was in fact, to bring the students in touch with the logic of architecture of "conditions". The students, from their initial stage of their studies (only second year students), were exposed to complex, heterogeneous environments and learnt how to manage issues about intervening in such environments. They learnt how to be creative and innovative while exposed to extreme urban conditions. The main design theme was to insert a small family business with living space within a large hypermarket at the city periphery of Nicosia, (Orphanides Hypermarket).

The studio time was divided in four stages with the students constructing their own way through. That was mainly done by studying the relations occurred between the public and private domain. It was consider crucial to study morphogenetic relations, like those of public / private in order to force the students to link the forces present in the urban space with the yielded architectural forms.

First stage: constructing a communication language through the public / private relations

During the first stage the students studied relations between public and private in the roads of the old city of Nicosia: relationships that took place within the three categories of "cosmoses" as described above. Plus, relationships that took place between the various cosmoses, (intercosmics). For example: a public view of a private property (public in temporal cosmos – private in pragmatic cosmos). In this way, a language of communication between students and teachers was built little by little.
Second stage: Analysing 4 case studies – enriching the data about relations between public / private

During the second stage, the students were invited to analyse 4 case studies using the under construction communication language. The first case study was about the “Melissa” pastry shop, which opened during the 1960s and is still operated by Mr Kyriakos 30 year old and his mother. The second case study was about the “Flying Coffee shop, a tiny space run by Mr George and his wife. The third case study was about the tailor shop of Mr Argyros, an 80 year old man who has stopped working as a tailor due to lack of clients. He still remains in his tailor shop and works as the neighbourhood administrator chief. The fourth case study was about the Hypermarket “Orphanides” in the periphery of Nicosia. The hypermarket is of extra large size and serves a large part of the metropolitan Nicosia.

The first three case studies are about traditional ways of working and living in Nicosia city centre. They are tiny business where their owners work and live a large part of their everyday. In this way they turn the working place into an intimate, private space with public access. The fourth case study is about a contemporary condition of urban periphery. It is an extra large activity with all typical characteristics of such use. The presence of such extreme in scale activities in Nicosia is due to the globalisation processes that puts another layer of activities on top of the Cypriot urban landscape.

Third stage: Construction a framework of directions and interrogations for design through the relations of public / private.

The education behind the architecture of “conditions” is based on a large part on the capacity of students to formulate frameworks of directions and priorities in design. In this manner one can avoid a sort of a series of solutions to given problems by the teachers. A method in fact, which is still prevailing in the architectural professional domain.
The students were invited to formulate their own framework through the public / private relations documented during the previous workshop stages, and considered interesting to investigate further. This framework replaced the building program which is more quantitative rather than qualitative.9

What was interesting was the fact that such framework gave a different direction for each student. The students could seek advice from their own “A3 Book of Directions and Interrogations” during their design process. The role of the teachers was to remind the students the content of such a “book” rather than imposing their own ideas.

By formulating such framework of directions through the public / private relations the construction of an architectural language was achieved and contained both general and specific characteristics: the users of the designed spaces had names and specific characteristics. Mr Kyriacos and his mother in case study # 1 (would Mr Kyriacos stay with his mother or not in his new space? – the students had to decide). Mr George, his wife and their two kids in case study # 2 (in what degree the flying coffee shop would parasite on the new environment in order to propose alternative environments and new spaces? – the students were encouraged to shift continuously from the specific to the general, from the part to the whole).10

Stage 4: The intervention area and the final proposal

As mentioned already, the students were given sites within the Orphanides Hypermarket / shopping centre, where they had to design an insert of similar use with one of their analysed case studies (pastry shop, coffee shop and tailor shop). Three different sites were given whose size was the minimum buildable plot in Cyprus (10.5 X 24 metres). The site for the pastry shop was located next to the candy and chocolate shelves, that of the coffee shop next to the escalators at the entry of the shopping centre. Through a series of simple rules, the students were encouraged to translate their frameworks of intentions and directions into architectural form. They were also encouraged to confront in their design process the tension between the extra small scale of a residential space and of course stay with his mother or not in his new space? – the students could seek advice from their own “A3 Book of Directions and Interrogations” during their design process. The role of the teachers was to remind the students the content of such a “book” rather than imposing their own ideas.

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9 Such differentiation was studied further in the doctoral research of Socrates Orphanides: “Forms of local / global dynamics in a project based action of an urban-architectural scale: the European context”, 2005

10 Schon, Donald, “The reflective practitioner – how professionals think in action”
the extra large (image 07).

In the first case, that of the pastry shop, a student chose to create a new entrance to the supermarket from the car park located on a lower level. Then the design concept was based on ways of managing the flow of users into the supermarket through the insert to be

μεταξύ υπεραγοράς και υπόλοιπου εμπορικού κέντρου και τέλος του ραφείου πάνω από τις κυλιόμενες ράμπες στην είσοδο του εμπορικού κέντρου. Μέσα από κάποιους απλούς κανόνες οι φοιτητές ενθαρρύνθηκαν να μεταφράσουν το πλαίσιο κατευθύνσεων και προβληματισμών που είχαν διαμορφώσει σε αρχιτεκτονική μορφή. Να αντιμετωπίσουν παράλληλα, μέσα από το σχεδιασμό, την ένταση

MODEL OF ORPHANIDES HYPERMARKET ΜΑΚΕΤΑ ΥΠΕΡΑΓΟΡΑΣ ΟΡΦΑΝΙΔΗ

THEOULA EYZONA ΘΕΟΥΛΑ ΕΥΖΟΝΑ

ANASTASIA AGGELIDOU ΑΝΑΣΤΑΣΙΑ ΑΓΓΕΛΙΔΟΥ

MARIA MATTHEOU ΜΑΡΙΑ ΜΑΤΘΑΙΟΥ

GEORGE KALLIS ΓΙΩΡΓΟΣ ΚΑΛΛΗΣ

CHRISTINA ARMOSTI ΧΡΙΣΤΙΝΑ ΑΡΜΟΣΤΗ

SOCRATES STRATIS
designed, (Anastasia Aggelidou, image 08). Another student chose to lower the main level of the site with a few steps, in order to create a trolley free zone (Theoula Evzona, image 09). In the same logic another student proposed the creation of an open air shopping space as a sort of an alternative environment for the supermarket users, (George Kallis, image 10).

In the case of the coffee shop, a student chose to design the ground floor of the site in relation to the various flows going through: entry – exit from the supermarket, lane for delivering for the coffee shop man on an electric bike this time who continued his trips within the shopping centre, (Christina Armosti, image 11). Another student chose to create a small nucleus of uses which would extend into the shopping centre parasiting on existing uses: an extra sitting area within the existing café of the shopping centre, extra bedrooms in the space for selling home accessories, (Maria Mattheou, image 12).

Finally, in the third case, the tailor shop, a student chose to translate
the role of Mr Argyros, from an administrative chief of the neighbour- 
bourhood of Faneromeni in the old Nicosia centre, into a chief of surveillance of the shopping centre “neighbourhood” (Argyrw Styli- 
anou). Another student chose to adapt the activities of a traditional tailor into a sort of a “fast cloth mending centre”. Each client could leave his or her clothes at the shop while going up the escalators from the parking level to the shopping centre and then pick them up when leaving. The escalator and the movement of the users gave form to the insert, (Christos Pasadakis, image 13).

Teaching the concept of “intercosmics” in the two studios

Describing the work done in the two studios, one can see how the students were encouraged to tackle complex situations and document relations between different cosmoses which coexist and then translate them into their design process. They learn how to activate in fact, “intercosmic nodes”. I hope that through the work done in both studios gave the chance to the students, to realise the complexity of the contemporary environment. In this manner, they could start managing it with creative ways, in the continuation of their studies.

4.2. The practice of an architect of “conditions”

As mentioned in the beginning of this text, the interdependence between teaching and practice is crucial in the architectural domain. Theories in the academic domain update the architectural practice but also get updated by it. I believe that the architectural work with which I am involved works in that logic.

Which are the limits of architecture of “conditions” in the everyday life and how such an architecture could shift the role of the architect into a more social one, more collective and even more politically activist? Such a question becomes relevant referring to areas like that of Cyprus, where the boarders of all kinds are rather present in the everyday urban life.

I will present two examples of my work. The first one in the “The Call # 192 project” which took place as a workshop – event within the
4.2. Η πρακτική ενός αρχιτέκτονα «συνθηκών». Όπως αναφέρθηκε στην αρχή του κειμένου, η αλληλοτροφοδότηση μεταξύ διάδοχων και πρακτική στον αρχιτεκτονικό χώρο είναι ουσιαστική. Θεωρήσεις και προβληματισμοί στον ακαδημαϊκό τομέα ενημερώνουν και ενημερώνονται από την αρχιτεκτονική πρακτική. Θεωρώ ότι το σχεδιαστικό έργο, με το οποίο σχεδιάζουμε, εντάσσεται σε αυτή τη λογική. Πώς μπορεί λοιπόν να διερευνηθούν τα όρια του σχεδιασμού «συνθηκών» στην καθημερινότητα και πώς αυτό το είδος σχεδιασμού μπορεί να μετατοπίσει το ρόλο του αρχιτέκτονα σ‘έναν τύπο πιο κοινωνικό, πιο συλλογικό ή ακόμα πιο πολιτικά ακτιβιστικό; Ιδιαίτερα, στη σφαίρα του δημοσίου, παράγοντας δημόσιο χώρο μέσα στο θεσμικό κενό που έχει δημιουργηθεί από την πολιτική κατάσταση στην Κύπρο, εκκένωσες τους διαδρόμους της πόλης να βείνει για μια στιγμή από τη σφαίρα του ιδιωτικού και να συναντηθεί με το «άλλο», ως διαφορετική εθνοτικότητα και καθημερινότητα, ως διαφορετική πόλη. Να βείσει το «άλλο» μέσα στο δημόσιο, να αναπροσαρμοσμόνται οι νοητικοί χάρτες σε σχέση με το «άλλο». Σε αυτή την περίπτωση προσκλήθηκαν ελληνοκύπριοι και τουρκοκύπριοι να ταξιδέψουν με τα λεωφορεία της γραμμής κατά μήκος της πράσινης γραμμής αλλά στην άλλη, για αυτούς πλέον. Τα τρία μέλη της ομάδας του έργου ήταν μαζί τους στις διαδρομές του Δήμου Λεωφορείων της πόλης και το σχέδιο τους ήταν να καθημερινώσουν την ενοποίηση αυτής της διαδρομής ως διαφορετική από την πολιτική κατάσταση της χώρας και της πόλης, σε σχέση με τη διαφορετική εθνοτικότητα και την καθημερινότητα της πόλης. Στη συνέχεια, δημιουργήθηκε ένας εφήμερος εφημερισμός, μέσω του οποίου η καθημερινότητα και το δημόσιο της πόλης πρέπει να αναπροσαρμοσμόνται με τη διαφορετική εθνοτικότητα και καθημερινότητα της πόλης. Τα τρία μέλη της ομάδας του έργου έδιναν συνέχεια τον συγκεκριμένο χώρο ως διαφορετικό και που εντάσσεται στο διάστημα της πράσινης γραμμής.”

Στα γνωστά πλαίσια ενός αρχιτεκτονικού σχεδιασμού. Απο την άλλη όμως έχει όλα τα συστατικά που μπορούν να χαρακτηρίσουν ένα σχεδιασμό «συνθηκών»: υπάρχουν οι εμπλεκόμενοι φορείς, που έχουν άμεση επίδραση στη διαμόρφωση του τελικού αποτελέσματος (χρήστες των λεωφορείων, επιμελητές της έκθεσης, ομάδα του έργου, οι δύο δημάρχοι της πόλης και οι υπηρεσίες τους, τα Ηνωμένα Εθνη). Υπάρχει ο σκοπός, κατεύθυνση για το τί είναι θεμιτό να αλλάξει ως υφιστάμενη κατάσταση (το θεσμικό κενό, η απουσία δημόσιου χώρου και κοινών αναφορών μεταξύ Τουρκοκυπρίων και Ελληνοκυπρίων). Υπάρχει η μέθοδος για επίτευξη του σκοπού που αναπροσαρμόζεται κατά τη διάρκεια ολοκλήρωσης του σχεδιασμού. Το παράδειγμα εδώ είναι ότι ο εκθεσιακός χώρος εξαρτόταν από τη συναίνεση των δυο Δημάρχων να παραχωρήσουν τα δημοτικά λεωφορεία. Λόγω της μη επικοινωνίας μεταξύ τους και της εχθρότητας που υπήρχε για διάφορους λόγους δεν ήταν δεδομένη η συμμετοχή τους στο σχεδιασμό "architects" was to relate the various actors involved, to facilitate, to
The “Public Private Synergy Convoy Project”
The Venice Biennale curators for Cyprus participation had asked us to work on a project that would confront the existence of a dividing line in Nicosia and the borders provoked by such situation. Our team departed from the fact that the Nicosia dividing line is part of a larger political problem and in such context, there is a question of how relevant architecture is. Proposing architecture of “conditions”, we believed that we were equipped with an appropriate form of action attempting to go a little bit beyond the architecture of objects and spaces. The “P.P.S. Convoy Project” is part in this case, of an Architecture of Emergency, proposing the production of a common culture to replace the institutional void caused by the war of 1974 and the bicomunal clashes of 1963. Such a culture can be produced by the construction of institutional infrastructures for cohabitation between Turkish Cypriots and Greek Cypriots. The proposal was in fact, concentrated on the design of synergy forms between public and private attempting to increase the porosity of the borders between the two communities (physical, social and psychological). References for the project were taken after the new situation created after the selective opening of the cease fire zone since April 2003.

The project was about the creation of a public infrastructure that could escort the refugees (both Greek Cypriots and Turkish Cypriots) back to their initial homes. An act that up to now is being done on a super private base since the State refuses any involvement. Through this public infrastructure, an archive would be created with documents on personal level (“P.P.S. Self – Other”) and on habitation level (“P.P.S. Home – Other”). In this manner, the refugee condition which has stayed for all these years on a general level is shifted to the sphere of the specific, of the personal and then it becomes public. The way to become public is through the exhibition of the archive in the vehicles of the “P.P.S Convoy” that will park in designated areas in both parts of the city of Nicosia. At these areas, workshops could be organised creating productive friction with the “other” plus beginning to produce fragments of culture of acceptance of the “other”. The basis of these workshops would be the material collected during the escorts of the refugees back to their homes (images 17, 18).

The “Public Private Synergy Convoy Project”

The project was convinced to participate in the project after a long and intense presentation about the project aims by the project team. The Venice Biennale curators for Cyprus participation had asked us to work on a project that would confront the existence of a dividing line in Nicosia and the borders provoked by such situation. Our team departed from the fact that the Nicosia dividing line is part of a larger political problem and in such context, there is a question of how relevant architecture is. Proposing architecture of “conditions”, we believed that we were equipped with an appropriate form of action attempting to go a little bit beyond the architecture of objects and spaces. The “P.P.S. Convoy Project” is part in this case, of an Architecture of Emergency, proposing the production of a common culture to replace the institutional void caused by the war of 1974 and the bicomunal clashes of 1963. Such a culture can be produced by the construction of institutional infrastructures for cohabitation between Turkish Cypriots and Greek Cypriots. The proposal was in fact, concentrated on the design of synergy forms between public and private attempting to increase the porosity of the borders between the two communities (physical, social and psychological). References for the project were taken after the new situation created after the selective opening of the cease fire zone since April 2003.

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5. The intercosmic character of architecture of “conditions” – a direction

An important characteristic of the architectural culture that makes it quite fascinating and adds a creative value is the endless interdependence between teaching, practice and research. It is in fact such interdependence that I tried to present through the concept of architecture of “conditions”. For sure, all observations in this text and any conclusions made just show a possible direction that needs further examination and thought. Hopefully that will be done through the studios, projects and research to come. The aim of the work in which I am involved it is in fact that, the creativity in architecture could have as source the interdependence between teaching, practice and research. Such creativity could participate in the construction of bridges with other domains. The concept of “intecosmics” leaves wide open the architectural investigation towards social issues which come out from the complex globalised environment and which form the contemporary urban space.

5. Η «Διακοσμικότητα» της αρχιτεκτονικής «συνθηκών» - μια κατεύθυνση.

Ένα σημαντικό χαρακτηριστικό της αρχιτεκτονικής κουλτούρας που της προσδίδει φοβερό ενδιαφέρον και συνεχή δημιουργικότητα είναι η αλληλεξάρτηση που χρειάζεται να υπάρχει μεταξύ διδασκαλίας, πρακτικής και έρευνας. Ενα τρίπτυχο, του οποίου τη συνεχή αλληλοπροσοχή προσαιόνησα να παρουσιάσω μέσα από την έννοια της αρχιτεκτονικής «συνθηκών». Σίγουρα, όλες οι παρατηρήσεις και τα συμπεράσματα δείχνουν μια κατεύθυνση που χρειάζεται περαιτέρω εξερεύνηση και προβληματισμό, μέσω των επόμενων εργαστηρίων, σχεδιασμών και έρευνας. Σκοπός του έργου με το οποίο ασχολούμαι είναι ακριβώς η δημιουργικότητα στην αρχιτεκτονική να συνεχίσει να πηγάζει μέσα από αυτό το τρίπτυχο και να επιχειρεί να δημιουργεί γέφυρες προς άλλους τομείς και προτεραιότητες. Η έννοια της «διακοσμικότητας» αφήνει ανοικτό πιστεύω, τον αρχιτεκτονικό προβληματισμό προς κοινωνικά θέματα που πηγάζουν μέσα από το πολυσύνθετο παγκοσμιοποιημένο περιβάλλον και διαμορφώνουν το σύγχρονο αστικό χώρο.
Throughout the studio of Media in Architecture an emphasis was given to the communication tools that document relation and time issues. The main theme to investigate was that of the concept of “performance”, referring to the sort of relations between actors and design during the making of the architectural project. As a case study, three musical instruments were chosen (a flute, a clarinet and a trumpet), considered to be performative objects par excellence. The students were encouraged to come in touch with various ways of documenting the concept of “performance” by becoming familiar with the cosmos of the musical instruments. In this manner, they dealt with the concept of time and relation, through a series of analytical diagrams and models. The students had the chance to follow and study the rehearsal and main performance of the Cyprus State Orchestra. As a final step they had to design a “case” for the performance of an instrument. Concluding, one could say that through this workshop, the students achieved to create and manage in a coherent manner, micro-stories about relations, with the concept of performance as the driving force.

Α: PROJECT BASED STUDENTS WORK | ARH 121 2005-06 | S. STRATIS

Μέσα από το συγκεκριμένο εργαστήριο, εξερευνούνται τα μέσα επικοινωνίας, που καταγράφουν σχέσεις και χρόνο. Ως κύριο θέμα για εξερέυνηση, τέθηκε η έννοια της απόδοσης, που χαρακτηρίζει το βαθμό αποτελεσματικότητας των σχέσεων σε μια διαδικασία σχεδιασμού. Ως περίπτωση ανάλυσης, χρησιμοποιήθηκε το πνευστό μουσικό όργανο (φλάουτο, κλαρίνο, τρομπέτα), το οποίο θεωρήθηκε ως το κατεξοχήν αντικείμενο, που σχετίζεται με το θέμα της απόδοσης. Οι φοιτητές ενθαρρύνθηκαν να έρθουν σε επαφή με τους τρόπους καταγραφής της απόδοσης, μέσα από την τριβή τους με τον «κόσμο» των μουσικών πνευστών οργάνων. Με αυτό τον τρόπο διαχειρίστηκαν την έννοια του χρόνου και των σχέσεων, μέσα από μια σειρά αναλυτικών διαγραμμάτων και μακετών. Οι φοιτητές παρακολούθησαν τις πρόβες της Κρατικής Ορχήστρας Κύπρου και την κύρια παράσταση του ίδιου μουσικού ρεπερτορίου. Στη συνέχεια επέλεξαν ένα σημείο συναρμολογήσης, που σχετίζεται με την απόδοση, για να το μελετήσουν σε βάθος και να του κατασκευάσουν μια θήκη. Το αποτέλεσμα ήταν οι φοιτητές να δημιουργήσουν και καταχωρήσουν μικρές ιστορίες σχέσεων, μέσα από το φακό της έννοιας της «απόδοσης», με έμφαση τη συνοχή τους.
11> THEODORA SOULOUNIA - A CASE FOR HOSTING PERFORMANCE
ΘΕΟΔΩΡΑ ΣΟΥΛΟΥΝΙΑ - ΣΧΕΔΙΑ ΘΗΚΗ ΑΠΟΔΟΣΗΣ

12> CONSTANTINOS MARKOU - A CASE FOR HOSTING PERFORMANCE
ΚΩΝΣΤΑΝΤΙΝΟΣ ΜΑΡΚΟΥ - ΣΧΕΔΙΑ ΘΗΚΗ ΑΠΟΔΟΣΗΣ

13> ANNA MICHAELIDOU - TIME DIAGRAM
ΑΝΝΑ ΜΙΧΑΗΛΙΔΟΥ - ΧΡΟΝΙΚΟ ΔΙΑΓΡΑΜΜΑ

14> ELENI SPANOU - A CASE FOR HOSTING PERFORMANCE
ΕΛΕΝΗ ΣΠΑΝΟΥ - ΘΗΚΗ ΑΠΟΔΟΣΗΣ

15> ANNA MICHAELIDOU - A CASE FOR HOSTING PERFORMANCE
ΑΝΝΑ ΜΙΧΑΗΛΙΔΟΥ - ΘΗΚΗ ΑΠΟΔΟΣΗΣ

16> CONSTANTINA HADJICOSTA - A CASE FOR HOSTING PERFORMANCE
ΚΩΝΣΤΑΝΤΙΝΑ ΧΑΤΖΗΚΩΣΤΑ - ΘΗΚΗ ΑΠΟΔΟΣΗΣ

17> CONSTANTINA HADJICOSTA - A CASE FOR HOSTING PERFORMANCE
ΚΩΝΣΤΑΝΤΙΝΑ ΧΑΤΖΗΚΩΣΤΑ - ΘΗΚΗ ΑΠΟΔΟΣΗΣ

18> MARIA GAVRIEL - A CASE FOR HOSTING PERFORMANCE
ΜΑΡΙΑ ΓΑΒΡΙΗΛ - ΘΗΚΗ ΑΠΟΔΟΣΗΣ

19> MARIA GAVRIEL - A CASE FOR HOSTING PERFORMANCE
ΜΑΡΙΑ ΓΑΒΡΙΗΛ - ΘΗΚΗ ΑΠΟΔΟΣΗΣ

20> ANNA MICHAELIDOU - A CASE FOR HOSTING PERFORMANCE
ΑΝΝΑ ΜΙΧΑΗΛΙΔΟΥ - ΘΗΚΗ ΑΠΟΔΟΣΗΣ

21> ANNA MICHAELIDOU - A CASE FOR HOSTING PERFORMANCE
ΑΝΝΑ ΜΙΧΑΗΛΙΔΟΥ - ΘΗΚΗ ΑΠΟΔΟΣΗΣ
This first Media Communications Course is strongly based on the premise that the means and media of communication are an integral part of the very idea, concept or design being communicated. Since different media can reveal different possibilities not only regarding the presentation or representation of the design proposal but about the design proposal itself, the presence of choice, and thus of design, in sketching and drawing is acknowledged and treated as the very essence of these seemingly simple and innocent tasks.

In-class exercises aim at discouraging some negative tendencies the majority of the students have. Such are: the focus given to a detail before considering the whole composition, the concentration on the figure at the expense of the ground, and the excessive use of the eraser which reveals the importance given to what is perceived as the ‘correctness’ of the work, an attitude which suffocates creativity. Consequently, many exercises use media which do not allow erasing and they last five to twenty seconds.

Keeping a sketchbook is mandatory. Its purpose is to encourage the student to develop ways of processing and ‘recording’ observations and ideas.

For the very first class in 2006-07, the motorcycle of one of the students was brought in and placed in the centre of the class in order to be drawn. Half hour was given for this first part after which the results were discussed. For the rest of the exercise, the students had five, ten, fifteen and twenty seconds to draw the same object. While most of the results of the first part looked uninteresting and still, many of the quick sketches managed to capture and reveal the dynamic and unique character of the object (the pedagogy behind the course is explained in the essay on first year teaching in this issue).

Αυτό το πρώτο μάθημα Μέσων Επικοινωνίας βασίζεται σε μεγάλο βαθμό στην πεποίθηση ότι ο τρόπος και το μέσο επικοινωνίας αποτελούν αναπόσπαστα μέρος της ιδέας, έννοιας ή σύνθεσης που μεταδίδεται, αφού διαφορετικά μέσα αποκαλύπτουν διαφορετικές πιθανότητες όχι μόνο σχετικά με την παρουσίαση ή αναπαράσταση μιας συνθετικής πρότασης, αλλά και σχετικά με την ίδια τη φύση της πρότασης. Επομένως, η παρουσία επιλογής, και έτσι η ανάγκη σύνθεσης, στο σχέδιο και το σκίτσο αναγνωρίζεται ως η ουσία αυτών των φαινομενικά απλών και αβών δραστηριοτήτων.

Ασκήσεις, κατά τη διάρκεια του μαθήματος, σκοπού έχουν να αποθαρρύνουν κάποιες αρνητικές τάσεις, τις οποίες τείνε να παρουσιάζει η πλειοψηφία των φοιτητών του πρώτου έτους. Τέτοιες είναι: η σημασία που δίδεται σε λεπτομέρειες πριν μια πιο γενική προκαταρκτική σύνθεση, η εστίαση στο αντικείμενο εις βάρος του χώρου, και η υπερβολική χρήση του σβηστηριού, κάτι που φανερώνει τη σημασία που δίδεται στην έννοια του ’σωστού’, μια στάση, η οποία πνίγει τη δημιουργικότητα. Επομένως, πολλές ασκήσεις απαιτούν μέσα που δεν επιτρέπουν το σβήσιμο και οι οποίες διαρκούν μόνο πέντε μείζονες δευτερόλεπτα. Σημαντικό παιχνίδι είναι η διατήρηση ενός πιο γενικού τρόπου επεξεργασίας και αποτύπωσης παρατηρήσεων και ιδεών.

Για το πρώτο μάθημα της χρονιάς 2006-07, το μοτοποδήλατο μιας φοιτήτριας τοποθετήθηκε στο κέντρο της αίθουσας σαν το αντικείμενο της πρώτης άσκησης σκίτσου. Το πρώτο μέρος της άσκησης διήρκησε τριάντα λεπτά και τα αποτελέσματα συνεβαίνουν σαν το αντικείμενο της πρώτης άσκησης σκίτσου. Το πρώτο μέρος της άσκησης διήρκησε τριάντα λεπτά και τα αποτελέσματα συνεβαίνουν σαν το αντικείμενο της πρώτης άσκησης σκίτσου. Το δεύτερο μέρος αποτελείται από σύντομα σκίτσα του ίδιου αντικειμένου των πέντε, δέκα, δεκαπέντε και είκοσι δευτερόλεπτα. Ενώ τα πλέον σκίτσα του πρώτου μέρους ήταν στεγνά και σκληρά, τα γρήγορα σκίτσα κατάφεραν να αποδώσουν το δυναμικό και ιδιαίτερα χαρακτηριστικά του αντικειμένου. (Οι παιδαγωγικοί στόχοι του μαθήματος αναπτύσσονται στην έκθεση που αναφέρεται στη διδασκαλία του πρώτου έτους και περιλαμβάνεται σε αυτό το τεύχος.)
3> WORK FROM THE SKETCHBOOK OF GEORGE KALLIS
ΕΡΓΑΣΙΑ ΑΠΟ ΤΟ SKETCHBOOK ΤΟΥ ΓΙΩΡΓΟΥ ΚΑΛΛΗ

4> WORK FROM THE SKETCHBOOK OF KATERINA NEOPHYTOU
ΕΡΓΑΣΙΑ ΑΠΟ ΤΟ SKETCHBOOK ΤΗΣ ΚΑΤΕΡΙΝΑΣ ΝΕΟΦΥΤΟΥ

5> WORK FROM THE SKETCHBOOK OF TASOS IOANNOU
ΕΡΓΑΣΙΑ ΑΠΟ ΤΟ SKETCHBOOK ΤΟΥ ΤΑΣΟΥ ΙΩΑΝΝΟΥ

6> WORK FROM THE SKETCHBOOK OF KATERINA NEOPHYTOU
ΕΡΓΑΣΙΑ ΑΠΟ ΤΟ SKETCHBOOK ΤΗΣ ΚΑΤΕΡΙΝΑΣ ΝΕΟΦΥΤΟΥ

7> WORK FROM THE SKETCHBOOK OF GEORGE KALLIS
ΕΡΓΑΣΙΑ ΑΠΟ ΤΟ SKETCHBOOK ΤΟΥ ΓΙΩΡΓΟΥ ΚΑΛΛΗ
A: PROJECT BASED STUDENTS WORK | ARH 120 2005-07 | C. HADJICHRISTOS

ARCH 120 FREEHAND DRAWING

8> WORK FROM THE SKETCHBOOK OF ARGIRO STYLIANOU
ΕΡΓΑΣΙΑ ΑΠΟ ΤΟΣΚΕΤΣΗΒΟΛΚΗΣ ΑΡΓΥΡΟΣ ΣΤΥΛΙΑΝΟΥ

9> IN–CLASS EXERCISES, DURATION: 90 MINUTES. MARIA GABRIEL
ΑΣΚΗΣΗ ΔΙΑΡΚΕΙΑΣ 90 ΛΕΠΤΩΝ. ΜΑΡΙΑ ΓΑΒΡΙΗΛ

10> WORK FROM THE SKETCHBOOK OF ANDRI PANTELIDOU
ΕΡΓΑΣΙΑ ΑΠΟ ΤΟ ΣΚΕΤΣΒΟΛΚΗΣ ΑΝΤΡΗΣ ΠΑΝΤΕΛΙΔΗ

11> WORK FROM THE SKETCHBOOK OF ANDRI PANAGIDOU
ΕΡΓΑΣΙΑ ΑΠΟ ΤΟ ΣΚΕΤΣΒΟΛΚΗΣ ΑΝΤΡΗΣ ΠΑΝΑΓΙΔΟΥ

12> WORK FROM THE SKETCHBOOK OF GEORGE KALLIS
ΕΡΓΑΣΙΑ ΑΠΟ ΤΟ ΣΚΕΤΣΒΟΛΚΗ ΤΟΥ ΓΙΩΡΓΟΥ ΚΑΛΛΗ
13> WORK FROM THE SKETCHBOOK OF ANDRI PANAGIDOU
ΕΡΓΑΣΙΑ ΑΠΟ ΤΟ SKETCHBOOK ΤΗΣ ΑΝΤΡΗΣ ΠΑΝΑΓΙΔΟΥ

14-18> IN –CLASS EXERCISES, DURATION: 5-60 SECONDS. TASOS IOANNOU
ΑΣΚΗΣΕΙΣ ΔΙΑΡΚΕΙΑΣ 5-60 ΔΕΥΤΕΡΟΛΕΠΤΩΝ. ΤΑΣΟΣ ΙΩΑΝΝΟΥ

19> IN –CLASS EXERCISES, DURATION: 30 MINUTES. TASOS IOANNOU
ΑΣΚΗΣΗ ΔΙΑΡΚΕΙΑΣ 30 ΛΕΠΤΩΝ. ΤΑΣΟΣ ΙΩΑΝΝΟΥ
The course “Electronic Architectural Communication” introduces students to the use of computers and computer aided design software (CAD) in architecture and design. The course’s primary goal is to enable students to develop their skills in the use of computers and CAD software as design and drafting tools in 2-dimensional and 3-dimensional space. Furthermore, students are required to expand the use of CAD software in common projects shared on computer networks.

The course’s further aim is for the students to utilise and apply their acquired knowledge and skills in CAD software, in the development of a complete architectural project.

During the Winter Semester of 2006, students were required to choose a concept for a project and a conceptual space in which to develop it. The project’s aim was to encourage students to utilise CAD software as their primary design tools, firstly in developing their ideas into architectural spaces and compositions and secondly into presenting their projects through 2-dimensional and 3-dimensional drawings.
Teaching and practice are for me equally important aspects of architecture.

The great conductor and musical educator Leonard Bernstein once said:

“Teaching and learning are not exclusive of each other. When I teach I learn, when I learn I teach”

I believe this.

I am not interested nor do I believe in the usual and often expediency academic division between theory and practice. Instead I am guided by an instinct for synthesis, a weaving together of the usually separated strands of professional life into a continuous fabric of experience. I have come to understand that at its best, architecture is an expression of knowledge, but also that knowledge itself can never be codified or complete. Teaching architecture is then a matter of passing on knowledge fixed in any form, but of continually re-creating it, and the process goes both ways between the teacher and student. Teaching, as is the process of design in practice, is both dialogue and discourse, which are living things, always in flux, ever expanding and embracing.

In the design studio, I am open to and encourage diverse ideas which signal my own creative restlessness and desire to learn, an essential quality which instructs my students on a life principal that will be crucial to their future work in architecture. The constant goal of the studio is to help the student attain, through this diversity and openness, the ability to conceive of architecture in a unique way, devoid of any dependence on preconception, trends or stylization. It is meant through a process of questioning and research that explore theory and precedent related to the given subject, to strengthen each student's creative process, and by which a meaningful and dynamic work of architecture will come into being, expressive at once of theoretical positions and pragmatic concerns.

Furthermore, the variety of student works in the design studio is meant to testify to the dialogical, exploratory nature of collaboration in it, just as the required thoroughness of their individual work's development always culminating in a comprehensive architectural statement, is meant to indicate the seriousness with which this exploration is carried out.

ΔΙΔΑΣΚΑΛΙΑ ΚΑΙ ΠΡΑΚΤΙΚΗ ΕΦΑΡΜΟΓΗ:
Η ΑΜΟΙΒΑΙΑ ΕΠΙΔΡΑΣΗ ΣΚΕΨΗΣ ΚΑΙ ΠΡΑΞΗΣ | ΘΕΟΧΑΡΗΣ ΔΑΥΙΔ

ΔΕΝ ΒΡΙΣΚΟΥΜΕ ΚΑΝΕΝΑ ΕΝΔΙΑΦΕΡΟΝ ΣΤΗ ΣΥΝΘΕΣΗ ΣΗΜΑΝΤΙΚΕΣ ΙΔΕΕΣ ΟΔΙΚΗΣ ΤΗΣ ΝΕΑΝΤΗΣ ΚΑΙ ΝΕΑΝΤΗΣ ΚΑΙ ΤΗΝ ΕΠΙΘΥΜΙΑ ΜΟΥ ΓΙΑ ΜΑΘΗΣΗ. Η ΙΔΙΩΤΙΤΑ ΜΟΥ ΑΥΤΗ ΔΙΔΑΣΚΑΕΙ ΤΕΛΙΚΑ ΣΤΟΥΣ ΦΟΙΤΗΤΕΣ ΜΟΥ ΜΙΑ ΑΡΧΗ ΖΩΗΣ, Η ΣΗΜΑΙΑ ΤΗΣ ΟΠΟΙΑΣ ΕΙΝΑΙ ΟΙΔΙΜΟΦΥΣΗ ΚΑΙ ΓΙΑ ΤΟ ΜΕΛΛΟΝΤΙΚΟ ΤΟΥΣ ΈΡΓΟ ΣΤΟ ΧΩΡΟ ΤΗΣ ΑΡХΙΤΕΚΤΟΝΙΚΗΣ. ΑΠΑΡΑΘΕΤΟΥΣΤΟΣ ΣΤΟΧΟΣ ΤΗΣ ΘΟΥΛΕΙΑΣ ΠΟΥ ΓΙΝΕΤΑΙ ΣΤΑ ΕΡΓΑΣΤΗΡΙΑ ΕΙΝΑΙ ΝΑ ΒΟΗΘΗΣΕΙ ΤΟΥΣ ΦΟΙΤΗΤΕΣ ΝΑ ΑΠΟΚΤΗΣΟΝΤΑΙ ΜΕΣΟΤΟΣ ΑΥΤΗΣ ΤΗΣ ΠΟΙΟΙΑΣ ΚΑΙ ΔΕΚΤΙΚΩΤΑΤΑΣ, Η ΙΚΑΝΟΤΗΤΑ ΝΑ ΑΝΤΙΛΑΜΒΑΝΟΝΤΑΙ ΤΗΝ ΑΡΧΙΤΕΚΤΟΝΙΚΗ ΜΕ ΤΡΟΠΟ ΜΟΝΑΔΙΚΟ, ΑΠΕΛΕΥΘΕΡΙΟΝΙΟΝ ΑΠΟ ΟΠΟΙΑΔήΠΟΤΕ ΠΝΕΥΜΑΤΙΚΗ ΕΞΆΡΤΗΣΗ ή ΠΡΟΚΑΤΑΛΗΨΗ, ΑΠΟ ΤΙΣ ΤάΣΕΙΣ ΚΑΙ ΤΗΝ ΤΥΠΟΠΟΙΗΣΗ. ΜΕΣΑ ΑΠΟ ΜΙΑ ΔΙΑΙΤΕΣΙΑ ΑΜΦΙΒΗΤΗΤΗΣ ΚΑΙ ΕΡΕΥΝΑΣ ΠΟΥ ΑΦΟΡΆ ΤΟΥΣ ΘΕΩΡΙΑΣ ΟΥΣΑΚΑΙ ΤΗΝ ΕΠΙΥΧΗΣΗ ΕΚΔΟΧΩΝ ΤΗΣ, ΕΠΙΧΕΙΡΕΙ Η ΕΝΔΥΝΑΜΩΣΗ ΤΗΣ ΔΗΜΙΟΥΡΓΙΚΗΣ ΑΝΤΙΛΗΨΗΣ ΚΑΙ ΕΡΓΑΣΙΑΣ ΤΟΥ ΦΟΙΤΗΤΗ, ΜΕΣΑ ΑΠΟ ΤΗΝ ΟΠΟΙΑ ΘΑ ΠΡΟΚΥΦΕΙ ΕΝΤΕΛΕΙ ΤΟ ΟΞΥΑΣΙΑΣΤΙΚΟ ΚΑΙ ΔΥΝΑΜΙΚΟ ΑΡΧΙΤΕΚΤΟΝΙΚΟ ΈΡΓΟ – ΕΝΑ ΈΡΓΟ ΠΟΥ ΘΑ ΑΠΟΤΕΛΕΙ ΤΑΥΤΩΡΗΧΩΝ ΕΚΦΡΑΣΗ ΘΕΩΡΗΤΙΚΩΝ ΘΕΣΕΩΝ ΚΑΙ ΠΡΑΚΤΙΚΩΝ ΑΝΑΓΚΩΝ.
Through practice, my conception of architecture has I believe grown stronger over the years. Realized designs in New York including churches in Brooklyn, and in the Cypriot cities of Lemesos and Nicosia, a stadium and sports arena, schools, a residential training center and urban housing, www.tdanyc.com strive along with other works, to synthesize diverse forms and materials with an imagination stimulated by my teaching experience, as well as skills I have gained and lessons learned from years of building.

Far from being didactic or rhetorical, these realized works arise from my interpretation of unique conditions, and are in themselves a form of dialogue with differing sites and programs. But these designs also aspire to demonstrate something else: my commitment to make an architecture of richly human substance, at once passionate and intelligent, responsible, expressive and realizable. A message I convey through this work to students of architecture.

What I have described is exactly the way that my teaching and practice have constituted for me a meaningful life-work, defined by an interplay of thoughts and actions that aspire to ever higher forms of knowledge.

Επιπλέον, η ποικιλία που παρουσιάζει το έργο των φοιτητών στο μάθημα των εργαστηρίων, έχει στόχο να καταδείξει το διαλεκτικό, εφευρετικό χαρακτήρα της συνεργασίας στο πλαίσιο τους, όπως ακριβώς και η εμπειρία που απαιτείται στην εξέλιξη της προσωπικής τους δουλειάς, που καταλήγει πάντοτε σε μια ολοκληρωμένη αρχιτεκτονική πρόταση, έχει στόχο να τονίσει τη συζευκτόνηση με την οποία διεξάγεται αυτή η έρευνα.

Στη διάρκεια της επαγγελματικής μου πορείας, η προσωπική μου αντίληψη της αρχιτεκτονικής εξελίχθηκε και ισχυροποιήθηκε. Σχέδια εκκλησιών που υλοποιήθηκαν στο Μπρούκλιν των ΗΠΑ καθώς και έργα για τις Κυπριακές πόλεις της Λεμεσού και της Λευκωσίας, ένα στάδιο και κλειστό γυμναστήριο, σχολεία, ένα συνεδριακό κέντρο και αστικές κατοικίες (HYPERLINK "http://www.tdanyc.com" www.tdanyc.com) μεταξύ άλλων, μαρτυρούν μια προσπάθεια σύνθεσης τόσο στο επίπεδο της φόρμας όσο και των υλικών, η οποία στηρίζεται αφενός στη φαντασία και την εμπνευσία που μου προσφέρει η διδακτική μου πείρα, αφετέρος στις διεξόδους που έχουν αποκτήσει και τα μαθήματα που έχουν πάρει μέσα από τη μακροχρόνια ενασχόλησή μου με το αντικείμενο.

Τα έργα αυτά δεν εξυπηρετούν ηθικοπλαστικούς ή ρητορικούς σκοπούς. Αντιθέτως, είναι αποτελέσματα του τρόπου του μονοπάτι με τον οποίο ερμηνεύεται η μοναδικά καθαυτοματοποιημένη διαδικασία μεταξύ της αρχιτεκτονικής και του εμπειρικού του μονοπάτι, που παρέχεται στον ιδιώτη και άλλες αρχιτεκτονικές κατασκευές, συμπεριλαμβανομένης της συνεργασίας με το κοινωνικό και τον ανθρώπινο κόσμο. Τα σχέδια αυτά ως φιλοδοξία της διδακτικής και της πρακτικής της αρχιτεκτονικής, που καταλήγουν σε ένα εννοητικό και εκφραστικό συνένωμα, καθορίζονται από την έμπνευση της καθαρής ενότητας και της διαλογικής εμπειρίας, που έχει γίνει με υπευθυνότητα, που είναι εκφραστικού και συνάμα πραγματοποιημένο. Κατά τη γνώμη μου, οι ιδιότητες αυτές δεν είναι ούτε αισχομένες ούτε ανθρωπικές. Είναι συμπληρωματικές και αλληλεπιδράντες. Κατά τη γνώμη μου, είναι ένα μήνυμα που συγκεκριμένα έργα επιχειρούν να μεταφέρουν στους φοιτητές της αρχιτεκτονικής.

Με αυτόν ακριβώς τον τρόπο η διδασκαλία και η πρακτική της αρχιτεκτονικής έχουν υπάρξει για μένα ένα συναρπαστικό έργο ζωής, μία αμοιβαία επίδραση σκέψης και πράξης, στόχος του οποίου είναι η κατάκτηση ακόμα υψηλότερων κορυφών στο πεδίο της γνώσης.
Experiencing architecture is, for the best or the worst, everyone's fate. As tourists we move through and look at architecture, a perception that does not necessarily differ from visiting the works of art in a museum. However everyday life implies living in architecture, consciously and unconsciously.

We can turn off the radio because we dislike the sound of Schönberg and instead go to buy a CD of Keith Jarrett; we can avoid Dali or Rothko and go to the Cézanne exhibition; we may love literature... and leave James Joyce aside. Architecture allows no such choice. Thus architecture is moving on precarious grounds when it essentially becomes idiosyncratic. Originality may be an issue in Art, it is not so in architecture.

Is architecture a “Science”? 
Our society’s understanding of science is linked to the establishment of verifiable general laws. Unless we are satisfied with mere physical comfort, there is no scientific way to design a building or a landscape. Architects nevertheless need and apply scientific and philological knowledge and methods.

With the exception of technology, architecture does not know of “progress”. There might be evolution, transfers, re-interpretations and sometimes even creative inventions, but such is not equal to the idea of progress in the world of science and technology where the new is bound to reign until the next positivist addition. Indeed while comparing the cupola of the Pantheon with the one of Borromini’s Sant Ivo, it seems more adequate to discuss a change in the way to represent our universe than the issue of “progress”. If you compare them to one of Nervis’ domes. All we might find is technological progress and a change of purpose. Architecture is so deeply rooted in human value systems of its time, that it intrinsically escapes the idea of “in-temporal” improvement.

As a result architecture is a discipline rather than a science, closer to the know-how of a surgeon or a lawyer than to that of a biologist. Our prerequisite for acting successfully is the capacity to make an appropriate diagnosis of a “situation” – be it cultural or geographic/morphological. Such is always unique and at the same time somehow similar to precedents. While science develops on the basis of confirmed (hard) knowledge, architectural knowledge develops on the basis of thorough critical analysis of precedents, each of which is different and therefore not repeatable.

Is architecture “Art”? 
Adolf Loos said that only in exceptional cases architecture might become Art: the monument and the tomb1). What Loos meant is

1 Loos, Adolf; in "Ins Leere gesprochen" (does there exist an English version?) Loos’ writings at the turn of the 19 th to the 20th century were exceptional or as Joseph Rykwert puts it: “Adolf Loos was not the finest architect of the century. But amongst twentieth-century architects, he was probably the only one (with the possible excep-
that architecture almost always has to serve practical use as well, which is not the case for painting, sculpture and music. Many contemporary “star-architects” have been able to take advantage of architectures’ ambiguous status between Art and Science. The “cultural event” is sold separately from the object to be built (taken care of by local know-how). It seems to work. Therefore teaching architecture has become a more delicate issue than some decades ago. Are we to prepare future star-architects (the reference for most students), future commercial builders or sensitive actors of cultural interpretation?

Architectures’ ultimate test of validity is time and not style or money. Beyond satisfying use patterns, which the architect obviously has to achieve with great care and competence, architecture can nevertheless evoke lasting emotions and this is where it approaches

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1 Loos, Adolf, in "Ins Leere gesprochen." To be a major writer.» (Studio International archive, vol.186, 1973)
Architecture may create emotions

Architectural variables for emotions are first of all linked to our experience with earth and sky, seasons and weather, day and night, space and dimension, light and darkness, sun and shade, obstruction and view, form and proportion, sound and echo, materials and textures and a myriad of other stimuli.

Variables for emotions are also strongly conditioned by place and culture, by what we have seen, heard of, learnt and discussed before, by what we know and what we may expect or what we then are prepared to discover.

Valuing and interpreting those variables in a concrete geographical and cultural setting remains to a large extent an empirical matter of judgment.

Ways to learn to become a good architectural designer

For the teacher of architectural theory and design there are essentially three fundamental challenges:

- Which are, - and how transmit the ethical grounds for diagnosis and design?

- Which are, - and how transmit appropriate means to challenge the initial problem statement for an adequate diagnosis?

- How develop design capacity with beginners?

Which are, - and how transmit the ethical grounds for diagnosis and design? This short contribution cannot re-define the role of the architect. However while responsibility towards the client as well as cultural setting remains to a large extent an empirical matter of judgment.

Which are, - and how transmit the ethical grounds for diagnosis and design? This short contribution cannot re-define the role of the architect. However while responsibility towards the client as well as cultural setting remains to a large extent an empirical matter of judgment.

We already referred to the treasure of precedents. The perception of precedents as well as the “diagnosis” varies from individual to

Oι μεταβλητές που αφορούν το συναισθήμα επηρεάζονται βαθύτατα επίσης από τον τόπο και την ιδιαίτερη κουλτούρα του, από τα όσα έχουμε δει, ακούσει, μάθει και συζητήσει, από τα όσα γνωρίζουμε και από τις προσδοκίες μας, ή από τα όσα είμαστε διατεθειμένοι ως εκ τούτου να ανακαλύψουμε.

Η αξιολόγηση και ερμηνεία αυτών των μεταβλητών σε ένα από γεωγραφικό και πολιτισμικό πλαίσιο, παραμένει σε μεγάλο βαθμό ένα ζήτημα εμπειρικής κριτικής προσέγγισης.

Τρόποι μέσω των οποίων γίνεται κανείς καλός αρχιτέκτονας

Τρεις είναι οι βασικές προκλήσεις που αντιμετωπίζει ο δάσκαλος της αρχιτεκτονικής θεωρίας και σύνθεσης:

- Ποια είναι οι ηθικές αρχές που επαναπροσεγγίζει κανείς το αρχικό πρόβλημα της σχεδιαστικής πρότασης; Ό,τι και η σχεδίαση και πώς τις μεταδίδει;

- Ποια είναι τα κατάλληλα μέσα με τα οποία στηρίζεται κανείς τον τρόπο του αρχιτέκτονα; Ό,τι και τον τρόπο του αρχιτέκτονα;

- Πώς βοηθάς τους αρχάριους να αναπτύξουν την ικανότητα σύνθεσης;

Ποια είναι οι ηθικές αρχές που αφορούν το συναίσθημα επηρεάζονται βαθύτατα επίσης από τον τόπο και την ιδιαίτερη κουλτούρα του; Ό,τι και τον τόπο και την ιδιαίτερη κουλτούρα του.

Ποια είναι τα κατάλληλα μέσα με τα οποία στηρίζεται κανείς τον τρόπο του αρχιτέκτονα; Ό,τι και τον τρόπο του αρχιτέκτονα; Ό,τι και τον τρόπο του αρχιτέκτονα;

Πώς βοηθάς τους αρχάριους να αναπτύξουν την ικανότητα σύνθεσης;

Ποια είναι οι ηθικές αρχές που αφορούν το συναίσθημα επηρεάζονται βαθύτατα επίσης από τον τόπο και την ιδιαίτερη κουλτούρα του; Ό,τι και τον τόπο και την ιδιαίτερη κουλτούρα του.

Ποια είναι τα κατάλληλα μέσα με τα οποία στηρίζεται κανείς τον τρόπο του αρχιτέκτονα; Ό,τι και τον τρόπο του αρχιτέκτονα; Ό,τι και τον τρόπο του αρχιτέκτονα; Ό,τι και τον τρόπο του αρχιτέκτονα;

Πώς βοηθάς τους αρχάριους να αναπτύξουν την ικανότητα σύνθεσης;
individual. This may explain why, with an identical competition program for all participants, you never see two projects alike. Even if the background of two architects were identical, the difference would still arise from the diversity of hierarchy and interpretation of the same problem. The synthesis is part of each one's creativity.

Critical knowledge of precedents can nevertheless not be exclusively taught and learnt on a "school bench" or gathered in a library. It has to be integrated with each one's personal experience to challenge the specific problem statement.

How develop design capacity with beginners?

We do not believe in the educational efficiency of the "submersion approach", where problems are too complex and realistic from the very beginning, thus putting the student in an awkward survival position. Nor do we agree with the "progression from the small to the large scale", from a log cabin in the first year to refurbishing a large neighborhood in an upper year. On the contrary, if we are serious about the contemporary importance of environmental and landscape issues, it is necessary to introduce such design problems and diagnosis from the very beginning. It all becomes a question of the level of complexity at which the problem is stated and the tools provided in the educational setting. What we are aiming for,
Is architecture "Art"? Pyramids of Giza

Είναι η αρχιτεκτονική "Τέχνη? Οι πυραμίδες της Γκίζας

Architecture may create emotions Franz Fueg, church in Meggen, Switzerland, 1966

Η αρχιτεκτονική και η ικανότητά της να δημιουργεί συναισθήματα Franz Fueg, εκκλησία στο Μέγκεν, 1966
Ways to learn to become a good architectural designer Le Corbusier, Voyages d'Orient, Athens Acropolis, 1911
Τρόποι να γίνει κανείς καλός αρχιτέκτονας-σχεδιαστής Le Corbusier, Voyages d’Orient, Ακρόπολη, Αθήνα, 1911

Where to learn architecture Gunnar Asplund, Stockholm library, 1918
Πού μπορεί κανείς να διδαχτεί την αρχιτεκτονική; Gunnar Asplund, βιβλιοθήκη, Στοκχόλμη, 1918
are the essentials\(^2\).

One way to go about this is a series of specific lectures and the construction of a sequence of design exercises with limited issues at a time, tailored to sum up the students’ “discoveries” step by step. As Christos Hadjichristos puts it in this issue, “... the end product of the first exercise becomes a “layer” for the creation of a new “finished” entity for the second exercise, which in turn becomes a third basic “layer” for the next step”. Each new stage allows us to introduce additional variables and re-orient the issues, the problem and its diagnosis. We have discussed and given examples of such an approach for spatial composition in “De la cave au toit”\(^4\). Similarly we can construct such sequential learning-by-doing at a large urban or territorial scale\(^3\).

There exists a further aspect of teaching design, which has to be stressed: in the sequential process of “layering” mentioned above, it is of utmost importance to lead the student to establish and re-adjust a hierarchy of issues, rather than simply asking him to be “creative” on conceptual/formal matters or be allowed to be submerged by practicalities. Students’ projects should be “radical”, rather than the result of compromise. The real world will take care of the latter. The university is a great place (although not the only one) to reconsider our man-made environment.

Where to learn architecture

For a very brilliant personality with exceptional awareness it could be “on the street”. If one examines Le Corbusier’s five sketchbooks “Voyages d’Orient” (at our students’ age), one realizes that the contribution of his Master, Leplatenier in La Chaux-de-Fonds, was merely an approximate introduction to the discipline. To my knowledge there were no further such talents originating from this master’s school. Where to learn architecture?

Today and for the great multitude, universities have become tre-

χώρου δίνονται στη μελέτη “De la cave au toit”\(^3\). Με τον ίδιο τρόπο μπορούμε να σχεδιάσουμε διαδικασίες διδάσκαλου βήμα προς βήμα και για προβλήματα που αφορούν τη μεγάλη αστική ή περιφερειακή κλίμακα\(^4\).

Η διδασκαλία της σύνθεσης έχει μια ακόμα υψηλή στοιχείο που πρέπει να δώσουμε ιδιαίτερη εμφάνιση: στο πλαίσιο της διδασκαλίας «διαστρωμάτωσης» που προσανατρέχει, είναι πολύ σημαντικό να καθοδηγήσουμε το φοιτητή με τέτοιο τρόπο ώστε να ερμηνεύσει συγκεκριμένα ζητήματα ή να επαναπροσδιορίσει τη σειρά προτεραιοτήτων τους, αντίνα παρέχει απλώς να είναι «δημιουργικός» στην αντιμετώπιση εννοιολογικών ή φορμαλιστικών παραμέτρων, ή να αντιμετωπίσει εξαρχής τις όπως πρακτικές διαστάσεις των σχεδιαστικών προβλημάτων. Οι εργασίες των φοιτητών πρέπει να είναι «ριζοσπαστικές». Σε καμία περίπτωση δεν πρέπει να αποτελούν προϊόν συμβιβασμού. Για αυτό το τελεύταιο θα φροντίσει αρχότερα η πραγματικότητα της ζωής. Το πανεπιστήμιο προσφέρει έναν ιδιαίτερα χώρο (αν και όχι τον μοναδικό) μέσα στον οποίο μπορούμε να αναθεωρήσουμε το δομημένο περιβάλλον μας.

Πού μπορεί κανείς να διδαχτεί την αρχιτεκτονική?

Σε περιπτώσεις λαμπρών προσωπικοτήτων εφοδιασμένων με εξαιρετική αντίληψη, η απάντηση στην ερώτηση αυτή θα μπορούσε να είναι: «στον δρόμο». Αν εξετάσουμε τα πέντε σημειωματάρια του Λε Κορμπουσέρ που έχουν τίτλο “Voyages d’Orient” (που περιλαμβάνουν σχέδια δημιουργημένα στην ηλικία των σημερινών φοιτητών μας), συνειδητοποιείσθε ότι η συμβολή του δασκάλου του Λεπλάτενιερ στο πανεπιστήμιο της Λα Χαυς-δε-Φόντς δεν συνίσταται παρά σε μια γενικότερη εισαγωγή στο ακαδημαϊκό πεδίο της αρχιτεκτονικής. Απ’ όσο προσωπικό μπορούμε να γνωρίζουμε, η σχολή του δασκάλου του δεν ανεβίζει άλλα τέτοιο ταλέντο.

Σήμερα, και όσον αφορά τη μεγάλη πλειοψηφία του κόσμου, τα

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2 von Meiss, Pierre; Elements of Architecture, Fom Form to Place, E:F:Spon, London / New York, 1990
4 Recently freshmen students from the UCY (University of Cyprus) have been exposed to a similar didactic step-by-step strategy at a very large scale while investigating and interpreting a 4x20 km strip of land from sea to mountain. The pretext was to search and document “ideal” locations to host an exhibition pavilion. The purpose was to gain deeper insight to a specific environmental context and landscape at a large scale and its dominant characteristics, problems and opportunities. The students discovered the immense source of information to be found in thematic geographical maps and aerial photographs completed by personal in situ observation in order to establish their “diagnosis”. Appropriate guidelines allowed them to come up with an unedited set of maps at a scale of 1:10.000 uncovering relevant patterns and relationships of topography, microlclimate, water and land resources, spatial occupation, paths and boundaries, waste management, etc. (ref. to contribution of Christos Hadjichristos 7)

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mendous places to learn architecture. Imbedded in an academic setting with plenty of competence and research, ranking from anthropology to engineering, architecture occupies some kind of “inbetween” status: architecture is in-between Art and Science, Science and History, History and Engineering, Engineering and Geography, Geography and Biology, Biology and Environmental science, Environmental science and Sociology ..... For the sake of getting things even more intricate, we can also replace the word “and” by “with”: Art with Science, Geography with Engineering, etc. Architecture thus is intrinsically trans–disciplinary. Indeed, almost all of our Renaissance architects were at the same time mathematicians, musicologists, painters, sculptors and military engineers. Palladio built a superb bridge in Bassano, Filarete was mainly a specialist for fortifications; however both are authors of a significant architectural treatise.5 6) These times are gone. Why?

In order to understand what had occurred, we may refer to the evo-

5 Palladio, Andrea; The Four Books on Architecture, i.e. recent English edition with MIT Press
6 Filarete, Antonio di Pietro Averlino; Treatise on Architecture, Yale University Press, 1965
Προοπτικές πρακτικής εξάσκησης Pierre & Angela von Meiss, "στέγη υπό κατασκευή", Ελλάδα, 1991

Προειδοποιώντας περίποιημα της στιγμής έχει αναπτυχθεί ένα τεράστιο σύνολο γνώσεων και μεθόδων στο πεδίο των θετικών επιστημών, θα ήταν ανεύθυνο να το αγνοήσει κανείς. Ωστόσο, είναι πλέον πρακτικά αδύνατον για έναν και μοναδικό νου να συγκεντρώσει όλες αυτές τις πληροφορίες και γνώσεις. Ως εκ τούτου, οι αρχιτέκτονες πρέπει να έχουν αντλήσει τις κατάλληλες γνώσεις από τα άλλα ακαδημαϊκά πεδία, ώστε να είναι σε θέση να καταλήξουν σε μια εύστοχη διάγνωση και να διατυπώσουν μια αξιόλογη υπόθεση εργασίας – έτσι ώστε να θέσουν τα σωστά ερωτήματα την κατάλληλη στιγμή. Και πάλι, το πανεπιστήμιο αποτελεί προσθοραίο χώρο για την ανάπτυξη μιας προσέγγισης που βασίζεται στην εξερεύνηση άλλων ακαδημαϊκών πεδίων.

Επιπλέον, οι εγκαταστάσεις της σχολής βρίσκονται σε μια εξαιρετική αστική τοποθεσία, ενώ το διδακτικό προσωπικό έχει επιλεγεί προσεκτικά και αποτελείται από νεαρά και ιδιαίτερα ικανά άτομα. Φυσικά, όλα τα παραπάνω είναι πολύ καλά, αλλά δεν είναι αρκετά.

Επί του παρόντος, λειτουργούν περισσότερες από τριακόσιες αρχιτεκτονικές σχολές στα ανώτατα εκπαιδευτικά ιδρύματα της Ευρώπης, πολλές από τις οποίες έχουν λίγο πολύ τον ίδιο στόχο: να δώσουν ύψη στην αρχιτεκτονική, να εκπαιδεύουν ευπρόσδεκτους αρχιτέκτονες, εφοδιασμένους με τα απαραίτητα προσόντα για να διασχίσουν τις σφαίρες του εργασιακού χώρου και να καταλήξουν σε μια αξιόλογη διάγνωση και εξυπηρέτηση της κοινωνίας.

Αφ’ του έργου του Frank Gehry και της Zaha Hadid θυσιάζει την ενασχόληση με ζητήματα χώρου, υλικών και περιβάλλοντος στον βωμό μιας ανεξάρτητης αρχιτεκτονικής στη δημιουργία θεαματικών εικόνων.

7 Το έργο του Frank Gehry και της Zaha Hadid θυσιάζει την ενασχόληση με ζητήματα χώρου, υλικών και περιβάλλοντος στον βωμό μιας ανεξάρτητης αρχιτεκτονικής στη δημιουργία θεαματικών εικόνων.
Educatng architects in Cyprus

Unlike other Mediterranean universities, UCY (phonetically: you see why) already offers the privilege of an extremely favorable student/staff ratio and a decent personal studio space for each student, similar to top British and American universities. In addition the school is in an excellent urban location and it has a carefully selected young and competent staff. All this is great, but not enough.

There exist close to three hundred Faculties of Architecture in Europe, many of which try to do more or less the same: promote imagination and educate a responsible architectural designer, qualified to enter the profession as an independent generalist. A decade after graduation relatively few of them are really able to make a decent living while designing projects as their central occupation. What’s more, architectural firms expect their newcomer-employee to complement their teams by some specific extra competence, be it rehabilitation on historical grounds, building with climate, landscaping, model building, structural design, construction, site supervision, computer simulation, communication, management, etc.

With the introduction of the “3+2+3 Bologna agreement” the European scene of higher education is bound to change considerably: student mobility will tend to move away from the traditional “tourist attraction of Erasmus programs” towards real competition among the variety of Masters programs on offer. Students searching an adequate Masters program to apply to might be more and more looking for a specific competence or a big name (ETH, MIT, AA, Delft, EPFL,...) or both.

UCY and its newly installed Program of Architecture (2005) could establish its educational policy to create a unique place of learning and research. Let us attempt to outline some thoughts in this respect:

If UCY aspires to move from its geographical edge condition to become a centre, it has to develop specific competences, very much appreciated within its larger geographic context, which includes the Middle East.

7 The work of Frank Gehry and Zaha Hadid is sacrificing spatial, material and environmental issues in favour of a solemn commitment to spectacular image-making.

douleia της ομάδας τους συμβάλλοντας σε αυτή με μια συγκεκριμένη επιλογή ειδικότητα, είτε πρόκειται για την αποκατάσταση ιστορικών κτιρίων, για κατασκευή βιοκλιματικών κτιρίων, για τη διαμόρφωση τοπίων, για την κατασκευή μοιάτο, το δομικό σχεδιασμό, την κατασκευή, την επιτοπία επιβλέψει, την ψηφιακή προσομοίωση, την επικοινωνία, τη διαχείριση κλπ.

Με την εισαγωγή της Συμφωνίας της Μπολόνια στο ευρύτερο πλαίσιο της άνωτάτης εκπαίδευσης στην Ευρώπη (σύμφωνα με την οποία οι πανεπιστημιακές σπουδές θα πρέπει να περιλαμβάνουν τριετή φοίτηση σε προγράμματα πρώτου πτυχίου, διετή φοίτηση σε προγράμματα μεταπτυχιακού επιπέδου και τριετή φοίτηση σε προγράμματα διδακτορικών σπουδών), το σκηνικό της άνωτάτης εκπαίδευσης δεν μπορεί παρά να αλλάξει δραστικά: η κινητικότητα των φοιτητών θα τείνει όλο και περισσότερο να απομακρυνθεί από το παραδοσιακό μοντέλο της «τουριστικής ατραξιόν των προγραμμάτων Erasmus», προς την κατεύθυνση ενός ουσιαστικού ανταγωνισμού μεταξύ της πληθύνσης μεταπτυχιακών προγραμμάτων (Master’s) που είναι διαθέσιμα. Οι φοιτητές που αναζητούν ένα καλό μεταπτυχιακό πρόγραμμα, θα ενδιαφέρονται όλο και περισσότερο είτε για μια συγκεκριμένη ειδίκευση είτε για ένα μεγάλο όνομα (ETH, MIT, AA, Delft, EPFL,...) είτε για ένα συνδυασμό των δυο.

Το Πανεπιστήμιο της Κύπρου και η νεοελεύθερη Αρχιτεκτονική Σχολή του (2005) θα μπορούσαν να εφαρμόσουν μια εκπαιδευτική πολιτική που θα έχει όχι στόχο τη δημιουργία ενός μοναδικού θέση στην περιφέρεια και να αναλάβει τον ρόλο ενός ακαδημαϊκού κέντρου, θα πρέπει να προσφέρει συγκεκριμένη ειδίκευση και ένα σχεδιαστικό κέντρο: Αν το Πανεπιστήμιο της Κύπρου φιλοδοξεί να υπερβεί τη γεωγραφική κατεύθυνση:

- Αν το Πανεπιστήμιο της Κύπρου φιλοδοξεί να υπερβεί τη γεωγραφική κατεύθυνση της οποίας είναι μεγάλη για το ευρύτερο γεωγραφικό του πλαίσιο, το οποίο συμπεριλαμβάνει τη Μέση Ανατολή.

- Αναφορικά με τα προγράμματα πρώτου πτυχίου και μεταπτυχιακού και τις ήθελες τους βάσεις, θα πρέπει να δοθεί προτεραιότητα στο πλαίσιο όλων των σχεδιαστικών στόχων, σε μια βιοκλιματική προσέγγιση προαναφερόμενη στο ιδιαίτερο περιβάλλον της Μεσογείας.

- Καθώς αυξάνονται οι πιέσεις που ασκούνται από την παγκόσμια βιομηχανία του τουρισμού, τα ζητήματα που σχετίζονται με την πολεοδομία και τη διαμόρφωση τοπίων κατά μήκος των συνόλου των Μεσογειακών ακτογραμμών θα αποκτούν ολοένα και μεγαλύτερη σημασία.

- Το Πανεπιστήμιο της Κύπρου θα μπορούσε να εφαρμόσει μια εκπαιδευτική πολιτική που θα έχει όχι στόχο τη δημιουργία ενός μοναδικού χώρου μάθησης και έρευνας. Ας παραθέσουμε μερικές σκέψεις προς αυτή την κατεύθυνση:
Perspectives of practice and graduate studies

Although the architect may no longer be the “conductor” as he was until recent times, he still has to claim control over the cross-disciplinary implications and overall coherence of building. Experience shows that there is no specialist-engineer or builder who will do the necessary kind of integrative thinking. It does not lie within their understanding of responsibility. On the other hand construction complexity forces him to work in interdisciplinary teams. His partners will respect him, as long as he proves critical insight for the over-all problem and provides convincing and specific architectural know-how (instead of idiosyncrasies) as well as a sense of coordination and integration.

There is nevertheless hardly a demand for as many architect-designers as being trained in our European universities (at present close to 200,000 students). In this sense the introduction of a Bachelor’s degree with certain employment perspectives and the offering of a variety of Masters programs (after a minimum of one year in any kind of practice), will prove to be a wise political move in architectural education.

It has to be considered that only a small percentage of our students will become and remain designers or design-managers. Has the school failed if they do not do an excellent job? To a certain extent perhaps yes, because the university has been too stubborn in producing designers only.

It might be a mistake to train all our students to become “real” practicing architects (frustrated if not successful). Some of them show other motivations and qualities, like architectural history and criticism, communication, architectural technology and so forth. Such capacities have to be discovered and re-oriented. Corresponding curricula have to be offered. German universities have recently turned towards such options at the level of their Masters’ programs.

metaptychikwn, dein symvadizei me to sytema 3+2 pou efaromizeita sta megalutera Europaiaka panepistima.

Προοπτικές πρακτικής εξάσκησης και μεταπτυχιακών σπουδών

Μπορεί το εικόνα του σύγχρονου αρχιτέκτονα είχε πλέον απομακρυνθεί από το μοντέλο του «διευθυντή ορχήστρας», κάτι που ίσως μέχρι πρόσφατα, εξακολουθεί να διαφανεί την ικανότητα ελέγχου των διεπιστημονικών παραμέτρων της κατασκευής και την ικανότητα διασφάλισης της συνολικής συνοχής του κτιρίου. Η πείρα σε αυτό το πεδίο δείχνει πως δεν υπάρχει κανένας ειδικός-μηχανικός ή κτίστης ή κτίστης που θα ασκήσει το είδος εκείνο της συνθετικής σχέσης που είναι απαραίτητη. Κάτι τέτοιο δεν εμπίπτει στον τρόπο με τον οποίο αντιλαμβάνονται την ευθύνη τους. Από την άλλη πλευρά, ο σύνθετος χαρακτήρας της κατασκευαστικής διαδικασίας αναγκάζει τον αρχιτέκτονα να εργαστεί στο εσωτερικό διεπιστημονικών ομάδων. Ο σεβασμός των συνεργατών του εξαρτάται από την ικανότητά του να συνδεί κριτικά συμπεράσματα για το σύνολο του προβλήματος και να συμβάλει στην προσπάθεια μέσω μιας συγκεκριμένης και πειστικής τεχνογνωσίας (αντι των όπων ιδιοσυγκρασίας προτιμήσεων) καθώς και μέσω μιας ικανότητας συντονισμού και συνόψεως.

Παρ’ όλα αυτά, στις μέρες μας είναι πολύ μικρή η ζήτηση για αρχιτέκτονες-μελετητές σε σχέση με τον αριθμό των ατόμων που εκπαιδεύονται στις αρχιτεκτονικές σχολές της Ευρώπης (ο οποίος ανέρχεται σήμερα στις 200.000 περίπου). Από αυτή την άποψη, η προοπτική ενός ακαδημαϊκού προγράμματος σε επίπεδο Bachelor’s που ανοίγει επίσης και συγκεκριμένες προοπτικές επαγγελματικής αποκατάστασης, καθώς και η προοπτική μιας ποικιλίας μεταπτυχιακών προγραμμάτων (τα οποία θα προϋποθέτονται ένα μίνιμου μονοετικός πρακτικής πείρας), θα αποδειχτεί σοφή κίνηση πολιτικής στο πλαίσιο της αρχιτεκτονικής εκπαίδευσης.

Πρέπει να αναλογιστούμε το γεγονός ότι ένα μικρό μόνο ποσοστό των φοιτητών μας θα φτάσουν τελικά σε μία επαγγελματική στάση με τον ικανότητας της κατασκευαστικής διαδικασίας και την ικανότητα ελέγχου των διεπιστημονικών παραμέτρων ή την ικανότητα ελέγχου των διεπιστημονικών ομάδων (project manager). Θα έχει αποτυχέςη η σχολή στην προσπάθεια εκπαίδευσης φοιτητών για δραστηριότητες σε άλλους τομείς της κατασκευαστικής διαδικασίας, όχι τόσο από άποψη της πείρας, όσο από την ικανότητα να συμβάλει στην προσπάθεια εκπαίδευσης μελετητών και μόνον.

Τόσοι είναι λάθος να προπαθήσουμε να εκπαιδεύουμε άλλους που φοιτήσεις μαζί μας για να γίνουν «ολόθρυσοι» αρχιτέκτονες (απογοητευμένοι έστω, αν όχι απαραίτητα επιτυχείς) που ασκούν το επάγγελμα. Κάποιοι από τους φοιτητές μας παρουσιάζουν άλλες προτιμήσεις και κλίσεις σε άλλους τομείς, όπως η ιστορία της αρχιτεκτονικής και η κριτική της, η επικοινωνία, η αρχιτεκτονική τεχνογνωσία και ούτω καθ’ εξής. Πρέπει να ανακαλύψουμε αυτές τις κλίσεις και να βοηθήσουμε τους φοιτητές να προσανατολιστούν βάσει αυτών. Πρέπει να αναπτυχθούν τα ανάλογα προγράμματα σπουδών. Ένα πρόσφατο παράδειγμα είναι αυτό των Γερμανικών πανεπιστημίων που εξετάζουν αυτές τις προοπτικές στο επίπεδο των μεταπτυχιακών προγραμμάτων τους.
The course “Construction I”, the first in the series of three courses on Construction, aims at introducing the students to the area of building tectonics. The syllabus concentrates on the clarification of the characteristics of different structural systems and the analysis of building envelopes, regarding form, structure, construction design of the load bearing and non load bearing elements and the development of working drawings.

In addition to the lecture series that aims to cover the spectrum of the respective technical knowledge, the assignments of the course include a micro studio of architectural and construction design. The exercise refers to the design of a timber structure, aiming at interconnecting construction with architectural design.

The design requirement remains consciously simple for enabling an understanding of the basic principles of the structural systems and the particularities of the design of timber structures, mainly in regards to the requirements of the systems stiffness and appropriate construction connections. The entire process is based on the integration of structure and construction in the design process, with the aim to boost the approach of integrated architectural design.
ΠΡΟΣΩΠΙΚΟ: ΚΑΛΙΔΟΝΙΟΝ

ΑΓΑΘΟΚΛΕΟΥΣ ΑΛΕΞΑ, ΕΥΡΙΠΙΔΟΥ ΑΝΝΑ, ΚΥΠΡΙΑΝΟΥ ΑΝΤΩΝΙΑ, ΣΤΥΛΙΑΝΟΥ ΑΡΓΥΡΟ

ΕΡΓΑΣΙΑ 1 ΚΑΤΑΦΥΓΙΟ ΚΑΛΥΔΩΝ

ΕΡΓΑΣΙΑ 2 ATELIER ΖΩΓΡΑΦΟΥ

ΕΡΓΑΣΙΑ 3 ΠΑΡΑΤΗΡΗΤΗΡΙΟ ΑΣΤΕΡΙΩΝ

1-3> PROJECT 1 RESOURCE PREMISES KALIDONION
ΑΓΑΘΟΚΛΕΟΥΣ ΑΛΕΞΑ, ΕΥΡΙΠΙΔΟΥ ΑΝΝΑ, ΚΥΠΡΙΑΝΟΥ ΑΝΤΩΝΙΑ, ΣΤΥΛΙΑΝΟΥ ΑΡΓΥΡΟ
ΕΡΓΑΣΙΑ 1 ΚΑΤΑΦΥΓΙΟ ΚΑΛΥΔΩΝ
ΑΓΑΘΟΚΛΕΟΥΣ ΑΛΕΞΑ, ΕΥΡΙΠΙΔΟΥ ΑΝΝΑ, ΚΥΠΡΙΑΝΟΥ ΑΝΤΩΝΙΑ, ΣΤΥΛΙΑΝΟΥ ΑΡΓΥΡΟ

4-7> PROJECT 2 PAINTERS ATELIER
ΑΓΓΕΛΙΔΟΥ ΑΝΑΣΤΑΣΙΑ, ΑΣΗΜΑΚΟΠΟΥΛΟΥ ΕΙΡΗΝΗ, ΚΩΝΣΤΑΝΤΙΝΟΥ ΜΑΡΙΝΑ, ΜΙΤΣΙΓΓ ΑΝΑΣΤΑΣΙΑ
ΕΡΓΑΣΙΑ 2 ATELIER ΖΩΓΡΑΦΟΥ
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8-10> PROJECT 3 STARS OBSERVATORY
ΑΝΑΣΤΑΣΙΟΥ ΜΑΡΙΑ, ΚΩΝΣΤΑΝΤΙΝΟΥ ΜΑΡΙΝΑ, ΜΑΤΣΟΥ ΜΑΡΙΑ, ΜΟΖΙΟΥ ΓΙΟΡΙΝΤΑ, ΝΕΟΦΥΤΟΥ ΚΑΤΕΡΙΝΑ
ΕΡΓΑΣΙΑ 3 ΠΑΡΑΤΗΡΗΤΗΡΙΟ ΑΣΤΕΡΙΩΝ
ΑΝΑΣΤΑΣΙΟΥ ΜΑΡΙΑ, ΚΩΝΣΤΑΝΤΙΝΟΥ ΜΑΡΙΝΑ, ΜΑΤΣΟΥ ΜΑΡΙΑ, ΜΟΖΙΟΥ ΓΙΟΡΙΝΤΑ, ΝΕΟΦΥΤΟΥ ΚΑΤΕΡΙΝΑ

ARH 230 CONSTRUCTION I
The course "Construction II" refers to the construction design of reinforced concrete buildings. The syllabus consists of a lecture series with emphasis on the construction of the building envelope and a theoretical exercise for an existing building analysis. In addition, a micro studio of architectural and construction design was realized. Its aim was the application of the technical knowledge acquired through the lectures and the in-depth study of the structure and construction of the building through the design process.

The building with a specific functional program serves as residence and office for a young architect. The design exercise concentrates on the construction solution of the building. Aim of the micro studio was the study of the tectonics of reinforced concrete through the analysis of the structural systems, the construction design of the load bearing and non load bearing elements and the development of appropriate construction details. In the frame of the course and in collaboration with the course on Reinforced Concrete Structures [CEE 241] the analysis and dimensioning of the proposed load bearing structure was effected. The process of integrated architectural design brought the students closer to the real terms of development and realization of the architectural concepts.
1-5> PROJECT 1 AGGELIDOU ANASTASIA, ANASTASIOU MARIA, ARMOSI CHRISTINA, PASADAKIS CHRITOS
ΕΡΓΑΣΙΑ 1 ΑΓΓΕΛΙΔΟΥ ΑΝΑΣΤΑΣΙΑ, ΑΝΑΣΤΑΣΙΟΥ ΜΑΡΙΑ, ΑΡΜΟΣΤΗ ΧΡΙΣΤΙΝΑ, ΠΑΣΑΔΑΚΗΣ ΧΡΗΣΤΟΣ

6-10> PROJECT 2 ASIMAKOPOULOU ERENE, KALLIS GEORGE, KYPRIANOU ANTONIA, NEOHYTOS KATERINA, PAPALOUCA DESPINA
ΕΡΓΑΣΙΑ 2 ΑΣΗΜΑΚΟΠΟΥΛΟΥ ΕΙΡΗΝΗ, ΚΑΛΛΗΣ ΓΙΩΡΓΟΣ, ΚΥΠΡΙΑΝΟΥ ΑΝΤΩΝΙΑ, ΝΕΟΦΥΤΟΥ ΚΑΤΕΡΙΝΑ, ΠΑΠΑΛΟΥΚΑ ΔΕΣΠΟΙΝΑ
Abstract: The nature of the task of representing architecture alters to reflect the state of architecture at each period of time. In simulating architectural design, the necessary conversion from that which is inhabitable, experiential, functional, and at times, indescribable to an abstraction in an entirely different media is often an imperfect procedure that centers on its translation rather than the actual design. The objective in visualizing any architectural design is to achieve a situational awareness that allows for meaningful criticism of the design. Computer-aided three-dimensional visualization technology has made available new representation techniques, surpassing the traditional means of graphic illustration and scaled models, and decreasing the amount of abstraction between architecture and its documentation. The architect’s ability to comprehend and extrapolate information is acquired through years of education and working experience. Architecture students are placed in the difficult position of attempting to understand complex drafting conventions without the benefit of years of experience. The VR-Desktop and Immersive Environments Lab initiative is an effort to bring key benefits of projection-based virtual reality into the mainstream of architectural education, through the deployment of affordable and easy to use virtual reality and integrated multimedia display systems within a variety of contexts. The systems discussed employ readily available hardware components, familiar desktop computing environments, and open-source VR development toolkits thus enhancing the experiential opportunities of students in understanding their designs. The approach is modular and easily adaptable to various applications in research or instruction.

Nature of architectural design process
Architectural design is an iterative visual process that involves thinking and exploration using pictorial or symbolic representations, which can be referred to as the “language” of the architect for communication (Bijl, 1989). Language, through use of expressions, allows people to reach into and interact with each other’s “unique” knowledge conditioned by their individuality. In the case of architectural design, these expressions are graphical in nature and aimed at communicating spatial properties and relationships. All computer tools aimed at supporting the design process can be considered simply as expressive environments that help us evaluate our designs and/or share our design knowledge with others. These environments inform others about our design process and thereby help evaluation, which in turn helps to further improve the quality of design. For these tools to be successful, they should be able to direct attention to the nature of a particular design and be able to reveal the unique set of combinatorial rules and processes developed by the designer in response to the context of the design project.

Perilhē: Η φύση του στόχου της αναπαράστασης της αρχιτεκτονικής μεταβαλλόταν ώστε να αντικατοπτρίζει την κατάσταση της αρχιτεκτονικής σε κάθε χρονικό περιόδο. Στην προσωποποίηση του αρχιτεκτονικού σχεδίου, η απαραίτητη μετατροπή αυτού που είναι κατακεκυμένο, βιωματικό, λεπτομερικά και σε πολλές περιπτώσεις σύνων θα περιγραφεί με αφαιρετικός όροι σε ένα εντελώς διαφορετικό μέσο, είναι συχνά μια αφαίρετη διαδικασία που επικεντρώνεται στη μεταφορά του αρχιτεκτονικού σχεδίου μάλλον πάρα στο ίδιο το σχέδιο. Στόχος της προσωποποίησης αυτού του αρχιτεκτονικού σχεδίου είναι να επιτευχθεί μια καταστατική αντίληψη που επιτρέπει την ουσιωδή κριτική προσέγγιση του σχεδίου. Η προσωποποίηση τεχνολογία αποκοινωνίας με ηλεκτρονικούς υπολογιστές, έχει στη διάθεση μας νέες τεχνικές αναπαράστασης που, σαφώς εξερευνούν κατά πολύ τα παραδοσιακά μέσα της γραφικής σκέψης και της μακρότροπης ρεαλιστικής. Ο χαρακτήρας αυτών των εκφράσεων στην περίπτωση της αρχιτεκτονικής αποκαθίσταται ως η ικανότητα να αναδείξουν τον χαρακτήρα του εκάστοτε σχεδίου και να συμμετάσχουν στην κατανόηση της σχεδιαστικής διαδικασίας. Η φύση της διαδικασίας του αρχιτεκτονικού σχεδίου με την τεκμηρίωσή της. Η ικανότητα του αρχιτέκτων να κατανοεί και να συνανθίζει λήψεις είναι κάτι που κατακτάται μέσα από μακροχρόνια εκπαίδευση και επαγγελματική πείρα. Ο χαρακτήρας της αρχιτεκτονικής αντωντιμοποιεί δυσκολίες στην προσωποποίησή τους να κατανοήσουν συνθετές σχεδιαστικές συμβάσεις χωρίς τη βοήθεια που προσφέρει η πολυγλώρια επιμελία. Η χρήση επιπράγματων συστημάτων εικονικής πραγματικότητας και επιβατικών εικονικών πλαίσιων επιτρέπει την ουσιωδή κατανόηση ύψιστων όρων στην εικονική εκπαίδευση με το επικίνδυνο εμπεσμένο εμπειρικό τοιχώματος που αναπτύσσονται από εκπαιδευτικά συστήματα. Τα συστήματα αυτά καθοδηγούν τους φοιτητές προς συνειδητοποίηση της κατανόησης των σχεδίων τους. Η υποκαταστήσιμη προσέγγιση είναι σπουδαστική και προσαρμόζεται ευκολά σε πολλές μορφές εφαρμογής στο πεδίο της έρευνας ή της διδασκαλίας.
Design Education

The objective of representation in any architectural design is to achieve a situational awareness that allows for meaningful criticism of the design. The more abstract the design representation, the more difficult it is to attain this awareness. To a competent architect, the summation of the information drawn on plans, specifications, or other design documents provides the information necessary to formulate an approximation of the design project. The architect’s ability to comprehend and extrapolate information is acquired through years of education and working experience. Architecture students are placed in the difficult position of attempting to understand complex drafting conventions without the benefit of years of experience. Despite its importance, understanding and visualizing space is one of the most difficult skills that architecture students begin their education with very limited personal experience in observing and understanding the spaces and forms that they are familiar with on an everyday basis. Architecture forms a backdrop against which their activities take place, but they are not consciously aware of the influence that the design of those spaces has on their perceptions. Students must learn to experience spaces and forms in a way that will enable them to understand not only the visual, but also the environmental, cultural, and social aspects of the natural and built environment around them.

Another difficulty students face in understanding and visualizing space is the limitations of the media used to represent and manipulate space throughout the design process. Drawing by hand or hand-derived electronic means (electronic drafting) continues to be the central activity in the design process despite the rapid advances in computer graphics. Through the use of manual graphics—pencil, marker, watercolor, two-dimensional electronic drafting, etc.—a design student is taught to translate a mental picture onto the drawing board. This type of visualization technique is generally accepted as an effective design tool that has little impact on the appearance of design form. All too often, however, graphic methods for representing space and form have no relationship to any visual experience, but are merely a ‘drawing-board style.’ Unfortunately stylized techniques can be copied by students with a high degree of sophistication. Emulation of style by students with a high degree of sophistication. Emulation of style by

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Even when used in an appropriate way, traditional graphic media have another limitation: they are static images which cannot represent the effects of movement and time in terms of light and motion. Because our perceived experience of architecture is primarily a sensual event involving movement and change over time, a two-dimensional static image is inadequate as it can only express the quality of a space at one point in time and from one point of view. Visualization that includes movement and time sequence allows the designer to make better judgments about space and form, as well as to see the effects of light, color, texture, reflectivity, and contrast. Lifelike simulations give the opportunity to experience mistakes before they are constructed, and to learn from them.

Representations and architectural design process

During the design process, architects works on a non-existent product, conceived in the mind and communicated only through representations (Porter, 1995). Seeking an appropriate form of representation for this “virtual object” has always been important for designers. Representations signify a world of objects through a series of established conventions (Akin, 1984; 1986). The quality of design, it can be argued then, depends on the ability of a designer to select useful abstractions, use them to simulate the performance of the design, and use the result of the evaluation to guide further refinements (Akin, 1984; 1986). Thus representations are critical to the design process for two reasons: to overcome the cognitive limitations and to facilitate the collaborative process (Akin, 1984; Markman, 1999). Markman (1999) defines representation as consisting of four components: a represented world – the external (physical) or internal (mental) world that forms the domain for the representations, a representing world – the domain containing the representations which presents selective information about the represented world, representing rules – which define the relationship between the elements of the represented world and the representing world and a process that uses the representation. The potential of the representation lies in the difference between the represented world and the representing world (Markman, 1999). Abstraction allows a representation to leave out irrelevant information, permitting one to focus on the issues relevant to the task (Laseau, 1980; Lawson, 1980). Usefulness of any representation therefore lies in the balance it achieves between inclusion of relevant information and exclusion of irrelevant information. Representations are less complex (in terms of the amount of information) than the represented world and lend themselves more to manipulation, which helps in understanding the structure or organization of the represented world, in evaluating it and refining it further (Markman, 1999).
Mental model of the creative process

While attempting to create a medium for design representation and communication, it is important to look at the behavior of the human mind during the creative process. Design is not linear problem solving with a definite starting point. In fact, the designer’s focus of attention shifts between different aspects of the design problem. Takala (1993) refers to the focus of attention as a view, and each view is evaluated for discrepancy by comparing with other views. The design process ends successfully when a number of different views can be taken without discrepancy. The progressive overlapping of views is an important process in the design of new ideas.

Distinctions between representation and presentation

With architectural design becoming more collaborative and projects as well as teams more geographically distributed, design communication becomes as critical as the design process. Fundamental to understanding design communication is the need to make a distinction between representation and presentation. In many cases, these terms are used interchangeably, adding to the confusion. Carpendale and Montagnese (2001) define representation as the act of creating an image that corresponds visually. Representations are primarily a visualization tool to aid reasoning and creative process. Presentation is the act of displaying this image, emphasizing and organizing areas of interest to aid reasoning and creative process. Presentation is the act of creating an image that corresponds visually. Representations are primarily a visualization tool to aid reasoning and creative process. Presentation is the act of displaying this image, emphasizing and organizing areas of interest to aid reasoning and creative process.

Diagnose the choice of the medium

The representation-presentation distinction is complicated by the fact that they lie in a continuum. This is analogous to MacEachren’s (1995) depiction of cartography as a cubic map-use space with visualization and communication occupying opposite poles. In design process and communication, representation and presentation can be respectively mapped on to the visualization-communication poles. Chi and Riedl (1998) sums up the difference succinctly –representations involve value operations, whereas presentations involve view operations. Changes in representations involve value operations and thus modify the nature of the artifact.
under design, whereas changes in presentation primarily affect how it is viewed or perceived. In this regard, scaling (especially non-uniform scaling) a building to make it longer or bigger would be a value operation, which changes the nature of the artifact. We can present the same building from different points of view within the geometric space, which communicates the nature of the building. Here the term presentation is used to mean more than different geometric perspective and includes other operations such as translation, zooming, show-hide layers etc.

For the same information or representation, the presentation strategies can vary depending on the type of task, nature of information and skills of the user (Carpendale and Montagnese, 2001). This distinction will allow us to explore the presentation space independent of information specification. The nature of presentation can play a critical role in the design process at two very important stages. The first stage is before the designer even attempts to solve the design problem. Carroll and Malhotra (1980) have shown that how the design problem is presented, strongly influences the space in which the designers search for solutions. Another stage in the design process where the presentations can play a major role is during the evaluative stage of the design process. By their choice of areas for emphasis and the organization of various representations, the presentation of the design solution can affect how it is evaluated. While most CAAD applications incorporate tools for both representation and presentation, it still is not quite analogous to the mental model of design thinking outlined by Takala (1993). Designers rely on multiple tools to explore different aspects of the design and what is needed is a tool to bring these together at the meta-level.

Need for a presentation environment for design communication

Traditionally, the tool kit of the designer, particularly architects, included a wide repertoire of media: pencil and paper, cardboard and rubber cement, foam core, wire and clay among other things. The only limit was the designer's imagination. These tools had a common characteristic in that they were flexible enough to encourage exploration and each was particularly suited for exploring a specific aspect of the design problem. When it comes to digital media, a variety of tools, that support drawing and 3-dimensional modeling are available. With their emphasis on precision and finality computer-aided design tools are seen as rigid and inflexible when compared to traditional media and are unable to support a broad range of functions in the early stage of the design process. However, they also come with many advantages in overcoming perceptual limitations, especially when it comes to assessing the potential of the designs.

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visualizing 3-dimensional space and permitting a greater perceptual range of experience. This is particularly so in the ‘propose’ stage. When it comes to the ‘evaluative’ stage, the nature of difficulty is slightly different, which is best illustrated by drawing a comparison between the traditional “pin-up” critique in the design studio and the presentations in the “digital studio”.

An interactive presentation system for architectural design should help explore the relationship among representations, their meanings and their effects. This is important for the evaluation stage of the design process, especially in a collaborative design environment or in an educational setting such as the design studio. The presentation medium should ideally amplify the representational talkback (Nakakoji, 2000). Nakakoji & Yamamoto (2001) define representational talkback as “a perceptual feedback from the externalized artifact (representations) to the designer.

Orland, Budthimedhee and Uusitalo (2001) tracing the evolution of forms of communication between the designers/planners and the public, point out that current technology offers the potential to examine the visual information in a more interactive manner, manipulate the particulars, compare alternatives side by side, and play “what-if games.” The need for an integrated immersive environment or in an educational setting such as the design studio. The presentation medium should ideally amplify the representational talkback (Nakakoji, 2000). Nakakoji & Yamamoto (2001) define representational talkback as “a perceptual feedback from the externalized artifact (representations) to the designer.

Virtual Representation
Virtual reality has the potential to improve the quality of architectural representation. The roots of VR, in the early 1960s, can be traced to diverse areas, such as flight simulation and art presentation (Orford, 1999). Now virtual reality is utilized in diverse realms, including cognitive mapping and planning. These uses can inform our understanding of the benefits of virtual reality in architecture. Virtual reality creates the opportunity to simulate, as well as control, the layout of the environment. According to Hills (2001), virtual reality has numerous advantages over traditional presentation methods because “it permits the creation of environments of varying complexity and allows interactive navigation with continuous measures within it.” In recent research on cognitive mapping and virtual reality, Albert (1999) controlled which feature of an environment to present at a given time. He also allowed the subjects to observe the environment from a previously
selected viewpoint. These methods permitted the analysis of the experimental data in a more detailed and accurate manner, not possible utilizing a real environment.

Albert (1999) argued, “Learning relative differences between landmarks in a simple virtual environment consisting of four buildings was rather robust. Whether a single view was studied for a long time or multiple views from around the environment were each studied briefly in a sequential or a random order and under a self-paced or fixed-paced condition.” The research subjects were able to learn the desktop virtual environment using various viewing conditions accurately in a short amount of time.

Mallot (1998, 2000) has pointed out that the advantages of using virtual reality in behavioral experiments. He mentions both the ability to control computer graphics stimuli and the easy access to behavioral data, such as the subject’s movement decisions, as enhancing research. The result of the Mallot’s experiment showed that spatial relations could be learned from exploration in a virtual environment even under rather restricted viewing conditions. When four viewing conditions of different amount of information were presented to subject, the number of errors during the search phase decreased as more information was provided. Mallot found that knowledge of configurations could be acquired in virtual environments, in spite of the fact that the subjects were interacting with a computer graphics simulation and did not themselves actually move. Because of increased ability to control visual input, virtual reality is a valuable addition field studies, where stimulus control is often a problem.

Virtual reality 3D visualization in architecture deals essentially with volume conceptualization. Traditional 2D architectural representation is capable only of depicting aerial or planar concepts and implies a spatial dimension only when these concepts are used in series. By merging motion with computer-aided 3D visualization techniques, spatial concepts can be easily conveyed. Such spatial information, when delivered through proper apparatus, can simulate depth—one of the most important components of spatial cognition. In addition, other architecturally related concepts such as shadow studies, transparent underlay, and form morphing, which were generally unavailable through traditional drawings, can now be represented in a manner easily understood by students.

The Virtual Design Studio

In any architectural program only one of our goals should be to familiarize students with the generally accepted body of knowledge regarding the computer and how it is used in architectural practice. – toso stin periptwseis mias kai monadikis aposthsis tou kyuropo pou melletfthke gia arkeit hirp, osa kai se ekhein polles apoepes apo pollles otimeikis gynies pou melletfthke exarxhmati gia syntomono chrniko diastima se mia sunexhe h tyxiaia seira kai me rhympo pou etane eite prokathorismenos eite kathorizan apo tous idous tous somatmeteconous. Oi somatmeteconous stin enera meno pareon na ekmatwv to epiparempo eikoniko periballon cheimopoiouwntas me akribia mia poikilia sunithwv paratirhseos se syntomono chrniko diastima.

O Mallot (1998, 2000) eie epimepane na pleonektimata ta pleonektimata eikonikis pragrammatiktis se peirama ta otopia otopia sunuperforanke monotel. Epiimepane to to tin ikanitita ellexou psikikwn grafikon erethismatos evethagmatoan evkholiopodeias suneperiropikoidekmene – apwma, gia paradoxi, apoephes tis upokeimevnwn pou apoourwv stin kinyia – sto stoichia qui eirhnoi stin enera meno. To peirma ton Mallot ediefei piws h ginwna twn charikwn sxezewn mporei na apoetkhe me mia eixe eraiwn ton eikoniko periballon, akoma kai kata apo sunithwv periopermenva diynasthtita paratirhseos. Sthn diathth pou otopia sunmeteconous tis exaeretitwn diasforoiteis apkeiwnwn, sunithwv paratirhseos kathma mia apo tis opioes perieixe kai diaforoforikos poso plhroforwv, to svoloo twn lathwv pou egignan kata th fassis th anaxihithta qui einai antistwros anaglogo me tin poiosita tou plhroforon pou paraspexhe. O Mallot apoefhndhe piws h ginwna ton dikastewn apoepes mporei na apoetkhe stin plasiia eikonikou periballon parag th genovno pou th upokeimevno allhleprousan me mia psikikai prosemwosiesi upologhsths kai de kinyoun ton idi. Xara stin autimenei diynasthtita ellexou twn otopikwn erethismotwn pou proosefer, h eikonikai pragrammatiktita apoetekle mia politeuma prooseh th stin epistopia erwma, opou autou akribws o ellexh – h mallon, h apouisia ths – apoetekle svnh probhlma.

Sto peidi ths arxhitektonikhs, th triasiadiastata opitikopoihsi mewsths ths eikonikhs pragrammatiktis eie na kaini kurwos me tin sulhli ths ton okh. H paradosikh diadiastata arxhitektonikh anakapartasa einai ikanh na apodusisei monon apo aerios h epipides sulhliyes kai upaimonestetai th charikai diastasa monon oti apoepesi autoe charhimopoiouni stin seira. O synusomhni kinyias kai psikikon mevdowh th triasiadiastata opitikopoihsis mporei me eukolia na apodusisei ths enowies tou kwhs. Dosemenes miws apo th katallhlo mewst, autou thn idous, ois charikes plhoprofories einai se thesa na paragagoni mia prosemwosi ths diastatas tou bhatous, pou apoetekle eina apo ta semeiostatika svstataikia ths ypoptikhs antileptias ths charhs. Epiplene, allo stoichia synefa na apo th arxhitektonikh scheidiasma, opws h melhtia ths okhias, th diapharon upostrotwv kai o metasychmimatos ths morphi, th otopia dein thn genikwv diathimata sthn peripwsia ths paradosikhv scheidias, mporei polw na anakapartasthoun me trpogo pou eikola ginetai katanogonos apo ths fofitites.

To Eikoniko Ergastristiko Scheidiasma

Sto plaiio opoioidhstote akadhamhpih proogrammatos arxhitektonikhs, enas apoekleistikast apo tous stogous mas, preptei na einai h exoexiwsis twn fofitwn me to genikwv apodetiko skulo gnwson pou aforh touvs upologhstes kai ton trpogo me ton otopio autou charhimopoiouni sto arxhitektonikh praktikh. H ekpatdeuse sto charho tou arxhitektonikh scheidiasmatos preptei telika na uperbxaini ths symbabesias, anaziptwntas pantote neves idees kai stragntikes. Exei hna anaptythke eina nevo paiaagrammih monotel pou dines emfase sth thewria kai praktikh diakaidia ths arxhitektonikh scheidiasmatos, to otopio eiprepe stous fofitites na prosgegouni thn arxhitektonikh ws mia episthima pou baxiai sti ginwsi (Kalisperis 1998, 2005).
Design education should aspire to go beyond convention and search for new ideas and strategies. A new pedagogical model that emphasizes design process and theory, which allows students to approach architecture as a knowledge-based discipline has been developed (Kalisperis 1998, 2005). It encourages students to be venturesome and discover innovative solutions by exploring more alternatives and designing from a holistic standpoint. Students are encouraged to design in three dimensions from the beginning of conceptualization. Through simulation and testing of the building design students go beyond convention and explore movement in both time and space. The virtual reality visualization techniques allow the students to understand space and form, as well as texture, contrast, and color, as they explore spatial and temporal movement.

Although virtual reality is a fast-growing field in other areas, in architecture no one has attempted to utilize its great potential within an affordable environment in the early years of architectural education. The need is especially great in these years, because it could change the student designer from being simply an observer through conventions to being a participant. Through virtual reality, the student designers can explore the proposed space; they can immerse themselves in the space in a manner similar to the way in which it would be used.

Currently we are in the process of exploring the educational potential of virtual reality in the creation and understanding of space as a set of dynamic volumes that can be experienced. The VR-Desktop initiative and the Immersive Environments Lab is an effort to bring the salient features of projection-based VR to second-year architecture students in a way that is more generally accessible than the many canonical, first-generation, projection-based VR systems. We refer to this goal as “lowering the bar and extending the reach” for the use of VR in everyday teaching and learning.

Projection based VR systems have been around for almost two decades. From initial and somewhat prototypical efforts of the early 1990s, these costly, albeit very high-performance, systems have evolved to offer increasingly useful and durable designs for the high performance research community within which they typically are deployed. But it seems a fair assessment at this writing that projection-based VR has not achieved widespread use among users beyond the high performance community. We believe that the lack of acceptance by general users is due to a dearth of VR enabled applications to which such users can easily transition, a challenging programming environment for non-programmers who would attempt to use VR systems to develop unique applications, and the typically high cost of purchasing and maintaining such.

To meet the challenge of high cost of purchasing and maintaining such systems. We refer to this goal as “lowering the bar and extending the reach” for the use of VR in everyday teaching and learning.

Projection based VR systems. We refer to this goal as “lowering the bar and extending the reach” for the use of VR in everyday teaching and learning.

The virtual reality visualization techniques allow the students to understand space and form, as well as texture, contrast, and color, as they explore spatial and temporal movement.

Although virtual reality is a fast-growing field in other areas, in architecture no one has attempted to utilize its great potential within an affordable environment in the early years of architectural education. The need is especially great in these years, because it could change the student designer from being simply an observer through conventions to being a participant. Through virtual reality, the student designers can explore the proposed space; they can immerse themselves in the space in a manner similar to the way in which it would be used.
facilities. Our experience has been that for many potential users in a university community, the effort and resources required to bring VR techniques to on everyday research and teaching have been too great. The design point for the VR-Desktop is to provide systems that meet a wider range of potential users closer to “where they are” in terms of existing computing skills/work methods, budgets and physical proximity. The objective is to make the VR environment as easy, cost effective, and convenient for users to realize the benefits “big screen VR” can bring to their disciplines and organizations. The principal design points in building the system were: 1) maintaining affordable cost by using “commodity” components; 2) ease of use by employing familiar computing environment and support for applications with which the students are familiar; and 3) seven-day, twenty-four-hour access by students, in proximity to their existing studio space.
The VR Platform

The Immersive Environments Lab display system includes three six-by-eight-foot, rear-projection, passive-stereo, display screens. The screens are joined at the middle and positioned at a 135-degree angle, providing a sixteen-foot panoramic view when used in dual screen “VR” mode.

The basis of the VR-desktop is the BS Contact software in a browser based environment utilizing VRML models generated by different 3D applications. The joystick input devices currently used are dependent on the Windows operating system; however, we have implemented devices independent of specific operating system, such as the SpaceOrb. These system-independent devices are controlled by utilizing the Java communications API, whereas the system-dependent devices use the Java Native Interface (JNI) to communicate with the native operating system. The high-end graphics cards used to produce the quad-buffer stereo image are inherently designed for OpenGL hardware acceleration. The stereo image produced is frame-sequential stereo that normally requires drawing at a monitor refresh rate of 100-120 Hz. The monitor refresh rate is reduced to 60Hz, allowing for greater choice of monitor resolutions and utilization of commodity DLP projectors. (see Figure 1 and Figure 2).
Implementation of Virtual Reality Simulation in a Second-Year Design Studio

Over the last nine semesters (design rotations of seven-and-a-half weeks each), an equal component of our design studios introduced students to the use of computers in enhancing design possibilities. Students spent one-half of each semester using the VR-Desktop environment to design their projects as part of the normal rotation through four different instructors. The projects were not specific to the fifteen-student computer studio: they were the same assignments as for the other three sections of second-year. Integration of computers directly into the design studio took place in a physical environment that united the traditional drafting table with the computer. All students provide their own portable workstation as part of their drafting table. Through the use of digital design media, 3D modeling, and virtual reality, students in the studio developed a critical design sense of fundamental architectural form, systems, and vocabularies. They examined the relationship between order and idea and developed their analytical and design capabilities through this exploration of digital technology.

Εφαρμογή της προσομοίωσης μέσω συστημάτων εικονικής πραγματικότητας στα εργαστήρια του δεύτερου έτους

Κατά τη διάρκεια των τελευταίων εννιά εξαμήνων (εναλλασσόμενα μαθήματα αρχιτεκτονικού σχεδιασμού διάρκειας επτάμισι εβδομάδων το καθένα), μέρος του εκπαιδευτικού έργου που γίνεται στα εργαστήρια ήταν αφιερωμένο στο να εισάγει τους φοιτήτες στη χρήση των ηλεκτρονικών υπολογιστών και τις δυνατότητες που αυτή εξασφαλίζει στον αρχιτέκτονα. Κατά τη διάρκεια του μισού εξαμήνου, οι φοιτήτες χρησιμοποιούσαν το σύστημα εικονικής πραγματικότητας για να σχεδιάσουν τις εργασίες τους στο πλαίσιο ενός μαθήματος που διδάκτεκε εναλλάξ από τέσσερεις διαφορετικούς καθηγητές. Οι εργασίες αυτές δεν αφορούσαν μεγαλύτερα τους δεκαπέντε φοιτητές του ηλεκτρονικού εργαστηρίου. Οι ίδιες ισχύαν για όλους τους φοιτητές στα τρία άλλα εργαστήρια του δεύτερου έτους. Η ενσωμάτωση των ηλεκτρονικών υπολογιστών στο εργαστήριο του αρχιτεκτονικού σχεδιασμού πραγματοποιήθηκε σε ένα περιβάλλον που συνεισέδωσε το παραδοσιακό σχεδιαστήριο με τον ηλεκτρονικό υπολογιστή. Όλοι οι φοιτητές φέρνουν το δικό τους φορητό υπολογιστή, ο οποίος αποτελεί τμήμα του σχεδιαστηρίου τους. Μέσω της χρήσης ψηφιακών σχεδιαστικών μέσων, τρισδιάστατης μοντελοποίησης και εικονικής πραγματικότητας, οι φοιτητές του εργαστηρίου ανέπτυξαν μια κριτική σχεδιαστική αντίληψη της θεμελιώδους αρχιτεκτονικής μορφής, των συστημάτων και της γλώσσας της αρχιτεκτονικής. Εξέτασαν τη σχέση μεταξύ οργάνωσης και ιδέας και ανέπτυξαν τις αναλυτικές και σχεδιαστικές ικανότητές τους μέσω της εξερευνήσης της ψηφιακής τεχνολογίας.

Fig. 3 > View of the three-screen immersive environment – multimodal presentation
Εικ. 3 > Άποψη του συστήματος εμβύθισης σε εικονικό περιβάλλον (τριπλής προβολής) – πολύτροπη (multimodal) παρουσίαση.
The undergraduate architecture design students provide a nearly ideal user community for the development of more accessible VR tools. For the most part, the students are not advanced users or programmers, so the design point for any tools deployed needs to be straightforward and in keeping with existing workflow. The students’ design work is such that the potential benefits of the human-scale interaction with their designs are readily apparent. The resulting independence and enthusiasm of the student users and the feedback they provide on software development have been invaluable in our success.

System Implementation and Evaluation

Through the VR-Desktop environment in the studio, students immediately start working in a VR environment. They create space by manipulating solids and voids while evaluating the anthropometric relations of the proposed solution. The students are able to study architectural form, as well as place-making, use, and tectonics on architecture. During the second year, it is essential to develop the students’ ability to communicate graphically and model productively in order to consolidate the knowledge that they have acquired during the first year. It is imperative to instill basic skills that are related to perception and visualization of materiality so that the students acquire a solid foundation of general knowledge. In our studio we make a conscious effort to integrate visual communication with the design process. Drawing and modeling, both with traditional techniques and with computer software, constitute the basis of studio performance. Students are encouraged to view architectural drawing, including computer-aided drawing, as a valuable process of thought and experimentation. Students are presented with problems that emphasize the analytic and synthetic activities of the design process. Drawing and modeling, both with traditional methods and with computer-aided drawing, as a valuable process of thought and experimentation. Students are presented with problems that emphasize the analytic and synthetic activities of the design process.

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ON ARCHITECTURAL DESIGN EDUCATION IN THE INFORMATION ERA

The first two years of architectural education are the most crucial for architecture students because during these years students form attitudes that they carry with them throughout their careers. During this time, students struggle with the concept of architecture as a hybrid of art and technology. The students’ preconceptions about the nature of architecture is challenged by the introduction of new ideas about the physical world; therefore, it is appropriate to introduce innovative computer representation techniques as early as possible in design education so that they become an integral part of the process of the making architecture.

In order to better assess student perception of the usefulness of various system attributes for various tasks undertaken, we have begun a usability study. Surveys were collected from the undergraduate students who had used the Immersive Environments Lab for coursework during the academic years of 2002-2006. One of the questions the students were asked was the open-ended question, “Please describe three aspects of using the Immersive Environments Lab that you felt were most convenient, useful or successful in your work.” Students provided at least one answer to the question. Specific functional or formal attributes that most often were cited as beneficial were stereoscopic or 3D projection, large screen size, and the ability to navigate and/or view the scene from different viewpoints. Several students specifically commented on psychological dimensions, such as “you can envision being in your project” or the “ability to show others what you see in your imagination.” Similar dimensions may be implied in many of the less specific comments along the lines of “(the ability to) walk through assists showing of designs.” It would seem that initially, at least, the utility of the key VR ingredients of wide field of view, stereoscopic projection and interactivity have been validated by the students. Similar studies have further validated these claims (Kalisperis et al., 2006, Balakrishnan et al., 2007). (Student responses often discriminated between useful functionality of the system and the awkward implementation of the same. For example, several students positively commented on “the ability to move around the scene,” while at the same time mentioning that system response made navigation awkward for large models or that they did not like using the joystick to do so (which the author suspect is confounded with poor system response for large models, which contributes to the difficulty in navigating with the joystick). Several comments pertained to access and spatial layout of the facility. For example, convenient, unattended-, and twenty-four hour access was cited as

synthetic, as it is the process of work, from the conceptual implications to the smallest detail. It is important that they learn the complex nature of the interactions of the different areas of architectural knowledge.

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design process and they are urged to show a concern for all levels of work, from the conceptual implications to the smallest detail. It is important that they learn the complex nature of the interactions of the different areas of architectural knowledge.

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a plus, as was useful presentation space; whereas limited audience capacity was cited as a drawback. Such observations should be useful for sorting out where best to focus future efforts to improve system functionality, room layout, scheduling, or other issues that will influence acceptance by users.

Overall, the students rated the system positively. Most rated the system at least somewhat more useful for presentation purposes than for making design decisions, although the degree of such perception appears to be influenced by instructor and/or the extent of use of the system, which also are correlated to. In continuing this research, additional questions and correlations with regard to instructor focus and access patterns may yield useful information for improved teaching utilizing such facilities in the future.

Conclusion

Within the architectural context, virtual reality techniques involving depth perception can convey relevant information to students more efficiently and with less misrepresentation than traditional techniques. These papers suggest that motion, stereoscopic vision, and interactivity are possible components of the 3D visualization techniques necessary to enhance architectural education. It has been shown that the use of computers in studio instruction increases the number of alternative solutions to design problems that students are able to produce, thus suggesting an increased mastery of material. The digital design studio and the Immersive Environments Lab has been successful in encouraging the acquisition of design knowledge by students. It has enhanced the flexible use of that knowledge by stimulating an increased number of representations. Critiques of student work indicate that not only do students propose more solutions to the problems, but that these solutions are of higher quality, reflecting the increased awareness of the complex nature of architectural knowledge.

prόσβαση στις εγκαταστάσεις του εργαστηρίου και τη χωρική διάταξή τους. Για παράδειγμα, η εύκολη και δίχως επιτήρηση πρόσβαση σε εικοσιτετράωρη βάση σχολιάστηκε θετικά, ενώ η περιορισμένη χωρητικότητα των εγκαταστάσεων αναφέρθηκε ως μειονέκτημα. Αυτές οι παρατηρήσεις αποδεικνύονται χρήσιμες για να επισημαίνουν τις πτυχές του συστήματος στις οποίες πρέπει να επικεντρωθούν οι μελλοντικές προσπάθειές μας για βελτίωση της λειτουργικότητάς του, της διάταξής του χώρου των εργαστηρίων, της ρύθμισης του προγράμματος τους και άλλων ζητημάτων που θα εξασφαλίσουν μεγαλύτερη απόδοση από τους χρήστες.

Σε γενικές γραμμές πάντως, οι φοιτητές αξιολόγησαν θετικά το σύστημα. Οι περισσότεροι δέχονται να το θεωρούν κατά τι χρησιμότερο για τον σκοπό της παρουσίασης παρά αυτού της λήψης αποφάσεων σχετικά με το σχεδιασμό, αν και ο βαθμός στον οποίο ισχύει αυτή η άποψη μοιάζει να επηρεάζεται από τον καθηγητή και /ή το βαθμό χρήσης του συστήματος, που επίσης αποτελούν συνιστώσες του ζητήματος. Στην πορεία αυτής της έρευνας, επιπρόσθετα ερωτήματα και συσχετισμοί που αφορούν το ρόλο του καθηγητή και το πρότυπο πρόσβασης στο σύστημα είναι πιθανό να παράσχουν χρήσιμες πληροφορίες για μελλοντική βελτίωση της διδασκαλίας που στηρίζεται στη χρήση αναλόγων μέσων.

Συμπέρασμα

Στο πλαίσιο της αρχιτεκτονικής, οι τεχνικές που προϋποθέτουν τη χρήση της εικονικής πραγματικότητας και στηρίζονται στην αντίληψη του βάθους μπορούν να μεταφέρουν πληροφορίες στο φοιτητή με τρόπο αποτελεσματικότερο και με μεγαλύτερη ακρίβεια απ’ ότι οι παραδοσιακές τεχνικές. Το παρόν άρθρο υποστηρίζει πως η κίνηση, η στερεοσκοπική θέαση και η διαδραστική θέση και η διαδραστικότητα είναι τα πιθανά συστατικά των τεχνικών τρισδιάστατης αποκοποποίησης που είναι απαραίτητα για τον εμπλουτισμό της αρχιτεκτονικής εκπαίδευσης. Έχει αποδειχθεί πως η χρήση ηλεκτρονικών υπολογιστών κατά τη διδασκαλία στα εργαστήρια αρχιτεκτονικού σχεδιασμού αυξάνει τον αριθμό των εναλλακτικών λύσεων στα σχεδιαστικά προβλήματα που μπορούν να προτείνουν οι φοιτητές, δηλώνοντας ετσι και αυξημένη καινοτομία κατανόησης και χειρισμού του αντικειμένου της διδασκαλίας. Το εργαστήριο ψηφιακής σχεδίασης και εμβύθισης σε εικονικά περιβάλλοντα έχει αποδειχτεί επιτυχείς ως αρμονία της μαθησιακής διδασκαλίας. Έχει βοηθήσει τους φοιτητές να χρησιμοποιούν τις γνώσεις που αποκτούν με τρόπο ελαστικό μιας και προσφέρει τη δυνατότητα παραγωγής μεγάλου αριθμού αναπαραστάσεων. Η αξιολόγηση της δουλειάς των φοιτητών δείχνει πως όχι μόνο προτείνουν περισσότερες λύσεις στα προβλήματα που μελετούν, αλλά και πως η ποιότητα των λύσεων αυτών είναι υψηλή, αντικατοπτρίζοντας μια οξυμένη αντίληψη της σύνθετης φύσης της αρχιτεκτονικής γνώσης.
References


Bibliography


The following reference on required elements of the architectural education results primarily from the necessity of reintegration of function, construction and form through the architectural design. The framework of development is mainly supported by the structure itself, at horizontal level it is driven by the visual perception and the creativity of the architect. Based on the modern interpretation of architectural education, the integrated design is developed within the multidisciplinary nature of the area, at various levels of analysis, at all scales of the project, with common connecting element, the architectural aim, the vision in architecture.

Historically the methodology of architectural design was not always identical. A few centuries ago, the architect could result to a simple building without resorting to a plan. Some discussions and visits at the building site were adequate for this aim, since the spatial layouts and the construction methods remained the same. Small deviations in the dimensions of openings of the building envelope, their proportions, the production, positioning, as well as the construction connections did not need to be defined in advance. Everything followed the “expression of the art”. This stability of technology and form contributed to certain homogeneity of architectural expression, which prevailed historically, quite naturally, on both, the public and the producer [4]. Buildings of special typology, such as cathedrals, innovative and more complex, required analysis design and often even prototypes. Their construction lasted longer.

Renaissance established the distinction between the architectural concept and the methods of construction, creating thus the beginnings of the specific activity of architectural design. The subsequent development proves a significant decrease of the frame of abilities and required qualifications of the architect, who until then was a man of letters and science, musician, painter, sculptor and especially an engineer. Architecture was subjected to the general trend of specialization, influenced mainly by the establishment of the profession of Structural Engineering in the 19th century. The development of statics as part of Technical Mechanics and Mathematics influenced directly the frame of activities and the historical development itself of Architecture. At this point I consider important a small parenthesis of relevant reference.

Up to 1825 the design of the structure was defined in general framework, mainly empirically. That year, which marks the beginning of the development of statics as a specialization, had already enjoyed conscious preparation, through a process of separation
of the functional from the fine arts in architecture. Most known is probably the opinion of von Gerstner, Mathematician and Technician, for the creation of an Architectural Engineering [1]: “Statics is not restricted to the solution of the equilibrium and to a process of calculation”. Navier, whose importance as an engineer we recognize even today with the additive of his name in many theories, was an exceptional individual of practice. Being Professor of Applied Mechanics and Strength of Materials at the École des Ponts et Chaussées, he unified the particular areas for their application in practical problems of construction. As a consequence he describes in his book “Mechanics of Architecture” [5]: “(...) After the design of a project the engineers examine, if they satisfy all conditions and they improve their design so long, until this has happened. Under these conditions the economics are one of the most essentials, the solidity and durability are not less important”. At this point of time statics was admitted as an independent scientific discipline.

The development of this discipline leads with the end of the 19th century until the mid 20th century to a period of stabilization, with orientation the optimization and extension of the methods of analysis (spatial systems, nonlinear analysis), With the use of computing facilities and numerical methods of analysis the “phase of integration” is initiated: Statics is unified with structural design – Design, Analysis, Dimensioning, Construction, Execution. With this development, statics loses the identity as an independent science of the given initial form.

Presently, the field of structural engineering can be interpreted as a science of creation of worlds of simulations that are increasingly distanced from the actual construction and structure of the building, and can be increasingly defined by constant, abstract symbols. The interpretation of Mathematics and modern Structural Analysis is focused on the interpretation of the problem with technical language, so that the solution steps are characterized by a gradual change of symbolism expressions, whereas the principles of continuous change are interrelated exclusively within a syntax form of symbolism, but not with the one that the symbols represent. This paradoxical is the result of the development of a “mechanization” of the methods of analysis with the development of the Finite-Elements that have reversed all disciplines of mechanics, in research and application, since the decade of the 60s. In final analysis however, from the architect’s point of view, the exclusive calculation decreases the engineer into a simple processor of symbols, whose decisions’ consequences are unknown. This specialization has henceforth taken the name of Computational Mechanics.

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The references in the last century as regards the relation of Architecture with Engineering are multiple. Ludwig Hilberseimer, an architect with ideological concordance with Mies van der Rohe, from 1929 Professor at Bauhaus, represents with his writings about architecture of rationalism an extreme position. His essay “Construction and Form” is published in 1924 in the journal of Elementary Design, representing a bold statement for an architecture with construction and form again identical [2]: “Identity of construction and form is an essential requirement of every architecture. Initially the two seem to be opposite. Nevertheless, architecture is based on their unification. Construction and material are substantial requirements of architectural design. They are in continuous interaction”.

Realizing that a number of efforts of theoreticians of the past and the present for the development of an absolutely scientific basis for architectural theory and practice have resulted one after the other in the other in self logical contradictions, a particularly promising fundamental and timeless approach of analysis has been expressed at the Symposium for Architectural Education, of Portsmouth in 1995, aiming at achieving a positivistic, but nevertheless critical and phenomenological review of architectural design [3]. The analysis is based on the definition of the structure, the space and the light as the most significant parameters of architectural development. Possible directions are the correlation of space and structure, the open space and the Raumplan. With the last direction the question is raised as to the honesty in architecture when the structure constitutes no longer the subject, the component of design.

This categorization is admittedly simple and evident and it gives pedagogically the basic principles of architectural design, on which further specialized course may be achieved. In particular, technologically advanced architecture is achieved with the development of built up spaces that are characterized by a technologically optimized physical and built up environment, with precise definition of the structural components, as regards the functions, construction and connections of the elements. The theoretical foundation, the methodology of application of technological parameters in the design is based on the main areas of the morphology that corresponds to the surrounding environment and results from the functionality of the building, the construction, geometrically and structurally directly related to the structure and responsible for the interrelation of the interior spaces, the building envelope, of non minor importance for the openings of the building and the natural light, and the energy efficiency, including the construction integration of the technical supporting systems of the building.
In search for honesty of expression in architecture, the structure supports the framework of design, without constituting a self aim. It always obtains a specific form, an evident morphology. International applications, based on a re-adaptation of the time frames of intervention of the significant areas of the structure and construction in the architectural design, have succeeded in a timeless quality of the built up result through the optimized tuning between the desirable of the functional spaces and the structure, as well as in the suitable formation of the structural elements, parameters that play a decisive role for the function of the structures, the smooth transfer of the loads.

It is my personal belief for the education and the profession, that design is identical to the construction and construction is always design. On this basis the design refers to all scales of the project: From the urban- to the building-scale, up to the detail. Indispensable connecting element is the search for and the iterative resisting realization of the architectural aim, the vision, that interconnects the different scales of design and levels of analysis. In this frame additionally indispensable, perhaps unconsciously controlling element of architecture, at all levels of development constitutes the visual perception and creativity that is encouraged and cultivated from the beginning at academic level. Presently, the hegemony of visual perception and creativity that is encouraged and cultivated from the beginning at academic level. Presently, the hegemony of the directing idea is also the specified objective repression of the focused vision, in opposition to the conscious aim, the perspective depiction.

With the creation of every architectural project, static images are evaluated from the view of the architect, as assembled images of the perfect form. Nevertheless the quality of architectural reality seems to depend completely on the nature of peripheral vision, which creates essentially every built up result or part of it in the wider space. In this frame the conscious perception that is experienced externally of the sphere of focused vision, is equally important as the focused image. On this basis architecture, interwoven with the arts, addresses all human senses simultaneously, maintaining its catholic role in strengthening the sense of real, not in creating positions of more production and imagination. Let’s not forget however, architecture frames and structures experiences and exhibits a special horizon of perception and meaning. In addition to the functional usage of spaces, architecture connects us
with time, it creates natural space without boundaries and it gives endless time in human scale.

The prevailing confusion and appearing difficulty in the development and preservation of a common level of quality for the built up environment emanates in my opinion from an existing majority of possibilities and means [7]. On the other side, even buildings of less importance include henceforth such a technological complexity, that they require a division of specializations at the design level, as well as at the production and the building site. In this frame the architect acquires increasingly at all levels of activities, from the conception of the idea to the construction, a role of coordinator between various disciplines, while the built up result often underlies influences of social, economic, political, technological nature etc. The architect should be in position to move horizontally in the respective fields, to organize, to draw information and data, to apply these in his collective study, to indicate and to coordinate the achievement of the design aims. The profession of architecture constitutes henceforth a complicated mechanism.

Even now contemporary, as regards the modern interpretation of architectural education and practice is, I believe, the message of Walter Gropius in 1949, titled “Issues for discussion for the education of the architect” as regards modern architecture [6]: “(…)

1. The architect should be a coordinator, a man with most wide perspectives and professional ability, whose task is to integrate the various social, technical, economic and morphological problems that are produced in relation to the “constructing”. (…)

2. In the period of specialization, the method has more meaning than the knowledge. The education of the architect should be integral rather than partial. It should essentially include in all its duration everything, gaining thus also in the certainty of understanding, i.e. in the clarity of thought and in the technical opinion of its realization. It should aim at teaching the student that only with creative attitude and independence of opinions, he will reach basic convictions, and not with the acceptance of ready formulations. (…)

3. The basic architectural education is the three-dimension al perception. The method of excitation of interest for visual expression in all plastic arts has firstly to educate the student to observe, to have perception of the distance and to conceive the human scale. Such an education is essential for acquiring the conscious perception of the distance and to conceive the human scale. Such an education is essential for acquiring the conscious

paragwvῆς καὶ φαντασίας. Ας μην ἔχουμε ὑπόμονης τις, ἡ Ἀρχιτεκτονική πλαισιώνει καὶ δομεί εμπειρίες και προβάλλει ἕνα ειδικό ορίζοντα αντιλήψεως καὶ νοήματος. Επιπρόσθετα της λειτουργικής χρήσης των χώρων, ἡ Ἀρχιτεκτονική μας συνδέει με το χρόνο, δημιουργεί φυσικό χώρο χωρίς ὁρία καὶ δίνει ατελείωτο χρόνο σε ανθρώπινη κλίμακα.

Ἡ επικρατούσα σύγχυση καὶ εμφανίζομενη δύσκολα να αναπτυχθεῖ καὶ να διατηρηθεῖ ἕνα κοινό επίπεδο ποιότητας για το δομημένο περιβάλλον προέρχεται κατὰ τὴν ἀπόψη μου από μια υπάρχουσα πλειονότητα δυνατοτήτων καὶ μέσων [7]. Απὸ τὴν άλλη, ακόμη καὶ κτήρια λιγότερης σημασίας εμπεριέχουν πλέον τόση τεχνολογική περιπλοκάτη, που απαιτούν διαχωρισμό ειδικοτήτων, τόσο στο επίπεδο σχεδιασμού, όσο και στην παραγωγή καὶ την οικοδόμηση. Σε αυτά τα πλαίσια ο αρχιτέκτονας αποκτά σε όλα τα επίπεδα δραστηριοτήτων, από τη σύλληψη της ιδέας μέχρι την οικοδόμηση, όλο και περισσότερο ρόλο συνοπτικής μεταξὺ διαφόρων ειδικοτήτων, ενώ τὸ δομημένο αποτέλεσμα υπόκειται συχνὰ σε επιρροές, κοινωνικές, οικονομικές, πολιτικές, τεχνολογικές κ.ά. Ο αρχιτέκτονας πρέπει να είναι σε θέση να διακινείται ορίζοντας στους συναφείς τομείς, να οργανώνει, να αντλεί πληροφορίες καὶ δεδομένα, να τα εφαρμόζει στη συλλογική του μελέτη, να υποδεικνύει καὶ να συντονίζει για την επίπτωση των σχεδιαστικών στόχων. Τὸ επάγγελμα της Ἀρχιτεκτονικῆς αποτελεῖ πλέον ἕνα πολύπλοκο μηχανισμὸν.

Ἀκόμη καὶ τώρα ἐπίκαιρο, μὲ βάση τὴ σύγχυση εἰκόνα ερμηνείας τῆς Ἀρχιτεκτονικῆς πρακτικῆς καὶ εκπαίδευσης, εἶναι πιστεύω τὸ μήνυμα του Walter Gropius τὸ 1949, με τίτλο «Θέματα προς συζήτηση για τὴν εκπαίδευση του αρχιτέκτονα», αναφορικὰ μὲ τὴ σύγχρονη Ἀρχιτεκτονικῆ [6]: «(…)»

1. Ο αρχιτέκτονας πρέπει να είναι ἕνας συνοπτικῆς, ἕνας ἀνθρώπους μὲ εὐρύτατες προσποτικὲς καὶ επαγγελματικὴ ἱκανότητα, του οποίου η δουλειά εἶναι να ενοποιεί τὰ πολλὰ κοινωνικά, τεχνικά, οικονομικὰ καὶ μορφολογικὰ προβλήματα που γεννιοῦνται σε σχέση με τὸ «κατασκευάζειν», (…)»

2. Στὴν εποχὴ τῆς εξειδίκευσης, η μέθοδος ἔχει περισσότερη σημασία απὸ τὴ γνώση, ἡ εκπαίδευση του αρχιτέκτονα πρέπει να εἶναι συνοπτικὴ μᾶλλον παρά τμηματικὴ. Θα πρέπει ουσιαστικὰ να περιλαμβάνει σὲ ὅλη τὴ διάρκεια τῆς αὐτῆς, κερδίζοντας έτσι καὶ στὴ βεβαιότητα της αντιλήψεως, δηλαδή, κατὰ τὴν καθαρότητα τῆς σκέψεως καὶ τὴν τεχνικὴ γνώση γιὰ τὴν πραγματοποίηση τῆς. Πρέπει νὰ αποβλέπει στὸ να διδάσκει τὸ σπουδαστὶ ὅτι μόνο μὲ μια δημιουργικὴ στάση καὶ ανεξάρτητη απόψεως θα φτάσει σε βασικὲς πεποιθήσεις καὶ ορίζει τὴν αποδοχὴ ἕτοιμων διατυπώσεων. (…)»

3. Ἡ βασικὴ Ἀρχιτεκτονικὴ παιδεία εἶναι ἡ τρισδιάστατη αντιλήψη, ἡ μέθοδος τῆς διέγερσης τοῦ ενδιαφέροντος γιὰ οπτικὴ
certainty to organize three-dimensional space and to conceive it simultaneously from the side of structural efficiency, economy of means and harmony of expression. (…)"

The university offers know-how, research and experience: At personal level, timeless and multidisciplinary. In present times that are characterized by a tendency of internationalization, post-development and even more with the danger of cultural uncertainty, the academic space connotes ideally basic, fundamental and constant principles of architecture, in advanced stages, critical thought, research, experimentation for new, innovative proposals. In every development, ethic is sought after equally by the student and the instructor, but as in the practice of the profession, it should primarily be sought after by the architect. In all stages of development, know-how from various areas is applied through the actual design, whereas the uncertainties prevail over the certainties. Something however, that applies timeless as the only method of learning architectural design.

The development of architecture in the last years is directly interwoven with modern architecture, with new materials and construction systems, the environment, at horizontal level in an environment of design, directly supported by the information technology. Nevertheless fundamental knowledge is acquired in principle with the study of applied materials and systems, and it supports the comprehension and analysis of new developments and innovations. Digital architectural design defines from the initial stages of development an integrated environment of treatment, accompanied naturally by the traditional methods of design. The relation of the architect with digital technology depends directly on the balance of parameters, areas of influence and guidance of the design process. In the initial stages it is in these points that emphasis is given within the university area.

The significance of integrated design and the multidisciplinary nature of the area constitute important structural parameters of the undergraduate program of studies in Architecture at the University of Cyprus. The integrated architectural design is supplied each semester with the know-how, the analysis and the experience that is obtained from the individual courses of technological, theoretic and humanistic nature, acting simultaneously as connecting element of reference. On this basis almost all courses refer also to the architectural design and they are taught, aiming at the application. In opposite case, architecture as a course of studies runs the danger of split, if the individual areas of theory were to be taught by the
specialists, non architects, with the danger of non-connection and non-integration in the design context.

In particular the courses correspond to four areas of studies, of Architectural Theory and History, Architectural Communication Media, Architectural Technology and Urban Design, a structure that may not be followed in a way of strict delimitation, it implies however areas of emphasis within the multidisciplinary nature of the studies with resulting integration in the design context. As regards the teaching staff, Schools of Architecture present a mixture of scientific theory and practice, based also on the nature of the profession. This is achieved through the continuous involvement of the academician with the architectural design beyond his research work and the enrichment of the teaching team with colleagues from the practice of the profession, of partial employment, for both, the teaching of individual courses and architectural design.

The society gives to the architects of today the confidence and responsibility for the development and realization of the built up environment. The academy gives to the architects of tomorrow a fundamental basis to be able to meet the requirements of the profession of tomorrow, and not only. It is a place, where fundamental knowledge is provided, in advanced stages, as well as the possibility for analysis, experimentation, innovation, free criticism and improvement of the profession. Today the process and the methodology are those focused within the architectural design. Tomorrow the realization of the designs, as Rafael Moneo also declared in 1985, “brings the building of the architect in a situation of complete solitude” [2]. The internal world of architecture is henceforth reflected in a condition of silent, or even non silent, but intact communication.

tην εφαρμογή. Σε αντίθετη περίπτωση η Αρχιτεκτονική σαν κλάδος σπουδών διατρέχει τον κίνδυνο της διάσπασης, εάν οι μεμονωμένοι τομείς θεωρίας διδάσκονταν από τους ειδικούς, μη αρχιτέκτονες, με τον κίνδυνο της μη αλληλοσύνδεσης και ενοποίησης σε σχεδιαστικό πλαίσιο.

Συγκεκριμένα τα μαθήματα αντιστοιχούν σε τέσσερις τομείς σπουδών, της Αρχιτεκτονικής θεωρίας και Ιστορίας, Αρχιτεκτονικών Μέσων Επικοινωνίας, Αρχιτεκτονικής Τεχνολογίας και Πολεοδομικού Σχεδιασμού, μια δομή που δεν πρέπει να ακολουθείται με τρόπο αυστηρής οριοθέτησης, υποδηλώνει όμως περιοχές εμβάθυνσης μέσα από την πολυκλαδική φύση της σπουδής με καταλήγουσα ενοποίηση σε σχεδιαστικά πλαίσια. Από πλευράς διδακτικού προσωπικού, οι Σχολές Αρχιτεκτονικής παρουσιάζουν ένα μείγμα επιστημονικής θεωρίας και πρακτικής, βάσει και της φύσης του επαγγέλματος. Αυτό επιτυγχάνεται μέσω της συνεχιζόμενης εμπλοκής του ακαδημαϊκού πέραν του ερευνητικού έργου με τον αρχιτεκτονικό σχεδιασμό και του εμπλουτισμού της ομάδας διδασκόντων με συνεδρίους από την πρακτική του επαγγέλματος, μερικής απασχόλησης, έως για τη διδακτικά μεμονωμένων μαθημάτων όσο και αρχιτεκτονικού σχεδιασμού.

Η κοινωνία δίνει στους Αρχιτέκτονες του σήμερα την εμπιστοσύνη και την ευθύνη για την ανάπτυξη και υλοποίηση του δομημένου περιβάλλοντος. Η ακαδημία δίδει στους αρχιτέκτονες του αύριο τις θεμελιώδεις βάσεις για να ανταποκριθούν στις απαιτήσεις του επαγγέλματος του αύριο, και όχι μόνο. Είναι ένας χώρος όπου παρέχονται θεμελιώδεις γνώσεις, σε προχωρημένα στάδια η δυνατότητα για ανάλυση, πειραματισμό, καινοτομία, ελεύθερη κριτική και βελτίωση του επαγγέλματος. Σήμερα η πορεία και η μεθοδολογία είναι αυτά που εστιάζονται στον αρχιτεκτονικό σχεδιασμό. Αύριο η υλοποίηση των σχεδίων, όπως δήλωσε και ο Rafael Moneo το 1985, «φέρει το κτίριο του αρχιτέκτονα σε μια κατάσταση πλήρης μοναξιάς» [2]. Ο εσωτερικός κόσμος της αρχιτεκτονικής αντικατοπτρίζεται πλέον σε κλίμα σιγανής ή μη σιγανής, όμως αυτούσια επικοινωνίας.
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The design of buildings with advanced technological capabilities is based on an integrated architectural framework of development, as this results from the main fields of structure, construction and energy efficiency. Representative projects may comprise of buildings based on the industrialization and standardization of the construction elements, or with large structural spans and minimized mass. The required properties of structural adaptability due to non constant conditions of functionality or external loading, constituted in the respective semester a significant horizontal component of development. The educational aims serve the provision of technical knowledge through a series of lectures, the typological analysis of structures and the design of a building structure with properties of adaptability under functional requirements. The development and analysis of the structures took place at the Archimedes Research Centre for Structural and Construction Technology. The course was attended by graduate students of Civil Engineering.

The required kinetic building structure supports a Computational Center of the Faculty of Engineering of the University of Cyprus, a total area of 300 m². The development of the steel structure aims at the achievement of minimized self weight and adequate static and dynamic behavior in connection to the remaining design parameters and the morphology of the building. The construction design of the elements and connections favors the possibility of erection and reuse of the building at another site.

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Κινητικό Κέντρο Υπολογιστών Πανεπιστημίου Κύπρου, ΧΕ 2006/07 Παμπόρης Γιώργος, ΧΔημητρίου Μαρία, Παπαδοπούλου Χριστίνα

Kinetic Computational Center of the University of Cyprus, FS 2006/07 Pamboris George, Hadjidimitriou Maria, Papadopoulou Christina
“Building Technology” – joint course for students of Architecture and Civil Engineering – refers to the integrated building design with emphasis on the basic fields of structure, construction and energy efficiency. Horizontal component comprises the design itself and the consistent gradation of the design scale, from the capture of the architectural concept up to the construction detail in 1:1. The teaching is based on the provision of technical knowledge through a series of lectures in the aforementioned fields and the integrated design of a required building. The design is developed at the Archimedes Research Center for Structural and Construction Technology. In the Spring Semesters 2005/06 and 2006/07, the course was attended by undergraduate students of the Department of Civil and Environmental Engineering.

In the Spring Semester 2005/06, the required Laboratory of Structural Engineering of the University of Cyprus was proposed in an area of the new University Campus, in the wider Nicosia district. The total area of the building amounts to 1200 m², of which 1000 m² accommodate the laboratory areas themselves.

In the Spring Semester 2006/07, the design of an Exhibition Center of the University of Cyprus in the centre of Nicosia was proposed, in the area within the old GSP stadium. The building unit has a total area of 1000 m², including 600 m² of the main exhibition area.

The design proposals refer to integrated functional buildings that are composed of element parts of the steel structure and envelope. The development and the construction design of the load bearing and non load bearing elements and connections favor the standardization of the structure and the possibility of perspective extension of each building. The building façade in combination with the energy concept aims at securing visual transparency based on the proposed functionality of the spaces and comfort of the users in the interior of the building.
IBK2, University of Stuttgart, Glass tubes, Schott
IBK2, Πανεπιστήμιο Στουτγάρδης, Σωλήνες Γυαλιού, Schott
Exhibition Center of the University of Cyprus, SS 2006/07  Georgiou Gregoria, Iakovidou Irene, Michael Alexandra, Charalambous Evi
Εκθεσιακό Κέντρο Πανεπιστημίου Κύπρου, ΕΕ 2006/07  Γεωργίου Γρηγόρια, Ιακωβίδου Ειρήνη, Μιχαήλ Αλεξάνδρα, Χαραλάμπους Εύη
There are at least four questions which need to be addressed:

- During this period there have been over 20 international conferences on the subject, numerous symposia and PhDs, dedicated international journals, books, articles and other publications. What has been the major contribution of this research to our understanding of people - environment relationships from both the theoretical and practical perspectives? Has this increased knowledge resulted in changes in perspectives? Has this increased knowledge resulted in changes in the teaching and practice of architecture over the past 38 years. In pedagogic terms, these reflections are important in educating and training a student of architecture in a contemporary and changing society here and abroad.

- The aim of this paper is to critically evaluate the impact that research on the subject fundamental to their education. This is supported by annual feedback studies on a longitudinal basis, as well as many examples of students putting this knowledge in practice when they qualify.

- The aim of this article is to provide the reader with a critique based on the knowledge and experience of teaching Architectural Psychology to architecture students since the subject was born in 1969 at the House of Black Dell in Dalandhui, Scotland and the first conference proceedings were published by the RIBA (Royal Institute of British Architects) and edited by David Canter (1970).

- There are at least four questions which need to be addressed:
1. Have research, conferences, books and journals contributed to an increase in our knowledge on the subject?

2. Has this knowledge been communicated to designers on the built environment as witnessed through the practice of architecture?

3. Has there been a change in attitudes towards a more humane architecture, after putting this research knowledge into the educational curriculum?

4. Have professional groups and institutions such as local authorities and professional organisations such as the RIBA and the ARB influenced legislation and directives on such issues as accessibility, disability, crime prevention, human rights, and sustainable development?

In 1969 there were very few books from mainstream psychology or sociology which designers found inspiring or relevant to the practice of their profession. Richard Gregory’s (1998) Eye and Brain, first published in 1966, was one such book from experimental psychology, as was Michael Argyle’s (1997) The Psychology of Interpersonal Behaviour published in 1967, which considered psychological needs and motivation in social psychology. Ervin Goffman’s (1963) Behaviour in Public Places was another major contribution from Sociology. The Hidden Dimension, by anthropologist Edward Hall (1966) was another such book discussing ethological issues, proxemics and cross-cultural differences in space requirements. Nico Tinbergen, John Calhoun, Robert Ardrey, and Konrad Lorenz were the predecessors of Oscar Newman and Alice Coleman in the ’70s, ’80s and ’90s, discussing the modern equivalents of territoriality and personal space within the new concepts of defensible space, surveillance and vandal-proof architecture, (2007). Roger Barker’s (1963) pioneering work in ecological psychology in his book The Stream of Behaviour, Kevin Lynch’s (1960) The Image of the City, and Terence Lee’s work on mental mapping applications in Psychology and the Environment (1976) were significant landmarks of what was to follow. In the field of experimental aesthetics, Daniel Berlyne’s (1971) Aesthetics and Psychobiology, as well as Rikard Küller’s (1971) Semantic Model for Describing Perceived Environments came after the first conference.


Schools of architecture introduced the subject in various guises of the didascalia of the antikeimeno of the Psychologiá tis Architects, from the stigmí που αυτό πρωτοεμφανίστηκε το 1969, στο House of Black Dell του Ντάλαντο της Σκοτίας, με την εκδοχή των πρακτικών του πρώτου συνεδρίου από το RIBA (Βασιλικό Ινστιτούτο Βρετανών Αρχιτέκτων) σε επιμέλεια David Canter (1970).

Υπάρχουν τέσσερα τουλάχιστον ερωτήματα που πρέπει να συζητηθούν:

1. Η έρευνα, τα συνεδρία, οι επιστημονικές εκδόσεις (μελέτες και περιοδικά) έχουν πράγματι συμβάλει στην εξέλιξη του συγκεκριμένου γνωστικού πεδίου;

2. Κρίνοντας από το δομημένο περιβάλλον γύρω μας και την εφαρμοσμένη αρχιτεκτονική, μπορούμε πράγματι να πάμε πόως οι άνθρωποι που ασχολούνται με το αρχιτεκτονικό σχέδιο έχουν γίνει συμμετέχοντα στο σύνολο της γνώσης που συνιστά αυτό το πεδίο;

3. Εφόσον γνώση που προέρχεται από την έρευνα αυτή συμπεριλήφθηκε στο ακαδημαϊκό πρόγραμμα σπουδών, συνελήφθη πράγματι μια αλλαγή προς την κατεύθυνση μιας αρχιτεκτονικής με πιο ανθρώπινο χαρακτήρα;

4. Οι επαγγελματικές ενώσεις, οι θεσμοί, οι πράκτορες και οι ιδιώτες συμπεριλαμβανομένων των τοπικών αρχών και των επισήμων οργανισμών, όπως οι RIBA και ARB (Συμβουλευτικοί Αρχιτεκτόνων Μητρώου Εγγραφής), κατέφεραν πράγματι να επηρεάσουν τη νομοθεσία και τις επίσημες οδηγίες σχετικά με ζητήματα όπως η προσβάσιμητη, η ασφάλεια, η πρόληψη του εγκλήματος, τα ανθρώπινα δικαιώματα και η αειφόρος ανάπτυξη.

To 1969 υπήρχαν ελάχιστα βιβλία που καταπιάνονταν με τις τότε κυρίαρχες τάσεις στην ψυχολογία και την κοινωνιολογία και αποτελούσαν τεταμένο παράγοντα στην εκπαίδευση των αρχιτεκτόνων που ασχολούνταν με το αρχιτεκτονικό σχέδιο, ή που οι ίδιοι έκριναν ότι το αποτέλεσμα της ψυχολογικής έρευνας υπήρχε σε περιοδικά και σε επιμέλεια David Canter (1970) The Image of the City, στο πεδίο της κοινωνιολογίας ήταν και το βιβλίο του Ervin Goffman και το καταπιάνονταν με τις ψυχολογικές ανάγκες ως κίνητρο και τη σημασία της ψυχολογικής χαρακτήρας;
ranging from human aspects of design to courses in architectural psychology or as part of history and theory. Terence Lee and David Canter moved from St Andrews and Strathclyde to the University of Surrey to offer the first MSc course in environmental psychology outside the context of a school of Architecture. In Lund, Sweden we saw the first Department of Theoretical and Applied Aesthetics formed, which hosted the third international conference on the subject. In fact, the development of the subject can be seen in the 21 conferences on architecture psychology, widened in 1988 to IAPS (International Association for People-Environments Studies) an organisation established to promote research and communication of these concerns about people and environments in theory and practice. Future historians will be able to assess objectively the contribution of this subject throughout this period within the social sciences as well as its impact on the design professions. At this early stage, one can only undertake a “content analysis” of its development reflected in the papers presented and published at the various conferences, as well as the title themes of these events.

The location and theme of these conferences are given in Table 1 and the atmosphere of several of these gatherings is illustrated vividly by the best-known architectural cartoonist, Dr Louis Hellman, throughout this article.
<table>
<thead>
<tr>
<th>Year</th>
<th>Location</th>
<th>Event</th>
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| 1969 | Dalandhui, Scotland | (AP1) Architectural Psychology: "Courtship in the House of Blackdell"
| 1970 | Kingston, London | (AP2) Architectural Psychology: "Apprehension in the Convent"
| 1973 | Lund, Sweden (May) | (AP3) Architectural Psychology: "Revitalised Hope in Diversity" (and Herring)
| 1973 | Surrey, England (October) | (AP4) Psychology and the Built Environment: "Psychology First, Architecture Second"
| 1975 | Sheffield, England | (AP5) Architectural Psychology: "Education, Participation and Carl Marx"
| 1976 | Strasbourg, France | (AP6) Space Appropriation: "Space Appropriation – Misappropriation"
| 1979 | Louvain La Neve, Belgium | (IAPC 7) Conflicting Experiences of Space: "Conflicting Experiences of Space and Place"
| 1982 | Barcelona, Spain | (IAPS 7) Home-Environment. Man-Environment: Qualitative Aspects "Midnight Cocktails in Gaudi’s Park Guell"
| 1984 | Berlin, Germany | (AP8) Perspectives on Environment and Action "Talking to Plants and Mother Nature"
| 1986 | Haifa, Israel | (IAPS 9) Environments in Transition
| 1988 | Delft, Holland | (IAPS 10) Looking Back to the Future
| 1990 | Ankara, Turkey | (IAPS 11) Culture-Space-History
| 1992 | Halkidiki, Greece | (IAPS 12) Socio-environmental Metamorphoses "Late Night Confessions in Marmaras"
| 1994 | Manchester, England | (IAPS 13) The Urban Experiences
| 1996 | Stockholm, Sweden | (IAPS 14) Evolving Environmental Ideals - ways of life, values, design practices
| 1998 | Eindhoven | (IAPS 15) Shifting Balances – Changing Roles in Policy, Research and Design
| 2000 | Paris, France | (IAPS 16) Metropolis: Cities, Social Life and Sustainable Development Inter-multi-trans disciplinarity
| 2002 | Corunna | (IAPS 17) Globalization & the new millennium
| 2004 | Vienna, Austria | (IAPS 18) Coral Anniversary
| 2006 | Alexandria, Egypt | (IAPS 19) Environmental health and sustainable development

Table 1 – Architectural Psychology (AP) and (IAPS) Conferences 1969 – 2006
In addition to these books and conference proceedings, there have been many papers in the psychological and the architectural journals with specific themes on the subject. The Journal of Environmental Psychology was first published in the UK and Environment & Behaviour in the USA; the Architectural Psychology Newsletters, published by Sue-Ann Lee at Kingston followed by the IAPS Bulletins, have kept researchers in touch with each other over the years. International organisations such as IAPS, EDRA (Environmental Design Research Association), PAPER (Australasia Association) were established. In the USA, The Journal of Architecture and Planning Research won publishing awards and Raymond Lifchez’s (1981) special issue entitled Designing with People in Mind, was followed by his book Rethinking Architecture (1987), highlighting his concern about accessible architecture to disabled groups.

The verdict on the first question raised at the beginning of this paper is that a considerable amount of new knowledge and research has been accumulated over the years in different guises in books, conference proceedings and scientific articles. This increased knowledge was in the areas of the psychology of space and place, perception, colour and light, aesthetics, participation and human needs, cross cultural studies, Post Occupancy Evaluation, proxemics, accessibility issues, as well as sustainable development in its various aspects.

The second question which needs to be addressed is how this knowledge has been communicated to designers practising their profession and to students of architecture aspiring to influence our future living environments? When we look at the real world of architecture, a considerable amount of this research has gone unnoticed. Some architects are sceptical about its value in design and, as a consequence, design awards are given primarily for imagination.
and originality at the expense of the users’ health and well-being. Niels Prak’s (1984) Architects, the Noted and the Ignored provides us with a useful analysis of the self-image and self-esteem of the professional as opposed to the user. However, a growing number of established and up-and-coming architects are offering us hope for the future when they combine both originality and aesthetics with an understanding and catering for people’s needs. In some of these cases, the architect puts their clients’ needs at the top of their list.

Ralph Erskine is one such architect; in the Pågens bakery in Malmo, Sweden, he has considered the occupants’ psychological needs such as the balance between “contact” and “privacy” as well as “identity” and “personalisation”, while remaining very much aware of the occupants’ differences in terms of personality and values, as well as the need to change the open-plan office landscape for various activities, whether co-operative or competitive. One can see this genuine concern about the users in his sketches in Architecture for People (1980), deeply aware of research in proxemics, personal space, social distance and territoriality, as well as the social psychological literature on human needs. His comment in the sketches referred to above, “that either buildings nor furniture solve social or psychological problems, but hopefully they can help”, shows that he has grasped the concept of “architectural determinism” just right (i.e. he does not make extravagant claims nor does he reject the role of the creative and caring architect in improving and facilitating more humane environments).

This is where Alice Coleman in Utopia on Trial (1985) got it wrong. While following and replicating the work of the late Oscar Newman (1972) on defensible space and surveillance, she has overstressed design improvement as the sole factor for health and well-being. In the “πραγματικό κόσμο”, τον κόσμο της καθημερινότητας, γύρω μας, θα διαπιστώσουμε πως ένα μεγάλο μέρος των συμπερασμάτων αυτής της έρευνας έχει περάσει απαρατήρητο. Ένας αριθμός αρχιτεκτόνων εξακολουθεί να αντιμετωπίζει με δυσπιστία τη σημασία για τον αρχιτεκτονικό σχεδιασμό και, κατά συνέπεια, τα αρχιτεκτονικά βραβεία τιμούν κυρίως τη φαντασία και την πρωτοτυπία σε βάρος της υγείας και ευημερίας του ατόμου-χρήστη του εκάστοτε αρχιτεκτονήματος. Η μελέτη του Neil Prak (1984) με τίτλο Architects, the Noted and the Ignored, προσφέρει μια χρήσιμη ανάλυση του τρόπου, με τον οποίο ο επαγγελματίας αρχιτέκτονας αντιλαμβάνεται την εικόνα του εαυτού του και θεμελιώνει την αυτοεκτίμησή του έναντι του χρήστη. Εντούτοις, ένας αλλόιον αυξανόμενος αριθμός καθιερωμένων αλλά και νεοεμφανιζόμενων αρχιτεκτόνων προσφέρουν ελπίδα για το μέλλον, καθώς κατανικούν να συνδυάζουν στο έργο τους την πρωτοτυπία και την αισθητική με μια προσπάθεια κατανόησης και εκατογοικής των αναγκών του χρήστη. Σε κάποιες από αυτές τις περιπτώσεις, ο αρχιτέκτονας δίνει απόλυτη προτεραιότητα στις ανάγκες του πελάτη του.
Refurbishment, management, security and landscape improvements could be just as important, depending on each particular housing estate, whether high-rise or not. Even Oscar Newman (1987) commented that “Utopia on Trial” does not pay sufficient attention to social factors interacting with the physical as causes of housing dysfunction”. As for her comment that Utopian design “have tipped the balance sufficiently to make criminals out of potentially law-abiding citizens and victims out of potentially secure and happy people” (Coleman, 1985 pp15) is emotive language which does not do justice to an otherwise important piece of research using unobtrusive measures. By getting the balance of the concept of architectural determinism wrong, however, she invited criticism discrediting the research. She also fails to stress of the concept of architectural determinism wrong, however, she

The point that in the final analysis it is not so much the actual development which contributes to the residents’ well-being. The participation and feeling on involvement of residents in the design process which contributes to the residents’ well-being.

There are other architects who should be mentioned in this context who have contributed through their architecture and writing to designing with people in mind.

Christoph Schulten’s sensitive participation projects in Aachen and Bavaria; Walter Segal’s projects in Lewisham and Stuttgart University self-build housing for students; Phil Bixby’s work with unemployed groups in the north of England; Herman Hertzberger’s attempt to get people involved with their surroundings, each other and themselves; Lucien Kroll’s (1980) motto “no inhabitant participation, no plans” and the late Charles Moore’s (1980) dictum that “buildings, if they are to succeed, must be able to receive a great deal of human energy and store it and even repay it with interest” are genuine non-architectonic attempts to consider, interpret and translate in their own way the concepts of human needs, aesthetics, health and well-being.
ing at their drawing boards. These days some of these concepts are referred to as ‘sustainable architecture’

However well briefed, well prepared and motivated the architect may be, there will usually be problems and conflicts which cannot easily be solved. A case in point is the exemplary Hartcliffe project at Bristol carried out in 1969. In this pioneering experiment the architects, clients and psychologists worked together on the proposed move of an industrial and commercial complex of Wills Tobacco Co from the centre of Bristol to the Hartcliffe suburb. The aim of the experiment was to collect the people’s reactions to the proposed move, their anxieties and feelings, and to consider their views on amenities and working conditions. According to Brian Wells, the aim was “not only to promote the efficiency but to promote happiness and add something to the quality of people’s working lives” (Wells, AAQ, Architectural Association Quarterly 1969). The pilot study, the interviewing, the structural questionnaires and the objective analysis of data used the latest scientific techniques. However in translating the company’s desire for a single, communal dining facility (to bring together all grades of factory and office workers) as employees wanted the hierarchy of dining facilities that they were used to. Architects, clients and psychologists had to meet again, re-educate themselves and consider how changing values in society are also tempered with the users’ practical wishes.

Even in the best intended experiments however there is no feedback on how successful these experiments are. Architectural journals should have a section on these. Fortunately, in the above experiment, a second-year architectural student, Jonathan Loxton, went back, as part of his Environmental Psychology course, to Hartcliffe 16 years later and found that the “caring company” was not just an image but that the users were genuinely happy about working at the Wills factory. They would have liked to contribute also to the visual aesthetics of the exterior of the factory, which, although won design awards, they thought looked like a “rusty biscuit tin”. Maybe another experiment to investigate the gap in taste between

1973 Lund, Sweden (May) “Revitalised Hope in Diversity” (and Herring)

Παρ’ ολά αυτά, όσο καλά ενημερωμένος και προετοιμασμένος και αν είναι ο αρχιτέκτονας, όσο ευγενείς και αν είναι οι προθέσεις του, συχνά θα υπάρξουν προβλήματα και συγκρούσεις που δεν επιδέχονται εύκολης λύσης. Μια τέτοια περίπτωση είναι το παραδελεμπτικό έργο στην περιοχή του Χάρτκλιφ, στο Μπρίστολ της Αγγλίας, που πραγματοποιήθηκε το 1969. Πρόκειται για ένα πρωτοποριακό πείραμα, το οποίο στηρίχτηκε στη συνεργασία των αρχιτεκτόνων, των πελατών τους και μιας ομάδας ψυχολόγων με στόχο την προτεινόμενη μεταφορά του βιομηχανικού και εμπορικού συγκροτήματος της εταιρείας Wills Tobacco από το κέντρο του Μπρίστολ στο προάστιο του Χάρτκλιφ. Το πείραμα απέβλεπε στην καταγραφή των αντιδράσεων του κόσμου στην προτεινόμενη μεταφορά, των προβληματισμών και συναισθημάτων τους σχετικά με το έργο, ενώ σκοπός του ήταν να συμπεριλάβει στη διαδικασία του σχεδιασμού τις απόψεις τους σχετικά με τις συνθήκες που θα έπρεπε να επικρατήσουν στο χώρο της εργασίας τους και τις ανέσεις που αυτοί θα έπρεπε να διαθέτουν. Σύμφωνα με τον Brian Wells, στόχος του πειράματος «δεν ήταν να διασφαλίσει μόνον τη λειτουργικότητα του κτιρίου, αλλά και την ευημερία των εργαζομένων – να προσθέσει κάτι στην ποιότητα της ζωής τους στον χώρο της εργασίας» (Wells, AAQ, Architectural Association Quarterly, 1969). Οι πιλοτικές μελέτες, οι συνεντεύξεις, τα ερωτηματολόγια σχετικά με τη κατασκευή και η αντικειμενική άναλυση των δεδομένων που συλλέχτηκαν στηρίχτηκαν όλα στις τελευταίες επιστημονικές μεθόδους. Εντούτοις, στην προσπάθεια να εφαρμοστεί στην πράξη η επιθυμία της εταιρείας για έναν εναίσχυντο, κοινόχρηστο χώρο οίκων (που θα συγκέντρωσε όλες τις βαθμίδες του προσωπικού της εταιρείας, από τους εργάτες στον χώρο της παραγωγής ως τα στελέχη των γραφείων), οι αρχιτέκτονες, οι πελάτες τους και οι ψυχολόγοι έπρεπε να συναντηθούν ξανά και να μελετήσουν εκ νέου τα δεδομένα, μιας και η επιθυμία των εργαζομένων να διατηρήσουν την καθιερωμένη ιεραρχία στους χώρους οίκων τους ανάγκαζε να λάβουν υπ’ όψη το γεγονός ότι η αλλαγή στις κοινωνικές
the professional and the user is in order. However encouraging these examples may be of architects designing with people in mind, by far the best way of communicating the new body of knowledge is through education. Architectural students may see and study some of these successful architectural experiments and a few may be inspired and attempt to emulate their masters. The opportunity of critically evaluating the validity and reliability of their work in formal teaching and studio projects is a good practice and to ignore it, is to perpetuate the naïve view that architecture is only an art at the expense of articulating form which reflects human life and emotion.

By far the main contribution of psychology in architectural education is in the first three years of the course and that once the groundwork has been laid down it does not matter what formal course in psychology or human factors the student pursues afterwards. The fact is that by this time all the students of architecture have been instilled with a “psychological eye” and are better equipped to search for those aspects they have not considered in their designs before. Pedagogically this is a very difficult test to quantify but it can be seen in the exhaustive feedback studies over the past 39 years where Psychology has been evaluated amongst the best rele-

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European Sustainable City Award for Oslo in 2002; the work of Phil Bixby enabling poor families in the north of England to build their own homes by extending his traditional architectural role; the work of Chris Trickey who for the past 20 years has been designing with people in mind in the south of England. In his firm’s latest project, designing the Police Headquarters in Hertfordshire in 2005, he worked with an architectural psychologist to include in his design the latest research in colour and light psychology. Examples from non-Oxford Brookes graduates include Omretta Romice’s ongoing successful participation experiments in Glasgow and Roderick Laurence full scale simulation experiments in Switzerland. So in answer to the third question raised in the beginning of this article, this subject can change the attitudes of the new generation of architects, and has done so where it was taught.

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1988 Delft, Holland Looking Back to the Future
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could have in architectural education, there is little evidence that it is taught, let alone integrated within the architectural curriculum in the UK. Amber Beare (1993) carried out the only survey of the 36 schools of architecture in the UK with a 60% return rate. Beare found that only parts of the subject are covered – human factors, colour theory and space perception being the most popular topics. The only other survey of its kind is a cross-cultural comparison between Sweden and England on colour research in architectural education by Janssens (Lund) and Mikellides (Oxford) in 1998. A total of 448 students in five Swedish and British universities took part in testing the students' knowledge on colour psychology, their actual knowledge based on the coverage of the subject in lectures and studios was very poor in both countries. We think these results are typical and represent the situation in other schools of architecture in both countries.

The architect who has had no training in psychology or human aspects of design as part of his/her education will either completely dismiss research in architectural psychology as being of no practical usefulness whatsoever (because he/she fails to understand it), or may view part of it with unrealistic enthusiasm, awe, or even see it as panacea for the complex problems of modern society. This is aptly illustrated by the Government's eagerness to apply Alice M. (Lant) – Mikellides (Oxford). In the year, a topic examined the meanings of the questionnaires, personal and professional views, research and education, perceptions and experiences of the students. The responses showed that the majority of the respondents felt that the teaching of architectural psychology is important for architects and other professionals. The results are encouraging, as they indicate that the teaching of architectural psychology is necessary and important for the development of the profession. The teaching of architectural psychology is an integral part of architectural education, and should be included in all courses in architectural design. The teaching of architectural psychology should be based on the principles of human factors, colour and light, and spatial perception. The teaching of architectural psychology should be integrated into the architectural curriculum, and not be taught as a separate subject. The teaching of architectural psychology should be improved, and should be given more importance in architectural education.
we should move some of the emphasis away from architectural psychology towards a psychological architecture.

The concepts of accessibility and disability issues, fire behaviour (by the late Jonathan Simes), housing guidelines including Ingrid Gehls’ psychological needs of identity, control, security, experience and pleasantness as well as different concepts of participation can be easily related and integrated in studio projects. (Mikellides 1980). The subject of aesthetics entails different philosophical, psychological and practical considerations; however difficult, it can be tackled immediately in the first year of architectural education in a sensible and sensitive way by looking at beautiful elements and structures in nature and the built environment – a successful project run over the past 25 years. By appealing to nature which has been in the design business for one hundred million years, as well as experiencing nature during the changing of the autumn colours we should move some of the emphasis away from architectural psychology towards a psychological architecture.

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Students also see how these ideas have been used since antiquity; here Vitruvius’s (1960) concepts of commodity firmness and delight (40 BC) become not only relevant but link with the past to the inquiring architectural mind: the training in geometry and philosophy, the golden section and theories of proportion, astronomy and especially music where rhyme and contrast are an integral part of a musical composition. Perhaps one needs to go back to basics. Students also see the relevance of poetry and Gerald Manley Hopkins’ “platonic dialogue”, Andy Goldsworthy, Victor Vasarely and the methods of structuralism. They also study Küller’s model of aesthetic experience relating the concepts of complexity and unity to physiological arousal. Architectural examples proposed by P. Smith’s books Architecture and the Principle of Harmony (1980) and the Dynamics of Delight (2003) are also very relevant.

The outstanding work on the subject by evolutionary biologist Nicholas Humphrey is the backbone of this project. During this period it has been consistently considered by students as one of the best projects they have in Year 1, (See Table 2).

### Satisfaction Scores for Year 1 Studio Projects (1985-96)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psych of Aesthetics</td>
<td>5.63</td>
<td>0.27</td>
<td>5.3</td>
<td>6</td>
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<td>Landscape / Canal</td>
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<td>0.6</td>
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<td>6.2</td>
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<tr>
<td>Materials / Design &amp; Make</td>
<td>5.5</td>
<td>0.67</td>
<td>4.4</td>
<td>6.1</td>
</tr>
<tr>
<td>Town House / Barn</td>
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<tr>
<td>Paper structure</td>
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<td>5.7</td>
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<tr>
<td>History &amp; Theory</td>
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<td>5.1</td>
<td>5.4</td>
</tr>
<tr>
<td>Express Quality Study / Sp&amp;Me</td>
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<td>0.51</td>
<td>4.7</td>
<td>5.7</td>
</tr>
<tr>
<td>Urban Design</td>
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<td>4.4</td>
<td>5.6</td>
</tr>
<tr>
<td>Estate / People&amp;Plan</td>
<td>4.92</td>
<td>0.26</td>
<td>4.5</td>
<td>5.2</td>
</tr>
<tr>
<td>Self Portrait / Intro</td>
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<td>0.36</td>
<td>4.3</td>
<td>5.4</td>
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<tr>
<td>Container / Precedent</td>
<td>4.76</td>
<td>0.48</td>
<td>4.2</td>
<td>5.5</td>
</tr>
<tr>
<td>Day / OASS / Cartoon</td>
<td>4.6</td>
<td>0.22</td>
<td>4.5</td>
<td>5</td>
</tr>
<tr>
<td>Full Size Detail / 3D</td>
<td>4.13</td>
<td>0.12</td>
<td>4</td>
<td>4.2</td>
</tr>
<tr>
<td>Sketch / Oxford Mapping</td>
<td>4.08</td>
<td>0.71</td>
<td>3.2</td>
<td>4.7</td>
</tr>
</tbody>
</table>

Table 2: Longitudinal Mean Educational Satisfaction scores (1985-96)

Psychology of Aesthetics Project has been consistently evaluated amongst the best three studio projects over the period of 1985 to 1996 and has also topped the list on educational satisfaction based on the average evaluation scores over the same period. This table is based on formal student feedback obtained anonymously at the end of each academic year.

Even more encouragingly, students use the concepts of synchronic and diachronic rhyme throughout their five years at School. These concepts are now part of the architectural vocabulary and were the topic of Gerald Manley Hopkins «πλατωνικού διαλόγου», τη σημασία του έργου των Andy Goldsworthy, Victor Vasarely και των μεθόδων του προγράμματος. Στο διάστημα των εκκοσμήσεων αυτών ετών, οι φοιτητές θεωρούν αυτό το πρόγραμμα ένα από τα καλύτερα του πρώτου έτους των σπουδών τους (βλ. Πίνακα 2).

<table>
<thead>
<tr>
<th>Μαθήματα</th>
<th>Μέσος άρος</th>
<th>Απόκλιση</th>
<th>Min</th>
<th>Max</th>
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<tr>
<td>Τοπίο / Κανάλια</td>
<td>5.6</td>
<td>0.6</td>
<td>4.9</td>
<td>6.2</td>
</tr>
<tr>
<td>Υλικά / Σχεδιασμός &amp; Κατασκευή</td>
<td>5.5</td>
<td>0.67</td>
<td>4.4</td>
<td>6.1</td>
</tr>
<tr>
<td>Αστική κατοικία / Κατοικία της Υπαίθρου</td>
<td>5.46</td>
<td>0.21</td>
<td>5.1</td>
<td>5.6</td>
</tr>
<tr>
<td>Χάρτινη κατασκευή</td>
<td>5.44</td>
<td>0.29</td>
<td>5</td>
<td>5.7</td>
</tr>
<tr>
<td>Ιστορία &amp; Θεωρία</td>
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<td>0.12</td>
<td>5.1</td>
<td>5.4</td>
</tr>
<tr>
<td>Express Qual / Quality Study</td>
<td>5.13</td>
<td>0.51</td>
<td>4.7</td>
<td>5.7</td>
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<tr>
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<td>Οικιστικά συγκροτήματα / Ανθρώποι&amp;Σχέδια</td>
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<td>5.2</td>
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<td>Αυτοπροσωπογραφία / Εισαγωγή</td>
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<td>0.36</td>
<td>4.3</td>
<td>5.4</td>
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<tr>
<td>Δοχείο / Προηγούμενο (Precendent study)</td>
<td>4.76</td>
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<td>Day / OASS / Cartoon</td>
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<td>0.12</td>
<td>4</td>
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<tr>
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<td>4.08</td>
<td>0.71</td>
<td>3.2</td>
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It is one thing to know about psychological needs and even to be able to recite them from memory and another thing to isolate the relevant ones for a defined problem within a particular social or cultural context. Knowing about human needs is an important first step, understanding these needs is a vital second, but evoking and expressing them through their translation in built form is a culminating third. It is at this stage that the creativity and aesthetic sensitivities that is demanded of the architect becomes the critical factor. At this point, the architect may need to be inspired by nature and art, or go out to learn from experience what natural structures people find beautiful, as well as from architectural precedent and Post Occupancy Evaluation studies. Then he or she may return to the drawing board and try to emulate these structures in design not by naively mimicking natural objects but by being inspired by the relations between the artificial elements exhibiting the felicitous rhymes of natural beauty. It is in this marriage of interests, and in this understanding, that the architect’s truly creative role resides.

The reader interested in research based projects in Year 2 undergraduate course, can obtain from the address above, a specially prepared CD on the subject. A visit to the website http://www.brookes.ac.uk/schools/social/psych/year2projects.html will show the titles of over 1400 Environmental Psychology reports carried out since the early 1970s. One can observe the main areas of students’ interests (see Figure 1 below) as well as identify changes their interests during this period and compare them with those in international Journals.

Finally in answer to the fourth question raised in the beginning of this article, there is no better time than now to consider the impact of this research on human needs and aesthetics, to the design of the architect role in society are the actual terms used. Nor is it a coincidence that the RIBA strategic study carried out in the UK by a previous President, Frank Duffy in the late ‘90s sees that the top eight requirements are about these aspects. Aesthetics, human sciences, social factors, preparing briefs, human comfort, users’ needs, methods of investigation and the architect role in society are the actual terms used. Nor is it a coincidence that the RIBA strategic study carried out in the UK by a previous President, Frank Duffy in the late ’90s sees that the top priority for change perceived by staff and students in schools of architecture is “a greater focus on design from human/social needs” (RIBA Report to the Oxford School of Architecture 1998). There is the realization, more than ever before of the potential impact of this research in both education and practice. Different countries have been more successful than others. In UK this knowledge is inherently more successful than others. In UK this knowledge is inherently
corporated in both legislation and different types of Directives. For example in addition to the EEC Directive above, the Disability Discrimination Act 1995, the Crime Prevention Act 1997, the Human Rights Act 1998 and currently the various Sustainability Directives and Agenda 21 are further examples where IAPS research over the years has become an important part in the education and practice of the design and planning professions.

Conclusion
The fact that well over 4000 students over this period have studied Architectural Psychology as an integral and mandatory part of their education at par with Design, History and Theory, Structure and Technology, despite the economic climate, philosophical and personality traits of five different Heads of School over the years is a test of the validity and reliability of the value of Architectural Psychology on a longitudinal basis. This was achieved because the consumers of this work considered the subject in annual student feedback as essential, relevant and interesting in their education.

Charles Moore once wrote that when people do visit a place and like it or feel some connection with it, they send postcards to their friends to indicate their pleasure. Over the years, letters from past students, informed the School of the pride they felt when designing for humanity. They want to share it with the people they are designing for. RIBA prizes are now given not only for original designs but for humane ones.

Figure 1: Number of topics of the top 10 Keywords in students projects.

Greek:
εργασίών.

Figure 1

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In pedagogic terms, this article has shown how a subject like Psychology is integrated within a design-based course. The critical factor is the balance between imparting knowledge, practice and research. The emphasis on research based experience in the second year, offers the students the possibility of meeting people – young and old, here and abroad – that they are designing for. The titles of the various projects undertaken, is a testimony of the range and topic of interest. This real life research based learning, goes beyond carrying out a good piece of work. Clients of buildings- whether private homes, public buildings, streets or towns- find the results of students projects interesting and relevant to their lives. The pride and joy experienced by students over the past 10 years when their work was also exhibited to the public, with architects, planners, councillors, police officers, members of parliament attending, is a further testimony that this approach is not just fashionable but a sustainable academic and pedagogic practice.

References


Education and training leading to diplomas, certificates and other evidence of formal qualifications referred to in Article 2 shall be provided through courses of studies at university level concerned principally with architecture. Such studies shall be balanced between the theoretical and practical aspects of architectural training and shall ensure the acquisition of:

1. An ability to create architectural designs that satisfy both aesthetic and technical requirements,
2. An adequate knowledge of the history and theories of architecture and the related arts, technologies and human sciences,
3. A knowledge of the fine arts as an influence on the quality of architectural design,
4. An adequate knowledge of urban design, planning and the skills involved in the planning process,
5. An understanding of the relationship between people and buildings, and between buildings and their environment, and of the need to relate buildings and the spaces between them to human needs and scale,
6. An understanding of the profession of architecture and the role of the architect in society, in particular in preparing briefs that take account of social factors,
7. An understanding of the methods of investigation and preparation of the brief for a design project,
8. An understanding of the structural design, constructional and engineering problems associated with building design,
9. An adequate knowledge of physical problems and technologies and of the function of buildings so as to provide them with internal conditions of comfort and protection against the climate.
10. The necessary design skills to meet building users’ within the constraints imposed by cost factors and building regulations,
11. An adequate knowledge of the industries, organizations, regulations and procedures involved in translating design concepts into buildings and integrating plans into overall planning.
Εικ. 1 – Κατασκευές με πήλινα τούβλα. / [Αρχείο Φαθύ]
What does the study of history offer the architect? What ways of thought and expression would be lost if history were eliminated from architectural curricula? Today, more than 80 years after Bauhaus’s radical attempt to exclude the teaching of architectural history, and about 30 years after the creation of the first doctoral programs in the History and Theory of Architecture—which separated architectural history from art history, underlining the interdependence of history and architectural practice—the teaching of history is an integral part of architectural education. However, what exactly is the practical purpose of historical knowledge? This of course is an old question. Woodrow Wilson answered it by pointing out that history endows us with the invaluable mental power we call judgement. Similarly, Sam Wineburg, who analyzed methods of teaching general history in his book, Historical Thinking and Other Unnatural Acts, emphasizes that history offers a basic tool for promoting literacy not of names and dates but of discernment, and the potential of “humanizing us in ways offered by few other areas in the school curriculum” and this process of humanization is based on “a tension that underlies every encounter with the past: the tension between the familiar and the strange, between the feelings of proximity and feelings of distance in relation to the people [and buildings, and places one can add] we seek to understand.” This definitely holds true in the case of architecture as well, where history offers the potential to really change how we think. Its purpose is not to merely increase our factual knowledge, or simply turn the past into a commodity to be used or consumed; rather, architectural history can open up new avenues of nuanced reflection and action in architectural practice. The essay below offers a tangible example of how research in architectural history (and by extension, how the teaching of architectural history) can offer the basis for these kinds of multifaceted, constructive, and critical ways of thinking in architecture. It centers on a somewhat known page of the history of modern architecture, specifically Hassan Fathy’s work, for which a great deal may have been written, which however, has rarely been situated in its complex sociopolitical contexts. Through a systematic analysis of various aspects of Fathy’s work and its interpretations, this essay reexamines it from alternative points of view and beyond clichés, with the goal not to reaffirm, augment, or disprove any “facts” (or

1 This essay is based on a public lecture given at the University of Cyprus in May 2007. Beyond its pedagogical-theoretical concerns, it presents the results of a research that was done in archives in Egypt and Greece, and through interviews with architects, users, etc. Because of the nature of the public lecture, the text does not include all the footnotes for archives etc., which will be presented in a forthcoming publication.

Because Fathy's work has been predominantly associated with the radical denunciations of Modernism that emerged in the 1970s, many other intricacies of his thought have been obscured. To grasp the complexities of his career, however, it is important to recognize that, from the time Fathy launched his housing experiments in the 1940s, to the time he gained international recognition in the 1970s, his thought traced a complex trajectory, defining a nuanced response to culture and modernity that cannot be explained away.
either by the essentialist politics of separatist identity or by the formalism of historicism. The many interpretations of New Gourna, either by others, or by Fathy himself, have a historicity of their own—in other words, they did not emerge in a vacuum, but rather, they were tied to particular circumstances, and they had, to one degree or another, particular goals and uses. It is these "alternative histories" that are being studied here. Not to advance any of them as better than others, or, inversely, not to advocate some kind of total relativism (as though each interpretation is just as valid as the next), but rather to contemplate, in a rigorous and precise manner, the multifaceted character of historical analysis. Let us take things from the beginning, from the building of New Gourna.

1st story: New Gourna as part of the sociopolitical circumstances of Egypt in 1945

In 1945 Fathy was asked by the Egyptian monarchy to design mass housing in Upper Egypt near Luxor, for the inhabitants of Gourna, who had, until then, lived on top of Pharaonic tombs in the area. The main objective was the creation of economical and sanitary housing. For the monarchy—which was advancing plans for a general modernization of the country—the project also promised to provide a prototype for other housing settlements that would help regenerate the Egyptian countryside, and provide the foundation for a modern, postcolonial national identity.

Hassan Fathy, who was selected as the architect of the project because of his connections with the Royal family, saw this project as an opportunity to advance his experiments with alternative construction methods that would not depend on imported materials. Fathy was already performing such experiments because during WWII, Egypt had faced great shortages in construction materials such as wood and steel. Fathy also aimed to seek collaborations between the architect and local craftsmen, not only to minimize cost but also to create a type of architecture sensitive to local rural lifestyles, that would, in turn, cultivate peasants’ pride about their own culture. Based on all these objectives, then, Fathy focused on reviving pre-modern building methods with hand-made sun-dried mud bricks. Fathy made a series of experiments with mud brick construction, and the biggest problem he faced was how to span the mud brick walls to create a roof without the use of wood or another material. In the end, he found the answer during his travels to Nubia, where he learned how to create vaults with mud bricks, and he brought craftsmen to Gourna to teach and disseminate their skills.

Another important source of inspiration for Fathy was the typology of the Mamluk mansions of Cairo. Fathy was particularly fascinated by their internal courtyards, because they provided an organizing principle for the house, and also because they facilitated natural ventilation and lighting, improving the microclimate. (Fig. 2) For similar reasons, he wanted to transport to New Gourna the idea of the wooden window screen, which was used in the Cairene mansions to temper the harsh daylight and reduce air temperature by increasing its pressure.

How were all these precedents reinterpreted in New Gourna? Fathy envisioned a new village of mud brick houses in quaint streets and squares, cozy houses with internal courtyards and domes, and public spaces such as a theatre and market. The poetic simplicity of the buildings had a sensual presence on the desert landscape, while it also revealed some modernist sympathies, with the abstraction of spaces, the simplicity of volumes, and the monochromatic character of the buildings—as opposed to the colorful mud houses of Nubia. (Fig. 3) The project attracted the attention of European press which praised its formal character, and also for its aspiration to put physical design at the center of postwar social reform. Despite the positive reception abroad, the Gourni refused for years to transfer to their new homes and they even resorted to drastic measures, vandalizing or stealing from the houses of New Gourna.7 The Gourni’s stance sabotaged Fathy’s proclamations for a village sensitive

to rural lifestyles, and the project was interrupted before completion. Thus, at that moment in time—Egypt, 1947—New Gourna was a dramatic failure.

The Gourni’s reaction seemed like an incomprehensible mystery to Fathy, who could not understand why the peasants did not appreciate his noble attempt to improve their lives. In all fairness, many reasons for New Gourna’s failure went well beyond the architect’s control, and were the result of various antagonisms between locals and government bureaucracy. (For example, there were many land use disputes at the background, plus the Egyptian Department of Antiquities accused the Gourni of looting). Nonetheless, the architect also had a share of the responsibility. First, one can easily detect a dose of paternalism in Fathy’s claim that he was trying to restore aesthetic qualities that the locals themselves were incapable of appreciating. This attitude towards the peasants differed little from the biases of a typical bourgeois urbanite of Cairo. Second, Fathy’s assumption that the villagers would willingly relinquish their own homes for a planned village came dangerously close to arrogance, even hubris, the type of which, it should be noted, was not peculiar to Fathy, but it was characteristic of many planning visions of mid-20th Century).

8 The main public buildings and about 100 homes were erected before the work was interrupted in 1947. Fathy’s colleagues recount many reasons for the work’s interruption. Interviews with Abdelhalim Abdelhalim & Nawal Hassan, 1999. Also, see Fathy, Architecture for the Poor; and J.M. Richards, “Gourna: A lesson in Basic Architecture,” The Architectural Review, Vol CXLVII, 876 (February 1970): 109-118.


Something more specific: Fathy's rhetoric about reviving an "Egyptian tradition" ignored the ironies behind a homogenizing view that conflated many different formal precedents and building techniques from diverse cultural provinces of Egypt. For example, Fathy's key strategy to organize the house around a courtyard drew on spatial conceptions from the urban residential architecture of Cairo; but it had a very different reception among the rural population, which associated courtyards rare in residences in Upper Egypt, they were associated with more utilitarian functions, as places for work, washing, raising animals—quite distinct from the secluded and serene outdoor courtyards that conflated many different formal precedents and building techniques from diverse cultural provinces of Egypt.

In other words: Fathy may have thought that his reinterpretations of internal courtyards or mud brick domes would revive "Egyptian architectural tradition," but his gestures imposed a homogenizing conception of culture/tradition that did not in fact exist. Further, his zeal to exalt "tradition" separated it from everyday realities and led Fathy to nostalgia for the past. This is why he even designed the tom, “New Gourna: Vernacular Remodeling of Architectural Space,” Traditional Dwellings and Settlements Working Papers Series XVI 49-77 (1989): 50-77.  

10 Fathy describes the significance of courtyards and public fountains to women in Architecture for the Poor, 56-59, and 99-101.

11 Although Fathy never wrote about the political circumstances that pushed his decision, members of his circle describe his departure for Greece as a self-imposed exile. [Interviews with Nawal Hassan and Shahira Mehrez.]
Doxiadis himself, as a consultant for his firm’s Middle East projects. Doxiadis Associates, which had a prolific practice designing mass housing and new cities around the world, offered Fathy an opportunity to tackle large scale design issues. Doxiadis believed that the only realistic approach for postwar architects was to align themselves with international trends in urban industrialization; at the same time however, he shared many of Fathy’s sensitivities. Thus, through his collaboration with Doxiadis, Fathy had the chance to more systematically contemplate the interrelationships of local knowledge systems with dominant demands for standardization and mass production. For this reason, the five-year period Fathy spent in Athens has been very important to shaping his conception of “tradition”—even if current scholarship often ignores this chapter of his life, or overlooks it as an aberration.12

While at Doxiadis Associates, Fathy worked on projects for Iraq (housing for Baghdad and Mussayib) and Pakistan, while he also performed various experiments; for example, he proposed a plan of mass-produced mud houses, and he attempted to transport the idea of the internal courtyard to high rise housing. (Fig. 4) Through these research activities which were supported by Doxiadis Associates, Fathy began a much more systematic study of the principles that guided the design of New Gourna. For example, he did a series of investigations into the ways in which courtyard houses supported passive cooling, and he even went as far as proposing modifications and improvements to maximize a courtyard’s climatic benefits.13 Also, he experimented with minimizing construction cost. Simultaneously, he traveled around Greece studying mud structures in Santorini, Corfu and elsewhere (The Fathy archive in Egypt is full of photos and sketches Fathy made in these travels.) Thus, one can argue that during his experience in Greece, Fathy’s search is full of photos and sketches Fathy made in these travels.) Thus, one can argue that during his experience in Greece, Fathy’s search for “tradition”—even if current scholarship often ignores this chapter of his life, or overlooks it as an aberration.12

χωρίς τρεχούμενο νερό, με το σκεπτικό ότι έτσι θα αναγκάζονταν οι κάτοικοι να επισκέπτονται καθημερινά το πηγάδι στο κέντρο του χωριού, καινοτομήσουν εσωτερικά μια κοινωνική συμπεριφορά και συναναστροφής.10 Τέτοιες χειρονομίες όμως στερούσαν από τους κατοίκους τις στοιχειώδεις ανέσεις της σύγχρονης (ως, κάτι που αύξησε ακόμα περισσότερο την καχυποψία των χωρικών.

2η Ιστορία : Η Νέα Γκούρνα μετά το ταξίδι του Φαθύ στην Ελλάδα, 1957-61

Μετά την αποτυχία της Νέας Γκούρνα, συνέβησαν και δραματικές πολιτικές αναταραχές στην Αίγυπτο, με την επανάσταση του Γκαμάλ Αμντέλ Νάσσερ και τη βίαιη εκθρόνιση του Μονάρχη το 1952, και όλα αυτά ώθησαν τον Φαθύ στην αιτιολογία.11 Βρήκε φιλοξενία στο γραφείο Δοξιάδης στην Αθήνα, όπου τον κάλλεσε ο ίδιος ο Κωνσταντίνος Δοξιάδης να ενεργήσει ως σύμβουλος για τις μελέτες για το γραφείο του Μείζον Ανατολία. Στο Τριαντάφυλλο Δοξιάδη—ο οποίο εκτίζε ανά το παγκόσμιο ολόκληρες πόλεις και μεγάλους οικισμούς—ο Φαθύ ήρθε σε άμεση επαφή με μεγάλες κλίμακες πολιοικομοιοτήτες. Ο Δοξιάδης θεωρούσε ως μόνη ρεαλιστική προσέγγιση τη συστράτευση με διεθνείς τάσεις για αστική ανάπτυξη και εκβιομηχανοποίηση, όμως συμμερίζόταν επίσης πολλές από τις ευαισθήσεις του Φαθύ. Έτσι, μέσα από τη συνεργασία του με τον Δοξιάδη, ο Φαθύ προβληματίστηκε βαθύτερα για το συσχετισμό τοπικών συστημάτων γνώσης με τις κυριάρχες απαιτήσεις για τυποποίηση και μαζική παραγωγή. Για αυτό λοιπόν, παρόλο που πολλοί θα ένοικε την ανγούνη, ή τη θεωρούσαν αυτή την ακολουθία για την επισκευή του Φαθύ, ήταν σημαντική στην καριέρα του Φαθύ γιατί ανοίξεια καινούργιους προβληματισμούς.12

Με το Τριαντάφυλλο Δοξιάδη, ο Φαθύ εργάστηκε στο Ιράκ (για οικισμούς στη Βαγδάτη και το Μουσσαγίμπ)13 και στο Πακιστάν, ενώ έκανε επίσης άλλους πειραματικούς σχεδιασμούς, όπως π.χ., για πήλια σπίτια μαζικής παραγωγής ή για τη μετάφραση του φαινομένου της εσωτερικής αυλής σε πολυκατοικίες και μεγάλες οικοδομικές συμπλέγματα. (Εν. 4.- Πειραματισμοί Φαθύ με εσωτερικές αυλές σε πολυκατοικίες του γραφείου του Δοξιάδης στη Βαγδάτη). Μέσα από τις ερευνητικές δραστηριότητες που στέρησαν το Τριαντάφυλλο Δοξιάδη, ο Φαθύ έκινησε μια πιο συστηματική μελέτη για τα πλεονεκτήματα της αρχιτεκτονικής που προώθησε στη Νέα 

13 Many sketches attest to this and also, many of the firm’s reports, such as Fathy, Deimezis, Kyriou & Marinos, Το Ψύχος του Φαθύ, στο Architecture for the Poor, 56-59, and 99-101.
3rd story: New Gourna on the international scene, 1973

As mentioned before, New Gourna acquired new life in the early 1970s, when Fathy published a book that described his experiment. The book was first published in Egypt in 1969 with the title, A Tale of Two Villages, but in 1973 it was published in English by the University of Chicago Press, and it was with this later edition that Fathy became a celebrity. There were many conditions that helped the phenomenal reception of the book. As part of the radical challenges to the Modern Movement as they were formulated in the 70s, there was a great suspicion towards the type of faceless mass-produced housing projects that had radically altered cities both in the postcolonial world and in the West, in the name of a homogenizing internationalism. In this climate, Fathy’s position was particularly appealing, not only because of its aesthetic sensibilities, but also because it valorized cultural difference. Emphasizing the timeless wisdom of particular building traditions, Fathy appeared as an apologist of any local knowledge system worldwide. In addition, the tone of the book, which made indirect but insistent references to the phenomenological qualities of architecture and the emotional needs of users represented a powerful challenge to rationalism and functionalism. And, Fathy’s argument for the “trinity” of architect-builder-user called for a modest architect willing to collaborate with others and this was immensely appealing at a time when the megalomaniacal signature-designer became anathema. It may of course be true that the Gourni did not consider Fathy’s approach all that modest, however the book itself had already acquired a “life” of its own, that transcended the realities of the particular village.

Fathy’s ideas were well received because others had already begun to pave the way. For example, Bernard Rudofsky’s seminal book, Architecture Without Architects (1964), which valorized premodern building methods, had already presented a strong argument for an indigenous anonymous architecture (challenging in many ways the bioclimatic equivalence of climate and culture that had dominated architectural thought). For example, Bernard Rudofsky’s seminal book, Architecture Without Architects (1964), which valorized premodern building methods, had already presented a strong argument for an indigenous anonymous architecture (challenging in many ways the bioclimatic equivalence of climate and culture that had dominated architectural thought).
ways, architectural profession itself). Similarly, Paul Oliver's, Shelter and Society (1969) presented a strong case for the timeless and transcultural validity of anonymous architecture. Fathy was also touching topics that were explored by Victor Oligay in Design With Climate: Bioclimatic Approach to Architectural Regionalism (1963) and Ian McHarg, in Design With Nature (1969), both of whom advocated the adaptation of architecture to local climate and natural energy sources (and paved the way for current practices in green architecture). Fathy's work echoed, in addition, many of the ideas of John F. C. Turner and Robert Fichter, whose book Freedom to Build (1972) advocated self-help housing as the key to the emancipation of the world's poor (and formed the foundation for current debates in participatory design.) All these books may have challenged some of the dominant trends in Modernism, (as they were advanced by the Modern Movement in the interwar period, and as they were re-conceptualized in the aftermath of WWII). However, these positions were still tackling quintessentially modern problems, such as the social responsibilities of architecture and its democratization.

Fathy's book also entered another dimension. Through its valorization of the cultural/architectural particularities of Egypt, Fathy advanced a severe criticism of the eurocentrism that characterized many dominant trends in Modernism that remained oblivious to local aesthetic preferences or the realities of developing economies. (In this sense, one can see several parallels between Fathy and Pikionis in Greece, for example.) In the case of Fathy, his praise for a "traditional Egyptian architecture" (regardless of how problematic this homogenizing concept may have been—as mentioned before) became a symbol of resistance to colonialism and its remnants in many parts of the so-called third world. The book's anti-colonial spirit was embraced by many architects not only in Egypt but also in the Arab world and beyond. Fathy's choice to place a greater emotional weight on the concept of "tradition" contributed to this effect. For example: In his analysis of the introverted courtyard, Fathy still spoke of the economic and climatic benefits he had studied all his life, but at this point he contended that "to the Arab" the courtyard had an altogether different value "To the Arab, " Fathy maintained, "the courtyard is more than a space that controls temperature," and "more than an architectural device for privacy and protection. It is, like the dome, part of a microcosm which parallels the order of the Universe itself."

Egyptian and Arab pride. It is in this climate that Fathy (and arguments of his such as, that mud construction could be traced to the Pharaonic era), were promoted by Nasser. The 1969 publication of the book was funded by the Egyptian State.

4η story: Who was left out of Fathy’s reformist vision?

Having gained extensive reputation in Egypt, Fathy began to build many houses in his own country, especially for Cairo’s urban elite, e.g., Fouad Riad House (1967), Mehrez Apartment (1967), Mit Rehan (1982). (Fig. 5) This is a phenomenon rather familiar in the history of architecture: The initial opposition turned into sympathy, and even a new fashionable trend in favor of Fathy’s approach. Some critics have pointed to the irony behind the fact that the proponent of “architecture for the poor” ended up designing luxurious villas. Fathy himself resisted the criticism saying that New Gourna taught him that the lower classes aspired to copy the wealthy, and thus, the only way to reach the poor with his architecture was to first collaborate with the rich. Aside from how valid this tactic would really be, one cannot ignore the disappointing implication of an argument that is based on the binary categorization of an architecture for the “rich” and architecture for the “poor”. This was a categorization that Fathy himself had rejected in the past: Specifically, when the University of Chicago Press changed his book’s title from “A Tale of Two Villages” to “Architecture for the Poor,” Fathy had resisted, arguing that the book’s title should not be changed.

ing that his architecture was not for the poor but “for man.” Similarly problematic is Fathy’s insistence to present the introverted courtyard as sensitive to the local desire for women’s privacy. These interpretations of the courtyard house (promoted in many of Fathy’s writings of that time) accepted, and even reinforced what often passed unquestioned as a “tradition” of confining women in secluded spaces, and came nowhere near addressing the politics of domestic space. 15 For all his reformist ambitions Fathy steered entirely clear of any gender issues.

5η ιστορία: Ο ρόλος του Φαθύ στον Αραβικό κόσμο, 1980-90 Τη δεκαετία του ’80 μια νέα γενιά από αρχιτέκτονες στράφηκαν στον Φαθύ ως την κύρια πηγή έμπνευσης τους (π.χ., όπως οι Rami El Dehan, Abdul Wahed El Wakil, and Ramaz Badran, among others) 16, and their work reflects two larger phenomena. First: The kind of amal-gam of interpretations that Fathy created from various vernacular architectures lost its relative value (as some interpretations of one story: Fathy’s role in the Arab world, 1980-90

During the 1980s, a new generation of architects turned to Fathy as their main source of inspiration (for example, Rami El Dehan, Abdul Wahed El Wakil, and Ramaz Badran, among others) 16, and their work reflects two larger phenomena. First: The kind of amalgam of interpretations that Fathy created from various vernacular architectures lost its relative value (as some interpretations of one


17 Βλέπε, π.χ., http://touregypt.net/featurestories/
nature becomes to a certain degree a space of consumption, but in this case, an entire notion of “tradition” turned into a commodity to be consumed. Of course the village of New Gourna itself is today an object of consumption, having been renamed on tourist maps as “Hassan Fathy’s Village!”

And it is at this point that we come to another dimension of Fathy’s work—another “life” of Hassan Fathy—the last one, at least for this essay’s purposes.

6th story: Fathy within the context of globalization

Today, at the beginning of 21st Century, Fathy’s work is often mentioned as an exemplar of environmental strategies. Those who search for the pioneers of sustainability, green architecture, or appropriate technology, often point to Fathy as a good example.

Parallels between New Gourna and the more recent environmental consciousness are of course on target, not only because New Gourna presents a crucial argument about the use of local materials, the conservation of energy, and the minimization of embodied energy, but also because Fathy’s approach touches on the larger meanings of sustainability, that go beyond its technical aspects, to its economic and social dimensions. In this sense, it is logical to draw par-

17 See, e.g., http://touregypt.net/featurestories/


19 Παναγιώτης Τουρνικιώτης, Ιστοριογραφία της Μοντέρνας Αρχιτεκτονικής, (Αλεξάνδρεια, 2003), σελ.214.
allels between Fathy’s work and current strategies in sustainability. Now, whether these parallels are substantive, or whether “sustainability” will be used as another marketing tool, this is an open question that requires our vigilance. Let us keep in mind that the notion of sustainability has already been used for the promotion of ecotourist villages in many parts of Egypt (Fig. 6).

Reflections
As the architectural historian/theorist Panagiotis Tournikiotis has astutely observed, “the history of modern architecture should be understood in plural terms” and in this sense, Fathy’s work, as well as its multiple interpretations constitute an important page in the history of modern architecture, because they contemplated quintessentially modern concerns—about the relationships of architecture with society, culture, the environment, and history. The “alternative histories” explored above show that concepts such as “tradition” or “locale” are neither simple, nor neutral, and that any binary opposition between “traditional” and “modern” or between “local” and “global” is highly problematic. To situate these “histories” into the larger sociopolitical realities that shaped them is not simply a matter of historical research or historiographic critique; rather, these histories and the rigorous reflections they cultivate can introduce useful complexities into contemporary architectural concerns about the social, political, and ideological uses of concepts of “tradition,” “place” and “environment” in a globalized world.
This course is offered during the fourth semester of undergraduate studies and it focuses on the social dimensions of architecture. Combining lectures with a critical reading of texts and group discussions, the course demonstrates the entanglement of architecture with power structures or aesthetic conceptions. The ultimate goal is to cultivate students’ analytical abilities and intellectual tools for critical thinking.

The starting point of the analysis was the fact that both architects challenged the conventional typology of religious architecture aiming at innovative designs. Of course, the opinion of the “expert” architect had to be negotiated with the preferences (and possibly preconceptions) of religious authorities as well as the users’ thoughts about the matter. Following an extensive analysis of the two buildings and their respective social contexts, the essay was focused on three themes for comparison which are: a) their site and urban context, b) materiality, lighting and symbolic references and c) social reactions following their completion. Here is a brief summary of parts b) and c).

The use of exposed concrete is common in both buildings; this choice simplifies the surfaces and also combines well with the reflection of natural light on them in a way that brings nature and structure together. The skilful manipulation of natural light –

To the μάθημα αυτό προσφέρεται στο τέταρτο εξάμηνο των προπτυχιακών σπουδών και εστιάζεται στις κοινωνικές διαστάσεις της αρχιτεκτονικής. Συνδυάζοντας διαλέξεις με κριτική ανάγνωση κειμένων και ομαδικές συζητήσεις, το μάθημα αναλύει τη συνύφανση της αρχιτεκτονικής με θέματα, όπως τις σχέσεις ιδιωτικού-δημοσίου χώρου, σχέσεις φυσικού-δομημένου περιβάλλοντος, σχέσεις εξωσύστασης, ή αισθητικές αντιλήψεις. Από τον άλλο, συγκεκριμένα κοινωνικά, πολιτισμικά οράματα σε διάφορες κλίμακες. Η τελική εργασία ζήτησε από τους φοιτητές να συγκρίνουν δύο κτίρια ως προς τα κοινωνικά τους διαστάσεις (η σύγκριση κατά κανόνα συνδυάζει κτίρια με παρόμοιο πρόγραμμα αλλά με διαφορετικές κοινωνικο-πολιτισμικές περιστάσεις). Πιο κάτω παρατίθενται αποσπάσματα από δύο τέτοιες εργασίες.

RELIGIOUS BUILDINGS: WHAT DOES A SOCIETY ACCEPT, THEIR FORM OR DEEPER MEANINGS?
Research project by Theoula Evzona, George Kallis, and Nataly Mitsigga

This essay compares two religious buildings and their social context. Specifically, it examines the Apostle Varnavas & St. Markarios Orthodox Church in Nicosia (1973), designed by Neoptolemos Michaelides, and the Protestant “Church of Light” in Osaka (1989), designed by Tadao Ando for a Christian minority in Japan.

The starting point of the analysis was the fact that both architects challenged the conventional typology of religious architecture aiming at innovative designs. Of course, the opinion of the “expert” architect had to be negotiated with the preferences (and possibly preconceptions) of religious authorities as well as the users’ thoughts about the matter. Following an extensive analysis of the two buildings and their respective social contexts, the essay was focused on three themes for comparison which are: a) their site and urban context, b) materiality, lighting and symbolic references and c) social reactions following their completion. Here is a brief summary of parts b) and c).

The use of exposed concrete is common in both buildings; this choice simplifies the surfaces and also combines well with the reflection of natural light on them in a way that brings nature and structure together. The skilful manipulation of natural light –
through a cross-shaped opening on the one case and through the roof windows on the other – creates an intense sense of spirituality and enhances people’s contact with their physical environment.

The reaction of the users and of the religious authority was completely different in the two cases. The alterations that followed the completion of Apostles Varnavas Church promoted a conservative perception regarding religious building, hindering the architect’s aim to question the dominant formal vocabulary of church buildings in Cyprus. On the contrary, the “Church of Light” was not only accepted by the locals and the religious authority, but it also became a popular place of public interaction. An interesting fact is that a small private church in Nicosia designed lately by Cypriot architect Heraclis Papachristou has a character similar to Tadao Ando’s. This could perhaps suggest new possibilities in reinterpreting the essence of religious building, beyond formal criteria.

**RECREATING THE CITY:** Research project by Anastasia Aggelidou, Christina Armosti and Christos Pasadakis

The subject of this study was the architectural competition for the reformation of Liberty square, Nicosia, which was held in 2005. We compared the first prize (office of Zaha Hadid) and the second prize (collaboration of architects Socrates Stratis and Christos Hatzichristos) to examine the impact that each proposal would have on the life of the city. Our study focused on three subjects of comparison, specifically, a) how each project addressed elevational differences, b) each project’s attitude to green spaces, and c) social reactions to the proposals, regarding the existing vegetation is also different. The alterations that followed the original project are completely different in the two cases. The alterations that followed the original project are completely different in the two cases. The alterations that followed the original project are completely different in the two cases. The alterations that followed the original project are completely different in the two cases.

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The end result of architecture, as seen by the eye and touched by the hand, is the embodiment of a complex process primarily developing inside the architect’s mind, the full extent of its complexity not always being readily conceivable or knowable to us. This is the space where architecture develops as both theory and practice, engaged in continuous interaction with the past (history), the present (social conditions) and the future (the building's own).

What takes place inside the architect’s mind as he attempts to provide solutions to the architectural problem is a true mystery, though both architects and critics will often present the process by which the architectural work is created in surprisingly linear narrative terms. The impression of outward cohesion, the process of synthesis and a conclusive reading of the work are all part of a conscious language that obscures whatever contradictions, conflicts and instances of automatism may have contributed to the work’s formal development; see more than is actually visible, perhaps even ‘see’ with one’s eyes closed! In other words, one must first see with the mind’s eye.

The Paris home that Le Corbusier and Pierre Jeanneret designed in 1924 for Mr. La Roche (Fig. 1) – a wealthy yet solitary art collector – one may find a chaise longue, designed (later on) by Le Corbusier and Charlotte Perriand in the shape of a reclining human body. The La Roche residence is now a museum and the chair in question is to be found in the space above the main entrance, on what is a bridge-like passage between the two sides of the vast entrance hall, connecting at the same time the house’s private and public spaces and bordered by a large glass pane (Fig. 2-3). Lying in this chair, one may gaze at either the house’s interior or exterior spaces – two worlds that are one yet cannot be both inhabited at the same time. The chaise longue is in fact a psychoanalyst’s couch – this is suggested in its form as much as in the ‘famous’ picture that shows Charlotte Perriand herself lying in it, her face turned away from the camera (Fig. 4). Most visitors choose to briefly sit in it, trying as it were to partake of the spirit of architecture – an architecture developed at the time of surrealism (let us not forget that André Breton’s Manifesto was also composed in 1924) – at the blurry interface between consciousness and the life of the unconscious.

The title for this essay was inspired by a contemporary film, Being John Malkovich (a 1999 film, whose title was translated into Greek as Inside John Malkovich’s Mind). In the film, a strange turn of events seems to have opened a ‘portal’ into the mind of the famous actor, allowing a number of his fans to live the amazing experience.
1. The chaise-longue/couch designed by Le Corbusier and Charlotte Perriand in front (or behind) the window in the La Roche residence (photo by: P. Tournikiotis)

Η πολυθρόνα καρέκλα/ντιβάνι του Le Corbusier και της Charlotte Perriand εμπρός ή πίσω από την τζαμαρία της κατοικίας La Roche (φωτ. Π. Τουρνικιώτη).

2. The chaise-longue/couch designed by Le Corbusier and Charlotte Perriand in front (or behind) the window in the La Roche residence (photo by: P. Tournikiotis)

Η πολυθρόνα καρέκλα/ντιβάνι του Le Corbusier και της Charlotte Perriand εμπρός ή πίσω από την τζαμαρία της κατοικίας La Roche (φωτ. Π. Τουρνικιώτη).


Le Corbusier και Pierre Jeanneret: η κατοικία La Roche στο Παρίσι, 1924 (φωτ. Π. Τουρνικιώτη).
of being John Malkovich for fifteen minutes. Malkovich himself will attempt to do the same, only this time the experience is twofold since he is in fact entering the other side of himself, his unconscious; the deep end of his mind. Ultimately, what actually takes place there remains a mystery both to Malkovich himself and to all those entering through the ‘portal’. Facing as they all are one or the other side of this mind, they are in fact experiencing the unbridgeable oneness from their particular point of view. There are many among us –and I am definitely one of them– that would love to find themselves inside Le Corbusier’s mind if only for fifteen minutes, though, in exiting this ‘tunnel’, they would each be carrying a different experience, having discovered a different truth, rooted in turn in their own private universe of perception. Somehow, this process of entering the mind of the creative genius is part of probing deep into the work this produces, be it a book, a design, or a building. In trying to grasp the exact meaning of this work, one must read between the lines; one must first penetrate into the work itself before they can reach the person behind it.
Vers une architecture (1923)¹

Toward an Architecture, the militant treatise Le Corbusier published in 1923 will serve as the portal through which we shall attempt to enter the mind of this particular architect, as much as this is possible, and perhaps the mind of any architect who thinks before he/she designs. Aside from its intrinsic appeal, the book in question may be read as an exercise in methodology and as an invocation of theory in the context of both the educational process and the creative process of architecture.

To Le Corbusier’s mind, architecture fulfills the three fundamental categories of principles that in turn correspond to the archetypal trinity of constructional necessity, functionality and aesthetic pleasure. Each and every building must be sturdy in terms of construction, withstand the test of time, and serve specific needs. In other words, it must at all times fulfill the first two principles. Thus far, man made structures belong to the realm of construction. Architecture is the next step. It presupposes a set of rules for the synthesis of form, which correspond to the third category of principles and are added to the process of simple construction. Therefore, the vast majority of buildings are works of construction that duly serve their purpose. Only a small minority among them can also be said to be works of architecture. In Le Corbusier’s own words: ‘ARCHITECTURE is an artistic fact, an emotional phenomenon that is outside questions of construction, beyond them. Construction: THAT’S FOR MAKING THINGS HOLD TOGETHER; Architecture: THAT’S FOR STIRRING EMOTION.’²

The objective of construction is to solve a problem on the basis of reason: practical potential is restricted to the limits of logic, the result being constructions that respond to requirements of functionality, achieve a maximum degree of performance while requiring the minimum in terms of means, labour and materials, form, colour, word and sound. In other words, resulting constructions may be functional, but they are not necessarily beautiful. Yet, serving basic needs is a necessary precondition for the pleasure that architecture may offer. The issue of habitation is one in which requirements of necessity and utility are combined: ‘A house: a shelter against heat, cold, rain, thieves, the inquisitive. A receptacle for light and sun. A necessity and utility are combined: ‘A house: a shelter against heat, may offer. The issue of habitation is one in which requirements of needs is a necessary precondition for the pleasure that architecture functional, but they are not necessarily beautiful. Yet, serving basic word and sound. In other words, resulting constructions may be the minimum in terms of means, labour and materials, form, colour, ality, achieve a maximum degree of performance while requiring suult being constructions that respond to requirements of function- result being constructions that respond to requirements of function- side questions of construction, beyond them. Construction: THAT’S FOR MAKING THINGS HOLD TOGETHER; Architecture: THAT’S FOR STIRRING EMOTION.’²

² Le Corbusier, Toward an Architecture, p. 97.

¹ Le Corbusier’s Vers une architecture brings together articles that appeared in the magazine L’Esprit Nouveau between 1920 and 1921. It was originally published in 1923 by Editions G. Grés, Paris, and was subsequently reprinted on numerous occasions. See Le Corbusier, Towards a New Architecture, translated from the French by John Goodman, under the correct title of Toward an Architecture (Los Angeles, Getty Research Institute).

² Le Corbusier, Toward an Architecture, p. 97.
for private life.\(^3\) As Le Corbusier writes, a house is a machine for living in (une maison est une machine à habiter), which means that the home's main purpose is to be inhabited.

This phrase has often been misinterpreted as drawing a direct, literal connection between the home and the machine. But this is not what it really means. Let us consider it again in its original context: 'A house is a machine for living in. Baths, sun, hot water, cold water, controlled temperature, food conservation, hygiene, beauty through proportion. An armchair is a machine for sitting in (un fauteuil est une machine à s’asseoir). […] Ewers are machines for washing oneself (Les aiguüères sont des machines à se laver).\(^4\) Le Corbusier defines the constructions that surround us in our everyday living on the basis of the particular function they serve. In no way is an aesthetics of the machine implied here, despite the references he makes to the airplane, the ship or the car. In fact, what he means to say is that constructions whose main purpose is to serve the basic needs of human life (the home, the armchair, the basin, the airplane, the ship, or car) must be made so as to precisely fulfill those needs. They should not be the means of fulfilling any other needs (intellectual or spiritual for that matter); they should not be the means of creative expression or the means of gaining social status. They are not architecture.

To interpret the meaning of Le Corbusier's famous quote by shifting focus to the 'machine' would be wrong even when translating word for word. In French, the phrase 'machine à' is always followed by a combination of noun and infinitive to mean 'ce qui est considéré comme ayant pour fonction unique ou essentielle de' (faire, produire, etc). Therefore, it means that the noun's sole or essential purpose is the function denoted by the infinitive; which would in fact allow Le Corbusier to write, further down in the text, that the Parthenon is 'une machine à emouvoir', meaning that its essential purpose is the function denoted by the infinitive; which would in fact allow Le Corbusier to write, further down in the text, that the Parthenon is 'a machine to stir emotion. In translating, that is, the word 'machine' should be omitted.

In addition to the above, a machine is defined as 'tout système où existe une correspondance spécifique entre une énergie ou une information d'entrée et celles de sortie' (every system involving a specific correspondence between an entering action, or piece of information, and those exiting the system).\(^5\) The meaning of the machine is not limited to that of an apparatus. It is first and foremost grounded in its very function. This interpretation is deeply rooted in time and it is these roots that Le Corbusier invokes in 1942, in his spītī είναι ένα καταφύγιο από τη ζέστη, το κρύο, τη βροχή, τους κλέφτες, τους αδιάκριτους. Ένας υποδοχέας ήλιου και φωτός. Ένας συγκεκριμένος αριθμός χώρων αφιερωμένων στη μαγικήροι, την εργασία, την προσωπική ζωή.\(^3\) Οπός γράφει ο Le Corbusier, το σπίτι είναι μια μηχανή κατοικίας (Une maison est une machine à habiter), δηλαδή κύριος σκοπός του σπιτιού είναι να κατοικείς.

Η φράση αυτή παρερμηνεύθηκε πολλές φορές, συνδέονται άμεσα το σπίτι με τη μηχανή. Δεν ήταν όμως αυτό το νόημα της. Ας την ξαναδούμε, στο πλαίσιο που την περιβάλλεται: «Το σπίτι είναι μια μηχανή για να κατοικείς. Λουτρό, ήλιος, ζεστό νερό, κρύο νερό, επιθυμητή θερμοκρασία, συντήρηση τροφίμων, υγιεινή, και η ανάλογη ομορφιά. Η πολυθρόνα είναι μια μηχανή για να κάθεσαι (Un fauteuil est une machine à s’asseoir). […] Οι νιπτήρες είναι μηχανές για να πλένεσαι (Les aigüières sont des machines à se laver).\(^5\) O Le Corbusier θεμελιώνει τις κατασκευές που μας περιβάλλουν στην καθημερινή μας ζωή στη λειτουργία τους. Αυτό δε σημαίνει καθόλου αισθητική της μηχανής, παρά τις αναφορές του στο αεροπλάνο, το πλοίο, το αυτοκίνητο. Σημαίνει πως οι κατασκευές που έχουν για κύριο σκοπό την εξυπηρέτηση ζωτικών αναγκών του ανθρώπου (το σπίτι, η πολυθρόνα, ο νιπτήρας, το αεροπλάνο, το πλοίο, το αυτοκίνητο), πρέπει να κατασκευάζονται με γνώμονα την ικανοποίηση των αναγκών αυτών. Δεν αποτελούν μέσα ικανοποίησης άλλων (πνευματικών ή ψυχικών) αναγκών, μέσα καλλιτεχνικής έκφρασης ή κοινωνικής καταξίωσης. Δεν αποτελούν αρχιτεκτονική.

Η μετατόπιση του νοήματος στη μηχανή θα ήταν λανθασμένη ακόμα και σε μια κατά λέξη μετάφραση. Η γαλλική έκφραση «machine à» συντάσσεται πάντα με ένα ουσιαστικό και ένα απαρέμφατο και σημαίνει «ce qui est considéré comme ayant pour fonction unique ou essentielle de (faire, produire, etc)». Ηλεκτρική, σημαίνει πως το ουσιαστικό έχει σαν κύριο ή αποκλειστικό σκοπό τη λειτουργία, που δηλώνει το απαρέμφατο. Πράγμα που επιτρέπει στον Le Corbusier να γράφει, πιο κάτω, πως ο Παρθενώνας είναι μια μηχανή να μηχανή, έχει δηλαδή σαν ουσιαστικό σκοπό να συγκινεί. Η λέξη μηχανή θα έπρεπε να λείπει στη μετάφραση.

Επειδή, μηχανή σημαίνει «κάθε σύστημα όπου υπάρχει μια ειδική αντιστοιχία άνοιγμα σε μιαν ενέργεια ή μια πληροφορία εισόδου και σε εκείνες της εξόδου»\(^5\). Η μηχανή δεν είναι μόνο το μηχανήμα. Είναι, πρώτα απ’ όλα, η λειτουργία. Η ερμηνεία αυτή έχει βαθιές ρίζες, που επικοινωνεί ο Le Corbusier το 1942, στη Συζήτηση με τους απουδαστές της αρχιτεκτονικής, για να ανατρέψει την

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3 Ibid, p. 165.
5 Petit Robert, 1981, entry for ‘machine’, p. 1124

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3 Στο ίδιο, σελ.89.
4 Στο ίδιο, σελ.73.
Talks with Students, to set the matter right and clear up the misconception that was due to a large extent to translated versions of his text, particularly into English, where such phrases first appeared as ‘a house is a machine for living in’ and ‘an armchair is a machine for sitting in.’ Nevertheless, when it comes to the Parthenon, the translator opts for a circumlocutory rendition, this time arriving at an accurate interpretation (here is something to arouse emotion). He thus reveals his own active role in shifting the meaning of the source text. I shall quote here Le Corbusier’s own comment as found in his Talks: ‘In 1920, when we created L’Esprit Nouveau, I attributed the house its fundamental significance by calling it “une machine à habiter” and thus demanding of it to provide a comprehensive and accurate solution to a well articulated problem; a problem that is an exclusively human concern and that reinstates man at the centre of architecture’s attention. My use of this term was held against me, both in Paris and the USA – the USA, where the machine reigns supreme. According to the dictionary, the word “machine” is of Greek and Latin origin and its connotations involve the notions of artistry and subtle craftsmanship: “a device assembled so as to produce certain results.” The word “craftiness” introduces us in a unique way into the problem, the need to harness the accidental (...), to establish the adequate and necessary context of a life which we have the potential to illuminate, lifting it above the mundane by the means of art, with a care wholly dedicated to the happiness of mankind.’

For Le Corbusier, architecture is but an almost imperceptible intervention into the (otherwise complete) standard of a construction which aims at imparting a sense of harmony to the arrangement of these typical features and at carving details in relief that will stir the viewer’s emotions and allow them to experience intellectual satisfaction. The human face, for instance, is a synthesis of typical features: the nose, the mouth, the forehead, etc. The slightest differentiation in structure and proportions as far as the arrangement of these features is concerned may make a given face beautiful and stir the soul of those who look at it. It is in this way that the Parthenon diverges from the standard of the Doric temple, of which the temple of Poseidon at Paestum is a typical example. Architecture, then, is ‘added’ to Construction. Its absence will in no way hinder the fulfilment of man’s basic needs, but its presence will ensure mental and emotional delight.


7 In the new edition: ‘a machine for stirring emotions’ (p. 241).

To better understand the significance of architecture and the way in which this is ‘added’ to simple construction, we must first see how Le Corbusier himself conceives of mental and emotional delight in man.

1. 'Our eyes are made for seeing forms in light; shadow and light reveal forms'.

This rather trite explanation – which in fact enjoys pride of place in the chapter titled ‘Three Reminders to Architects, 1. Volume’ – stresses the major importance of that which is perceived for Le Corbusier's understanding of architecture. Architecture is void of meaning in the absence of light that helps reveal it to the eye. As a phenomenon it is absolutely contemporary with the viewer, who is not called upon to discern in its forms symbols that might belong to different eras and different cultures and their respective relations. Such forms are opaque: a complex of volumes waiting to be perceived by our sense of sight, which must ‘evaluate’ the degree to which phenomena are in fact architectural: ‘The eye of the spectator,’ Le Corbusier writes, ‘moves through a site made up of streets and houses. It receives the impact of the volumes that rise up around it. If these volumes are distinct (…), if the ordinance that groups them expresses a clear rhythm (…), if the volumetric and spatial relationships are rightly proportioned, the eye transmits coordinated sensations to the brain and the mind derives from them satisfactions of a higher order: it is architecture’.

The Beautiful – a visible harmony of volume – is perceived by our organ of vision and once it reaches the brain, it provokes a sense of mental and emotional satisfaction. In other words, Architecture is limited, as far as the viewer is concerned, to an emotional interpretation of perceptible objects: ‘The Parthenon. – A machine for stirring emotions (machine à emouvoir) (…) There are no symbols attached to these forms; these forms give rise to categorical sensations; no longer any need for a key to understand’.

Therefore, there is nothing hiding behind what is perceptible. The time of buildings is the present alone and it is on the present that one may base all possible interpretations of the past.

9 Le Corbusier, Toward an Architecture, p. 102.
10 Ibid, p. 117

1. «Τα μάτια μας είναι φτιαγμένα για να βλέπουν τις μορφές στο φως. Η σκιά και το φως αποκαλύπτουν τις μορφές».

Για να κατανοήσουμε καλύτερα το νόημα της αρχιτεκτονικής και τον τρόπο που αυτή «προστίθεται» στην απλή κατασκευή, θα δούμε πρώτα πως λειτουργεί, για τον Le Corbusier, η πνευματική και ψυχική ικανοποίηση του ανθρώπου.

1. «Το Ωραίο – η ορατή ευρυθμία των όγκων - συλλαμβάνεται από το αισθητήριο όγκο της όρασης και προκαλεί, σαν φθάσει στον εγκέφαλο, την ικανοποίηση του πνεύματος και της ψυχής. Με άλλα λόγια, η Αρχιτεκτονική περιορίζεται, όσον αφορά το θεατή, στη συγκινητική ερμηνεία των φαινομένων: «Ιδού η μηχανή για να συγκεντρώσει (machine à emouvoir) [ο Παρθενώνας]. (...) Δεν υπάρχουν σύμβολα που να συνδέονται με αυτές τις μορφές. Οι μορφές αυτές προκαλούν κατηγορηματικές αισθήσεις και χρειάζονται θεατρική περίπτωση για να καταλάβετε».

Πίσω από τα φαινόμενα δεν βρίσκεται συνεπώς τίποτα. Τα κτίρια έχουν μόνο παρόν και πάνω του στηρίζεται κάθε δυνατή εμπνέυση του παρελθόντος.
2. ‘Cubes, cones, spheres, cylinders, pyramids are the great primary forms that light reveals well. (…) That is why these are beautiful forms, the most beautiful forms. Everyone is in agreement about this: children, savages, and metaphysicians.  

The primary forms revealed by the light contain the undeniable and timeless stimulus that causes a stirring of emotion in the human soul, whether it is the soul of a child, or a savage, or even that of a philosopher. The purity of these forms affects the ‘receptor’ irrespective of their educational or cultural background. Such forms are absolute values in themselves and they are synonymous with Architecture, as there can be no Architecture in Le Corbusier – be it that of primitive cultures, of India and Egypt, of Persia, classical Greece, Rome or the Byzantium – that does not contain these pure forms. In the search for the foundations of Le Corbusier’s aesthetics, the absolute supremacy he ascribes to pure form has often been paralleled to that of the Platonic solids as described in Philebus. The treatment of architecture in Le Corbusier’s writings may often recall certain passages from the work of the Greek philosopher. Actually, a similar correspondence may also be traced in investigations carried out by the cubists at the time. In Le Corbusier’s case however, such connections are mainly superficial and, ultimately, contradictory (Fig. 5).

First of all, there is no evidence to support the idea that Le Corbusier did study Philebus, or any of Plato’s works for that matter. He must of course have been deeply influenced by the neoplatonic

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12 Cf. Ibid, p. 102.
13 L’Elan, 9/1916.
14 Φίληβος, 51c, όπ.π.
spirit that saturated many of the books he studied in his youth. Moreover, it is certain that he was familiar with the famous Philebus excerpt, cited in 1916 by Amedee Ozenfant in his magazine. Yet this citation was not the result of a thorough study, but rather a random, emotional, fragmentary act. The passage itself was seen, together with so many other examples of the literature and art of the past, to nicely fit a contemporary quest that showed little interest in the true philosophical meaning of the mixing of pleasures in Platonic thought. The sole interest of Le Corbusier’s contemporaries seemed to be in the straight lines and circles, and the plane or solid figures which are formed out of them by turning-lathes and rulers and measurers of angles. 14

Plato does not speak about the cube, the sphere, the cylinder or the pyramid, which have come to be known as ‘Phileban forms’, but about a generic principle that does of course apply to ‘Phileban forms’ as well. What is important, though, is that the solids to which Plato refers are the most beautiful of forms even in the absence of sight, or before sight itself, thanks only to the idea behind their conception. Rather than being visible, they are a set of mental shapes, of notions. On the contrary, Le Corbusier’s pure solids are visible forms. They attain their characteristic perfection only in the light, or before sight itself, thanks only to the idea behind their conception. Even if we choose to accept that Le Corbusier did refer back to Plato, despite the lack of evidence that would corroborate this idea; that he in fact referred to Plato’s Philebus before formulating his famous definition of architecture (‘the masterful, correct, and magnificent play of volumes brought together in light’), then it is certain that he did not understand the texts he read and that he failed to comprehend the platonic significance of perfect solids. 15

3. ‘Architecture is the masterful, correct, and magnificent play of volumes brought together in light’. 15

The particular play (jeu) Le Corbusier refers to here does not involve the notion of chance, nor does it imply any recreational activity. It is rather as masterful, correct and magnificent an act as the touch of the fiddletick upon the strings of a violin, or of a pianist’s fingers on the keys of the piano. It is a play that follows a set of strict and complex rules, which are the fundamental, nay the only preconditions for harmony and elegance of form. Architecture is a pure creation of the mind and a gift shared by a select few. Aided by the rules of mathematics and by inspiration in his choices, the Architect

oratá, allá vothéstá sçhtímatá, idézé. Antítheta, ta kathará stereá tou Le Corbusier einai ORATÍS MORFÉSES. Apoktovn thn tneléipteta twn mónon sth fws, pou ta kanv éntilptá sth máta tov Béte, kai einai, svnepwos, appa (tangibles). To wraioi einai pléon thméa psíxhologikí sáthth ths morfwn. Akóma kai an dektízoume wos o Le Corbusier anétrexe, me kápivo trópto pou dén gnwrizoume, sthn Plátwna kai, pio svgekriwména, sthn Filíbho, prin diaxwmpse tov períphimo orismou tou ths arxítektonikhí (‘to epideió, sosó sto kai axízóma sto páímos thn ógkon pou svmplékounta sto fws’), tóte oýgarh dén katanóhse to káieima pou diábas kai dén antélhesth thn plaiwnikhí sýmmia thn téleous sterewn. Plátwvna kai, pio svgekriwména, sthn Filíbho, prin diaxwmpse tov períphimo orismou tou ths arxítektonikhí (‘to epideió, sosó sto kai axízóma sto páímos thn ógkon pou svmplékounta sto fws’), tóte oýgarh dén katanóhse to káieima pou diábas kai dén antélhesth thn plaiwnikhí sýmmia thn téleous sterewn. 

3. ‘H arxítektonikhí einai to epideió, sosó sto kai thaumastó páímos thn ógkon pou svmplékounta kátos apó th fws’. 15

Páímos (jeu), ùporís kai, énoia píanidíou ù tayáiou svndúsoymou. Páímos epideió, sosó sto kai axízóma sto páímos, san ekeíno tov doxaríou pánw sth biól, san to dáktylo tov píanísto sto pléktro tov píanou. Páímos pou upakoiwi se svndéntas kai svsteroúkkanóndes, pou móno autoi epitpérpan thn arxomínán thn euvrímia ths morfwn. H Arxítektonikhí einai katharí dhimiourghí tou svneúmas kai charáisma lígwn eklektwv. O Arxítektonwos ofeiléi na dímiourghínei morfés pou na prokaloun svngkynwseis, me th bòtheia mathímatikon kanónwn kai emppneusémewn epilouvwn.

Oi arxímatikon charáxeis, pou svndúsoyn to vómo touv arithmwn kai thn táth ths gnavmetrias, apotelésonan, gia tov Le Corbusier, to sématikótero méso gia thn exafrîlía thn euvrímías thn morfwn. Thn danaítikte apo thn Istoría ths Arxítektonikhís tou Auguste Choisy (1899) kai thn òrtheiwmé svníasios nómov, pou efarmóstikan se óles ths epoxhés kai se óles ths koivwnías me ta idía lámapi apotelésmata. «O Ellhíos, o Ayóptgios, o Míahtl ‘Aggelos h o Blondel xrpímopoióssan rúbtimiatikés charáxeis gia na diorðíswoun th ta érra tous kai na ikanipoioun thn kalitexnikh ths aíðhsh kai th mathímatikh ths skêfis. (...) H eplógh ths rúbtimiatikhs xárachés, súntita apoñahasía stigmi ths emmeneías, apoteléi kefalalíwph práds ths arxítektonikhis». 16

Akolouðhíi h apódeíqhe thn lýgon me thn parásthase paraðeinnamon diálexgeménwn apo thn Istoría tou Choisy.

Denv arkoún òmos oi mathímatikoi kanónes. Xreiázetai h emppneusémewn efarmogh toux kai th dímiourghí diámevth th arxítektonw. H arxítektonikhí einai poísh, einai plásitikí. Éinai h stigmh pou charássontai ta charaktetriká tou prósouw. O arxítektonwos, léei o Le Corbusier, «épaixe me to fws kai th skia, gia na sthnizei ekeíno pou ÿhlele na pei. Akolouðhíi h smileúsh touw

13 'H arxítektonikhí einai to epideió, sosó sto kai thaumastó páímos thn ógkon pou svmplékounta kátos apó th fws’. 15

PANAYIOTIS TOURNIKIOTIS
must at all times create forms that move the heart.

Harmonious lines, resting upon a combination of the law of numbers and of the order of geometry, were for Le Corbusier the most important means in ensuring the eurhythmy of form. He borrowed them from Auguste Choisy’s History of Architecture (1899) and treated them as a set of eternal laws, applied throughout time and in every model of society and always yielding the same brilliant results. The Greeks, the Egyptians, Michelangelo, and Blondel used regulating lines for correctness in their buildings and the satisfaction of their artistic sense and mathematical thought (…) The choice of a regulating line is one of the decisive moments of inspiration, it is one of the crucial operations of architecture 16. Le Corbusier proceeds to offer proof of the above by means of examples he has selected from Choisy’s History.

Nevertheless, mathematical rules are not enough – they must be applied in an inspired manner, which in turn presupposes the architect’s own creative participation. Architecture is poetry; it is sculptural art. It is to be found in the moment when the lines of the face had acquired an almost transcendental significance that seems to originate from the moment when the lines of the face had to be incised. The architect, Le Corbusier will note, employed ‘plays of volumes in light’. The Greeks, the Egyptians, Michelangelo, and Blondel used regulating lines for correctness in their buildings and the satisfaction of their artistic sense and mathematical thought (…) The choice of a regulating line is one of the decisive moments of inspiration, it is one of the crucial operations of architecture 16. Le Corbusier proceeds to offer proof of the above by means of examples he has selected from Choisy’s History.

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The Parthenon and the car

For the remainder of this essay I shall be focusing on a chapter from Le Corbusier’s Toward an Architecture titled ‘Eyes that do not see…’

The cars', placing emphasis on an interpretation of two seminal pages in the course of this chapter, which have been considered the challenge par excellence posed by the movement of Modernism and the emblematic formulation of its avant-garde principles (Fig. 6). The top part of these two pages features the images of two celebrated temples of Greek antiquity, while at the bottom are images of two early twentieth century cars. This two-page spread, which has been reprinted and commented upon in many historical and critical essays on the Modern movement, has been interpreted as a comparison between the machines of the twentieth century and the temples of ancient Greece; a comparison that elevated the contemporary machine into a model to be emulated in the work of modernist architects - at least one that was of equal status to the

6. The two pages featuring Greek temples and cars in the first edition of Le Corbusier’s Vers une architecture (p.p. 106-107). Seen on the left is the temple of Hera at Paestum and the 1907 Humber; seen on the right is the Parthenon and the 1921 Delage Grand Sport.

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αριστερά η φωτογραφία ενός αυτοκινήτου Humber του 1907 και δεξιά η φωτογραφία ενός αυτοκινήτου Delage Grand-Sport, του 1921. 

O ναός της Ποσειδώνας δεν σχολιάζεται καθαυτός σε κανένα σημείο του κεφαλαίου. Η φωτογραφία, η τοποθέτηση και η αρχαία εποχή αρκούν, για να αποκτήσει το νόημα που του δίνει ο Le Corbusier, ως αφετηρία σε μια εξελικτική πορεία.
models with which ancient temples presented the architects of the previous century.

At the top left part of this two-page spread there is a picture of the Archaic temple of Hera at Paestum, which dates from between 600 and 550 BC. In the top right, there is an image of the Parthenon, which dates from between 447 and 434 BC. At the bottom left there is a photograph of a Humber car of 1907 and on the right a photograph of a Delage Grand-Sport of 1921. There are 13 other pictures on the chapter’s remaining pages, of which three show details of the Parthenon, nine feature various cars of the period, with an emphasis on the 1921 Delage, while the last one contains details of aerodynamics. These two levels of illustration – photographs of ancient Greek temples and of motor cars – clearly dominate the whole of the chapter.

Let us make a careful reading of the text that runs between the pictures, following the distinction between the two levels.

The temple at Paestum is not commented upon as such at any point in the chapter. The photograph, the site itself and the period to which this belongs – namely, the Archaic – are enough to invest the temple in question with the particular meaning that Le Corbusier attributes to it, as the starting point, that is, in the evolutionary course leading up to the Parthenon. In point of fact, he writes: ‘A century before this, the Greek temple was already organized, with all its features 19. That is to say, the Paestum temple already possesses all the features of a type – the Doric temple – on the model of which Greek temples of the period were built, including the Parthenon. More specifically, ‘the temples of that period all followed the same type 20. The essential difference between the majority of such temples and the Parthenon is that ‘the Parthenon greatly outstripped them 21. In other words, a hundred years previously, ‘the Greek temple was already organized with all its features 22. ‘A hundred years later, the Parthenon was to be the culmination of an upward course 23. ‘Gradually, as Le Corbusier notes, ‘the temple was formulated and passed from construction to architecture 24. ‘The Parthenon is a product of selection applied to an established standard 25. This last comment is of great significance: le Corbusier maintains that the completion of the type – of the standard, as he

19 Ibid, p. 106.
20 Ibid, p. 115.
21 Ibid.
22 Ibid, p. 106.
23 Ibid, p. 110.
24 Ibid.
calls this first phase represented by the temple of Hera – is a matter of construction, while the culmination of its evolutionary course, represented by the Parthenon, is a matter of architecture. The temple of Hera is a ‘standard’; it is simply a construction. ‘The Parthenon is a product of selection applied to an established standard’; it is, therefore, architecture. The difference implied in the horizontal reading of the two Greek temples is in fact the difference between a type and its perfected form, between the standard, what is current or repeated, and that which is unique, absolute and unrepeatable. On the one side is the construction; on the other, architecture. Le Corbusier is clear: ‘In constructing the Parthenon, Phidias did not carry out the task of a constructor, an engineer, a designer. All the features were there already. He perfected them, achieving a work of noble spirituality.’

This specific evolutionary course, from the already completed type of the Paestum temple to the happy culmination that is the Parthenon, had already been described by Choisy in his History, from where Le Corbusier indeed borrowed it. Choisy’s widely recognized authority was in itself proof of the soundness of this horizontal reading of the two Greek temples.

The basic type, the standard of which le Corbusier speaks, is a matter of rational thought. ‘Standards,’ he says, ‘are an object of reason, of analysis, of detailed study. Standards are shaped in the light of a problem which has been correctly stated.’ The shaping of a standard consists in the organization of rational elements, which follows an equally rational course. ‘The standard stems from the need for order to be imposed on human work.’ Construction concerns the standard.

Conversely, ‘architecture acts upon standards.’ ‘Architecture,’ Le Corbusier tells us, ‘is a plastic invention, an intellectual conception, higher mathematics. Architecture is a very noble art.’ ‘The Beautiful dominates, it is a pure creation of man; it is the superfluous which is needed only by those who have an ennobled soul.’ In the Parthenon, ‘each individual part is decisive; it achieves the maximum precision, the greatest expressiveness; on it, proportions can

Ο βασικός τύπος, το standart στο οποίο αναφέρεται ο Le Corbusier, είναι υπόθεση του ορθού λόγου. «Τα πρότυπα - λέει - είναι αντικείμενο της λογικής, της ανάλυσης, της ενδελεχούς μελέτης. Τα πρότυπα διαμορφώνονται στη βάση ενός προβλήματος που έχει τεθεί σωστά.» Η διαμόρφωση ενός πρότυπου συνιστάται στην οργάνωση ορθολογικών στοιχείων, που ακολουθεί μια εξίσου ορθολογική πορεία. «Το πρότυπο πηγάζει από την ανάγκη να επιβληθεί τάξη στην ανθρώπινη εργασία.» Το πρότυπο, που επιβάλλεται από το νόμο της επιλογής, είναι οικονομική και κοινωνική αναγκαιότητα. Η κατασκευή αφορά στον τύπο, το standart.

Αντιθέτως, η αρχιτεκτονική επενεργεί σε πρότυπα. ‘Η αρχιτεκτονική - μας λέει ο Le Corbusier - είναι πλαστική επινόηση, διανοητική σύλληψη, ανώτερα μαθηματικά. Η αρχιτεκτονική είναι αποκρυφιώ της τέχνης, έχει καθαρή δημιουργία του ανθρώπου είναι το περπάτημα που χρειάζονται μόνο όσοι έχουν εξευγενισμένη ψυχή. Στον Παρθενώνα, κάθε επιμέρους στοιχείο είναι αποφλοιοφορτιστικό, επιτυγχάνει τη μέγιστη ακρίβεια, τη μέγιστη εκφραστικότητα επάνω του διαβάζονται οι αναλογίες πεντακάθαρα.

Όλα όσα λέγονται ως τώρα, ερμηνεύοντας οριζοντικά το επίπεδο των αρχαίων ελληνικών ναών -έστω και αν οι ερμηνείες ακολουθούν το μέτρο του ορθολογισμού, όπως το διδάσκει ο Chοisy - συντρέχουν με την πλέον ορθόδοξη και ακαδημαϊκή αισθητική. Η ανελικτική ερμηνεία από τον τύπο ως την τελειοποίηση, με αποκορύφωμα τον Παρθενώνα, είναι η κατ’ εξοχήν κατεστημένη ερμηνεία της εποχής. Η προσδοκώμενη αμφισβήτηση θα πρέπει να συνδέεται λοιπόν με τα αυτοκίνητα, με αυτές τις φοβερές μηχανές των αρχών του αιώνα.

Ο Le Corbusier ανοίγει προκλητικά το κεφάλαιο με μια τομή προσθίου φρένου μάρκας Delage (εικ.7), και στις επόμενες σελίδες, εκτός από τα δυο αυτοκίνητα που αναφέραμε ήδη, απεικονίζονται και άλλα γνωστά μοντέλα, ένα Hispano-Suiza του 1911, με αμάξωμα σχεδιασμένο από τον Ozenfant, ένα Bignan-Sport του 1921, ένα Caproni-Hydrôcellulaire, ένα Caproni-Exploration, ένα Bellanger και ένα Voisin Torpédo-Sport του 1921 επίσης. Θα εστιάσουμε το
be read with perfect clarity. All that has been said up to this point in horizontally interpreting the level of the ancient Greek temples – even if such interpretation follows the norm of rational thought as taught by Choisy – is compatible with the most orthodox, academic perception of aesthetics. The kind of interpretation that focuses on an evolutionary course from the type to its perfected version, the culmination of which is the Parthenon, is the established interpretation par excellence of the period. The anticipated challenge should, then, be associated with the image of the car, that fearful machine of the early twentieth century.

Le Corbusier provocatively opens the chapter with a cross-section of a Delage front brake (Fig. 7), while on the following pages, apart from the two cars we have already mentioned, there appear other well-known models of the time: a Hispano-Suiza of 1911 with coachwork designed by Ozenfant, a Bignan-Sport of 1921, a Caproni-Hydrocellulaire, a Caproni-Exploration, a Bellanger and a Voisin Torpédo-Sport, also of 1921. We shall focus our attention on the two cars featured below the two Greek temples.

The Humber model of 1907 – featured on the page right below the temple of Hera - is a British car which epitomizes the time’s state-of-the-art technology, yet boasts no particular innovation. The Delage Grand Sport model of 1921 – featured right below the Parthenon - emerged as an example of the era's progress. A Delage won the Grand Prix of Indianapolis in 1913 and its career culminated with the world title in 1927. Delage Grand Sport of 1921 was the embodiment of the period: the final word of the machine.

As far as construction is concerned, the two automobiles are typologically similar, with the differences being concentrated in the development of the same type over the fifteen years that separate them. Yet the Humber belongs to the first generation of cars, which had not yet been completely freed from the practice of the horse carriage, maintaining a hybrid chassis and low speeds for the period. Conversely, Delage belongs to the early era of autonomous automotive aesthetics. The aerodynamic design is already an integral element of the composition, while the body moves as a seamless entity, creating a continuous curve that reminds us of the myth of identity. Nothing reminds us of the aesthetics of the carriage. The car is already a perfect orthographic form.
was a French car and prime example of cutting-edge modern technology. It was a Delage that won the Indianapolis Grand Prix in 1913, while the company’s success reached its peak with winning the world championship of 1927. The model in question was in fact the most modern thing the age had to offer: the last word in machinery.

In terms of structure the two cars are typologically alike: differences between them are a result of the evolution of the original type over the period of 15 years which separates the two. The Humber, however, belongs to the first generation of motor cars, which were not as yet wholly removed from the model of the horse-drawn carriage: it retained a hybrid coachwork and what were relatively low speeds for the time. On the contrary, the Delage is an example of the early stages in the development of independent motor car aesthetics. The aerodynamic design is already a constituent part of the overall concept, while the coachwork sweeps without distraction from the front of the car to the rear, creating a curving pattern that is reminiscent of the stern of a sailing craft. There is nothing which recalls the aesthetics of the carriage. The car is now a self-existent rational object which places its own aesthetic demands.

We have, then, two standards – the Doric temple and the motor car – which evolve horizontally from an original formulation of their basic features to a culmination of their structural, functional and aesthetic expression. A reading of this quadrilateral seems to tip the balance in favour of the Delage Grand Sport, which sets the scene for a radical questioning of the supreme paradigms of the past. Where everyone until then would have placed the Parthenon, Le Corbusier has placed a profane motor car. The reading would be entirely legitimate for a period that worshipped fast cars and the gleaming aesthetics of industrial products. However, a careful reading of the text that runs between the images yields an entirely different interpretation of things.

Le Corbusier makes a clear point: ‘Let us show them… the Parthenon and the car, for them to realize that we are speaking, in different fields, of two products of selection, one of which is already perfect, and the other is still in the course of evolution. Then! Then what remains is for us to compare our houses and palaces with cars. Here everything is being destroyed and nothing advances. Here we do not have our Parthenons.35 (Fig. 8-9)

If we take a few steps back, we shall see Le Corbusier arguing that: ‘The construction and the coachwork of the first cars were carried out in accordance with the old habits, so that these vehicles are

35 Le Corbusier, Toward an Architecture, p. 111.
slow and only minimally aerodynamic. A study of the laws of aero-
dynamics determined the standard, a standard which is evolving
by combining two different aims: speed, with a large mass in front
(sports car), and comfort, with the large mass behind (limousine).
And in both cases, there is nothing that recalls the slow-moving
carriage.36 The Humber model does not correspond to these speci-
fications. Although it has the same mechanical structure, the over-
all design is contrary to ‘the organization of rational features, which
follows an equally rational course.37 The shell is pre-designed. The
completion of the type, the standard, is, then, the Delage Grand
Sport motor car. A horizontal reading of the images on the two
pages presupposes a substantive transposition of the two cars to
the left. The equivalent of the temple of Hera is in fact the car on
the right-hand page. In any event, Le Corbusier states it clearly: ‘Let
us show them… the Parthenon and the car, for them to realize that
we are speaking, in different fields, of two products of selection,
one of which is already perfect, and the other is still in the course
of evolution.38

The statement with which the chapter opens is also that with which
it concludes, providing the key to its interpretation: ‘We must ap-
proach the grounding of standards in order [then] to deal with the
problem of perfection.39 The standard is the utterly rational solu-
tion to the problem of functionality and construction. Perfecting
the standard is to further process the problem, so that it finally be-
comes architecture. To repeat Le Corbusier’s own words: ‘Standards
are an object of reason, of analysis, of detailed study. Standards are
shaped in the light of a problem which has been correctly stated.40

Architecture acts upon standards.41

What is there, then, underneath the picture of the Parthenon? Le
Corbusier believes that ‘Phidias would very much have liked to
have lived in this age of standards [that is, in the age of the Delage
Grand Sport car]. He would have accepted the possibility, the cer-
tainty of success… he would have repeated the experience of the
Parthenon very quickly.42 He would not, of course, have created
the Parthenon as we see it in the upper part of the page. When Le
Corbusier asks us to compare modern houses with modern cars so
we may see that the comparison is to the detriment of the houses,
he is only saying so because he believes that modern houses of

37 Ibid.
38 Ibid, p. 111
41 Ibid.
42 Ibid, p. 115.

To αυτοκίνητο του Le Corbusier στην είσοδο της villa Stein de Monzie (πηγή: Le Corbusier & Pierre Jeanneret, Ouvre complète 1910-1929, σελ. 141)

11. The southern façade of the Villa Savoye. The garage door is open, allowing a view of a car parked inside (courtesy the Fondation Le Corbusier, Paris ©)
Η μεσημβρινή όψη της villa Savoye. Η πόρτα του γκαράζ είναι ανοιχτή και διακρίνεται παρκαρισμένο ένα αυτοκίνητο (πηγή: Fondation Le Corbusier, Παρίσι ©)
his time were still being constructed following the contradictory logic of the Humber car, when they ought to have been designed like a Delage motor car. To be precise, he says: ‘If we studied the problem of the dwelling, of an apartment, as we study a car chassis, we would see our houses being transformed and improved very rapidly.’ 43 And further on: ‘the standard of the house is a practical, a constructional issue.’ 44 It is precisely in this sense that he calls for the house to reach the level of a Delage, to become a machine for living in, une machine à habiter. Then, when the house achieves this level, the level of the standard, the moment will come to deal with the problem of perfecting it, with the issue of architecture in such terms as those set by the Parthenon.

So, beneath the Parthenon there is nothing! Or rather, there is the Parthenon again, as the symbolic equivalent of the kind of architecture Le Corbusier demands for the 1920s, calling into question all that has been carried out before it. That is to say, he does not only challenge the academic tradition of Beaux-Arts architecture, but also that of the so-called avant-garde, the exponents of which may have been innovatory in individual matters, such as the use of béton armé for example, but made use at the same time of features and forms that did not logically correspond to that particular moment in time, as was the case with the Humber car. Beneath

44 Ibid, p. 111.
the Parthenon lies the kind of architecture Phidias would have produced were he alive at the time, sitting behind the wheel of a Delage Grand Sport, speeding as if there were no tomorrow: an architecture founded on the substantive questioning of every recent work of architecture, without as yet having any other model but the Parthenon itself. The road to this architecture – the road versus one architecture - is the road that will be followed by those who accept the author’s questioning. But more so, it is the road Le Corbusier himself followed in projecting the ‘father’ Parthenon on the Villa Stein, or the Villa Savoye (Fig. 10-11).

Thus, in reading the four pictures, we do not come to the conclusion that the model for modern architecture is the Delage Grand Sport motor car of 1921, but rather the Parthenon of the fifth century BC. This interpretation touches upon the very essence of Vers une Architecture.

Le Corbusier drew a distinction between Construction (a sturdy shell and a fulfillment of basic needs) and Architecture (a fulfillment of the needs of the spirit). His approach of the dwelling, the home, and of the art of construction was purely rational; as rational, in fact, as he considered the engineer to be in his approach of the problem of constructing an aircraft, or a car. The rationality inherent in the conception of a building was limited to considerations of necessity and utility, leaving no room for aesthetic pleasure. The good and the real are not beautiful in themselves. And transparencies in the manner of construction is not an architectural virtue. "Architecture is defined as a pure creation of the spirit. It cannot, therefore, concern itself with the water-closet, with heating, with reinforced concrete, etc. These are matters of construction. 'It goes without saying,' Le Corbusier will write, 'that if the roof leaked, if the heating didn't work, if the walls cracked, the joys of architecture would be greatly hindered, like listening to a symphony while sitting on a pin cushion or in a draft blowing through the door.' And neither is architecture limited to 'adding' order to simple concepts, or of practical design. Architecture is the art par excellence, one that attains a state of Platonic grandeur, mathematical order, transcendence in the manner of construction is not an architectural virtue. Hence, the heating didn't work, if the walls cracked, the joys of architecture would be greatly hindered, like listening to a symphony while sitting on a pin cushion or in a draft blowing through the door.'

Me τον τρόπο που αντιμετωπίζει, στα μάτια του, ο μηχανικός το πρόβλημα της κατασκευής του αεροπλάνου ή του αυτοκινήτου. Η ορθολογική πλευρά της ανάγκης της τεχνοτροπίας περιορίστηκε στο πεδίο της αναγκαιότητας και της εξυπηρέτησης, μη αφήνοντας περιθώριο στις αισθητικές απολαύσεις. Το καλό και τ’ αληθινό δεν είναι καθαυτά ωραία. Και η διαφάνεια του τρόπου κατασκευής δεν αποτελεί αρχιτεκτονική αξία. O Le Corbusier, παρά τον ορθολογισμό του, δε δέχεται την αισθητική αυτονομία του φονηκοναλαμοφιού ή του κατασκευαστικού ρασιοναλισμού. «Η αρχιτεκτονική έχει άλλο νόμα και διαφορετικούς σκοπούς από το να αποκαλύπτει τον τρόπο κατασκευής και να ανταποκρίνεται σε αισθήματα (ανάγκες με την έννοια της λειτουργικότητας, της ανέσεις, της πρακτικής διάταξης). Η ΑΡΧΙΤΕΚΤΟΝΙΚΗ είναι η κατεξοχήν τέχνη που πλησιάζει το πλατωνικό μεγαλείο, τη μαθηματική τάξη, το διαλογισμό, την αντιλήψη της αρμονίας μέσα από σχέσεις που προκαλούν συγκίνηση, αυτός είναι ο ΣΚΟΠΟΣ της αρχιτεκτονικής.» 

Η αρχιτεκτονική ορίζεται σαν καθορισμό δημιουργία του πνεύματος. Δεν μπορεί, συνεπώς, να ενδιαφέρεται για το W.C., τη θέρμανση, το μπετόν αρμέ κλπ. Αυτά είναι θέματα οικοδομικής. «Είναι αυτονόητο – γράφει ο Le Corbusier - πως, αν είστατε η στέγη, αν δε λειτουργούσε η θέρμανση, και οι τοίχοι γέμιζαν ρωγμές, οι απολαύσεις της αρχιτεκτονικής θα ήταν πολύ μικρότερες. Φανταστείτε έναν κύριο που θα άκουγε μια συμφωνία επιτρέποντας τον τρόπο της κατασκευής. Ήταν μπορεί πάντα να ανέβει για τη W.C., τη θέρμανση, το μπετόν αρμέ κλπ. Αυτά είναι θέματα οικοδομικής.» 

Ο Le Corbusier δεν επιδιώκει τη ρήξη με το παρελθόν στο σύνολό του. Αντιτάχθηκε στους αρχιτέκτονες του 19ου αιώνα και σε εκείνους της εποχής του ζητώντας την επιστροφή στην ουσία της αρχιτεκτονικής. «Όχι με τούτο το ρυθμό ή με εκείνη την τάση, αλλά με την απόλυτη έννοια: την επιστροφή στην ιδέα της αρχιτεκτονικής. Αρχίσεις το βιβλίο του με τον απορριπτικό αφορισμό, «Η αρχιτεκτονική δεν έχει καμιά σχέση με τα “στυλ”, με σκοπό να προσδιορίσει στη συνέχεια το μόνο πραγματικό νόημα της αρχιτεκτονικής. Ένα νόημα, που θα επιτρέπει στο σύγχρονο αρχιτέκτονα να ξαναβρεί η πορεία των παραδόσεων του παρελθόντος, μέσα από μια ριζική αναθεώρηση...
struction. A rational arrangement of forms – geometry, rhythm and measure – is inherent to all of man’s creations and characterizes the sum of all constructions, as far back as the primeval hut. What architecture adds to the constructor’s inbuilt sense of order is the conscious pursuit of harmony: of eurhythmy, of ideal proportions, of poetry and clarity of form, of colour and sound.

Le Corbusier did not seek a radical break with the entire past of architecture. He levelled criticism at architects of the nineteenth century and of his own time, demanding a return to the true essence of architecture. Not in the sense of a given style or trend, but in an absolute sense: the sense of a return to the very idea of architecture. He began his book with a negative aphorism – ‘architecture has nothing to do with the “styles”’ – only to define further down the one true meaning of architecture; one that would allow the contemporary architect to retrace the course of past traditions through a radical revision of the present founded on reason alone. He did not therefore attempt to open the road toward a new architecture, but to find anew the ever right road to Architecture.

The coexistence of rationalism and idealism is a deeply rooted characteristic of his perception of architecture. Efficacy, grounded in functionality and solid construction, is combined with the spiritual exaltation offered by purely beautiful forms. A blending of these two systems and the problems resulting therein (the contradictions and distortions of established values) are the basis for the ideas set forth in Toward an Architecture and provide a ‘key’ for understanding and interpreting Le Corbusier’s diverse work.
Note
The above essay is based on the author’s ongoing research into the work of Le Corbusier, a project pursued over many years. A part of its content, in different form, has already been the subject of previous publications. It will also be included in the author’s upcoming book, titled Le Corbusier diagonalis, which is to be published by Ekkremes Editions, Athens.

Panayotis Tournikiotis is associate professor of architectural theory at the National Technical University of Athens, School of Architecture, and chair of the Docomomo International Specialist Committee on Register. He studied architecture, town planning and philosophy. He is author of Adolf Loos (1991), The Historiography of Modern Architecture (1999) and Architecture in our time (2006). He is also editor of The Parthenon and its Impact in Modern Times (1994), and the Greek translator of Le Corbusier’s Vers une architecture (2004). His current work is concerned with Le Corbusier in the 1920s and 1930s.

Σημείωση
Το κείμενο αυτό στηρίζεται σε μια προσωπική διερεύνηση του έργου του Le Corbusier που εξελίσσεται σχεδόν 20 χρόνια. Μεγάλο μέρος του έχει δει το φως δημοσιεύσεων με άλλη οργάνωση των περιγραφών του. Με άλλη επίπεδη μορφή, θα αποτελέσει μέρος του βιβλίου μου «Η διαγώνιος του Le Corbusier» που θα κυκλοφορήσει από τις εκδόσεις «Εκκρεμές» στην Αθήνα.

Presentation at the Symposium “The Work of Panos Koulermos”
Famagusta Gate Cultural Centre, Nicosia, Cyprus, September 3, 2005

Through this brief tribute I will attempt to paint a picture of Panos Koulermos as I met and knew him during the last decade of his life. I will make use of better and lesser known projects, and of a themed organization based on Panos’ main characteristics and traits: Panos the Architect, the Teacher, the Researcher, the Simeiologist, the Poet/Myth-maker, the Voyager.

1. DESIGN

Projects in Venice and California: The Open Building - The Enclosed Complex

The first contact with Panos was in Los Angeles late in 1988 (fig.1). As first-year architecture students, we were seeking each and every advice that he openheartedly offered to the students, to his numerous children as he branded us. Except for the “Grand Projects” which had already been designed and were materializing in Heraklion of Crete during that period, his research and theoretical designs in Venice and California were those which immediately won interest and admiration. An intriguing differentiation, one that betrays the manner by which Panos approached these two distinct geographical and cultural terrains, is how his Venetian researches, with their open-ended, unstructured approach, contrast sharply with his more rigid, prescriptive designs for the enclosed complexes of California.

In the competition for the UC Santa Barbara Museum (1983), the building takes a completely defensive circular form. The idea of the enclosed complex is carried over to the design for the Los Angeles School (1988). The building is split into three cylindrical masses, which are disposed symmetrically around the perimeter, and their form is derived from the street grid. In the proposal for the San Francesco della Vigna Community Center (1980), the building is more open-ended, using curved metallic roofs and an open plaza facing the canal, while in the Greek Pavilion for the Biennale of Venice (1990), the dream takes on typological references (bridge, tower, open-air auditorium), urban composition, visual axes and escape routes.

Figure 1
Εικόνα 1

1. ΣΧΕΔΙΑΣΜΟΣ

Μελέτες στη Βενετία και την Καλιφόρνια: Το Ανοιχτό Κτίριο - Το Κλειστό Σύμπλεγμα

Πρωτογνώρισα τον Πάνο το 1988 στο Λος Άντζελες (εικ.1). Ως πρωτοετής φοιτητής αρχιτεκτονικής, αναζητούσα κάθε μικρή ή μεγάλη συμβουλή που απλόχερα και ακατάπαυστα προσέφερε στους φοιτητές, στα πάρα πολλά παιδιά του όπως μας χαρακτήριζε. Εκτός από τα «Μεγάλα Έργα» που έπαιρναν σάρκα και οστά στο Ηράκλειο της Κρήτης την περίοδο εκείνη, οι ερευνητικές - θεωρητικές κτιριακές μελέτες στη Βενετία και την Καλιφόρνια ήταν αυτές που κέντριζαν άμεσα το ενδιαφέρον και κέρδιζαν το θαυμασμό. Μια αξιοπρόσεκτη διαφοροποίηση, που προδίδει και τον τρόπο με τον οποίο ο Πάνος προσέμεινε αυτά τα δοκιμάστρα γεωγραφικά και πολιτισμικά τοπία, είναι ότι οι μελέτες στη Βενετία έχουν έναν ανοιχτό χαρακτήρα και διάθεση που προσκαλεί στο εσωτερικό των συνθέσεων, οι μελέτες στην Καλιφόρνια παραπέμπουν με επιμονή και χωρίς εξαίρεση στην τυπολογία του κάστρου, ενός κλειστού και αυτάρκους συμπλέγματος.

Έτσι, στο διαγωνισμό για το Μουσείο Τέχνης του Πανεπιστημίου UC στη Santa Barbara (1983), το κτίριο παίρνει μια απόλυτα αμφιλεγόμενη κυκλική μορφή. Η ιδέα του κλειστού συμπλέγματος μορφοποιεί και τη λύση για το Νηπιαγωγείο στο Los Angeles (1988). Το κτίριο με τους τρεις κυλινδρικούς όγκους εσωτερικά της περιμέτρου τοποθετείται σε αστικό περιβάλλον, απ’όπου τα οριά του αντλούν τη μορφή τους. Αντίθετα, στην πρόταση για το Κοινωνικό Κέντρο Αναψυχής San Francesco della Vigna (1980), το κτίριο παίρνει συμβολικό και αστικό χαρακτήρα, ανάμεσα στο Μεγάλο Κανάλι και την ομώνυμη εκκλησία των Sansovino-Palladio, με καμπύλες, μεταλλικές στέγες και ανοιχτό αμφιθέατρο με άξονα και θέα στο Κανάλι, ενώ και στην πρόταση για το Ελληνικό Περίπτερο στη Biennale της Βενετίας (1990), η φαντασία καλύπτει με τυπολογικές παραπομπές (γέφυρα, πύργος, ανοιχτό αμφιθέατρο στη στέγη), αστική χωροθέτηση, οπτικούς άξονες και φυγές προς
geographic and cultural constructs, is that while the Venice designs have an open character and an inviting mood towards the inside of the compositions, the California designs insistently and with no exception turn to the typology of the castle, an enclosed and self-sufficient complex.

Thus, in the competition for the Art Museum of the University of California in Santa Barbara (1983) the building assumes a completely defensive circular shape. The same concept of the enclosed complex shapes the solution for the Kindergarten in Los Angeles (1988). The building, with its three cylindrical volumes enclosed within a tall, inhabited perimeter wall, is placed in an urban setting, from which the perimeter limits draw their delineation. On the other hand, in the proposal for the San Francesco della Vigna Community Recreation Center in Venice (1980), the building assumes a clearly symbolic and urbanistically friendly character, situated between the Grand Canal and the same-named church by Sansovino and Palladio, with curving metal roofs and an open-air theater, an urban setting and visual axes toward landscapes which unite the Aegean with the Adriatic in an interchange of labyrinthine circulations and clean volumes.

Three Competitions: The Building as Marker in the Landscape
During the 1990s, in the three large scale architectural competitions that Panos entered, his intent for creating important complexes which act as clear and important markers in the landscape (be it urban or not) grew stronger. In the proposal for the Visitor Facilities for the Alhambra (1990), the absolute geometric presence and the interchange of volumes refer not only to the adjacent historic monument, but also respect the awesome surrounding landscape, with both of which the proposal attempts a dialectic relation.

In the competition for the Parliament in Nicosia (1994, fig.2), the obvious symbolism is even further reiterated with the breaking up of the program in two clearly distinct volumes. While the austere volume of the offices refers to the urban fabric with an interchange of solid and void and with interior courtyards, the volume of the Parliament is an open temple dedicated to Democracy. This traversable building, with environmental design and axial placement to the surrounding plazas, proposes easily accessible interior spaces which emphasize its character and use.

In the proposal for the Urban Seafront of Thessaloniki (1997, fig.3), the symbolism of the building-markers joins the linear character to the topos, που ενώνουν το Λιγναίο με την Αδριατική σε μια εναλλαγή λαβυρινθικής διακίνησης και καθαρών μορφών.

Τρεις Διαγωνισμοί: Το Κτίριο σαν Σημείο Αναφοράς στο Τοπίο
Στη δεκαετία του 1990, στους τρεις διαγωνισμούς μεγάλης κλίμακας, στους οποίους ελάβε μέρος ο Πάνος, ενδυναμώθηκε η διάθεσή του για χωροθέτηση και αντιμετώπιση ενός συμπλέγματος κτιρίων ως σημείο αναφοράς μέσα στο ευρύτερο τοπίο, είτε αυτό είναι αστικό είτε όχι. Στην πρόταση για το κέντρο επισκεπτών στο Alhambra (1990), η αυστηρή γεωμετρική παρουσία και η αλληλουχία των όγκων αναφέρεται όχι μόνο στο παρακείμενο ιστορικό μνημείο, αλλά και σεβάται το μεγαλεώδες φυσικό τοπίο, με τα οποία το προτεινόμενο σύμπλεγμα έχει μια διαλεκτική τάση.

Στο διαγωνισμό για το Καινοβουλίο στη Λευκωσία (1994, εικ.2), ο προφανής συμβολισμός τονίζεται περισσότερο με τη διάσπαση του προγράμματος σε δυο όγκους. Ο αυστηρός όγκος των γραφείων αναφέρεται στο αστικό τοπίο με εναλλαγή πλήρους - κενού και εσωτερικά αέρια. Ο όγκος του Καινοβουλίου είναι ένας ανοιχτός ναός αφιερωμένος στη Δημοκρατία. Το διαμπερές αυτό κτίριο, με βιοκλιματικές αναζητήσεις και αειφόρο χωροθέτηση, προτείνει εύκολα προσβάσιμους χώρους οι οποίοι υπερθεματίζουν το χαρακτήρα της χρήσης του.

Στην πρόταση για το Θαλάσσιο Μέτωπο της Θεσσαλονίκης (1997, εικ.3), ο συμβολισμός του κτιρίου αναφοράς έρχεται να συνδέει το γραμμικό χαρακτήρα της πρότασης με τους κάθετους χώρος και το εσωτερικό του αστικού τοπίου. Κτίρια - σταθμοί για πολιτιστική, ψυχαγωγική και εμπορική δραστηριότητα γίνονται κόμβοι - κλειδία, για να προσφέρουν τοπική ταυτότητα και αστική συνέχεια, επαναφέροντας ένα αμήχανο θαλάσσιο μέτωπο στον πυρήνα της αστικής ζωής και δημιουργίας.

2. ΔΙΔΑΣΚΑΛΙΑ
Η διαλεκτική Αμερικής - Ευρώπης
Η διδασκαλία και η διάδοση της γνώσης και του πάθους για δημιουργία ήταν για τον Πάνο μια καθημερινή ανάγκη, ένα χάρισμα που λάτρευε να το πλάθει και να το ανανεώνει συνεχώς. Ο πολυπολιτισμικός χαρακτήρας της Νότιας Καλιφόρνια, αυτού του μεγάλου «χωριού», μέσα στο οποίο ο Πάνος έζησε και δίδαξε για ένα τέταρτο του αιώνα, του έδωσε την ευκαιρία, όχι μόνο να μελετήσει κτίρια που συνδύαζαν μορφές και τυπολογίες, αλλά και να δίνει στους φοιτητές του προβλήματα σχεδιασμού, επιχειρώντας
of the urban design with the vertical axes that lead to the inland urban fabric. These buildings act as key nodes for city's cultural, leisure and commercial activities, offer local identity, urban continuity, and return a previously indifferent seafront to the core of the city's life and creativity.

2. TEACHING

The America-Europe dialectic

Teaching, the passing-on of knowledge and the passion for creation, were an everyday need for Panos, a charisma which he continuously enjoyed to reshape and renew. The multicultural character of Southern California, that immense “village” in which Panos lived and taught for a quarter of a century, gave him the opportunity to not only study buildings which combined multiple forms and typologies, but to also present his students with design problems while at the same time attempting to answer them himself with his own proposals. This attempt, as he would emphatically explain, aimed at enriching an urbanistically poor and out-of-scale landscape with proposals that would in fact bestow Los Angeles with some of the imagination, the monumental presence, the symbolic imagery and the unique humanism, all the myths that the city itself created and conserves via the cinematic industry. The previously mentioned “protection” of the enclosed complex in the California projects is also repeated in La Jolla, next to Kahn’s Salk Institute, where Panos proposes the creation of a Conference and Community center, which, though initially projected, had never materialized. The La Jolla project was a design problem which, parallel to
Panos, his students were asked to solve for five consecutive years (1989-1993).

Teaching in America was for Panos never complete, had it not been complimented with a piece of Europe. For the West Coast Architecture student, USC’s program in Italy, a program which Panos found, organized and watched over with care and affection, was an oasis of urban culture, history and knowledge, a supplement for all the things that Los Angeles lacked. With Lake Como on the Italian-Swiss border as base, and with travels to the whole of Italy, from Rome and Florence to Bologna and Venice, the students continuously confronted history together with the new and the unknown, and were called to act in architectural, urban and social problems. They returned from Europe with those experiences in their luggage and with Panos emphasizing the need for architectural action within both a local and a regional urban landscape, and within the historic fabrics which according to him unavoidably encircle our every move.

From the first clumsy design attempts, until the Undergraduate and Graduate thesis projects, Panos kept the students company with continuous advice, with examples, with friendship, and always with strictness regarding the way they understood creativity and method in their work. One of the examples for which in every given opportunity Panos spoke with love and nostalgia was Cyprus, his homeland, to which he was thankful for the experiences and lessons it had offered.

3. RESEARCH

Bringing Modernism and Rationalism to the Mediterranean

Panos’ research activities, ever since the first years of his architectural education and experience, were not exhausted in theoretical design projects. Architectural theory and practice from the 1910s to the 1960s exerted unavoidable pull on him. He attempted a deep comprehension at the thought and lessons of the creators and currents that impressed him most, from the visions of the Russian Constructivists, of Sant’Elia and the Italian masters of Futurism, to Terragni and the war-years, until Corbu and the absolute of the high Modern. Through this effort he would attain a well informed self-understanding, and would comprehend who he really was and what he stood for within the larger context of Southern European Architectural creation in the final decades of the twentieth century.

This attempt at self-understanding became evident again in 1993-
1994, during the production of texts and drawings for a monograph on the work of Panos which was to be published by Academy Editions in London. The pretext was the preparation of material for the buildings that had just been completed in Heraklion on Crete, and especially for the three complexes of the Research Center of Crete (1985-1990), the Science Complex of the University of Crete (1985-1994) and the Foundation of Research and Technology - Hellas (1987-1994). The constant energy, the unstoppable insistence and the unending variations and presentations with which conceptual diagrams, site and floor plans those complexes were approached betrayed Panos’ curiosity and will to view and comprehend his own creations with as many lenses as possible, and to place them within the theoretical and creative spectrum of the time. Some months after the monograph's publication, Academy Editions returned with a proposal for a publication on European rationalism in the twentieth century, a pre-existing project idea which Panos had been forming for years. During the following academic year (1995-1996), Panos composed and defined the concept and production of European rationalism through his own experiences, and proposed a publication (fig.4) which included specimens from modernism’s beginnings from Scandinavia until Greece, and reached until Italian and Swiss rationalism and post-modern tendencies, both from
the wider Mediterranean region as well as from his own creations. The manner in which Panos wished to approach the projects by the masters of the first half of the twentieth century was indeed characteristic of his thought process. All drawings for those projects were executed in Panos' studio, and, as an unavoidable result, Corbusier and the others migrated and became true worshipers of the Mediterranean, with references to bright, white light, to traditional, vernacular, and even mythic architecture of single buildings or complete conglomerations, and to the unbroken connection between building and topos.

4. SIGNS

**Venice and Crete**

Panos believed that life's constant twists and games had to be carefully studied in order for the appropriate actions to be undertaken. His love for Venice and the parallel studies that materialized on Crete are an example of this belief's result. From Venice he drew strength and inexhaustive inspiration. The myth of the city, the fog, the lagoon, the imagination, but also the historic and cultural ties that bind it to Crete and Cyprus, opened the gates to the dreamworld of the Serenissima. The compilation and presentation of his work at the Fondazione Marieri (1993, fig.5) remained for him his most important exhibition. The presentation of the theoretical projects for Venice, with their hybrid typological references, in conjunction with the built projects at Heraklion was an epilogue for Panos' relation with those two worlds, an epilogue that duly bridged, united, and merged the light of Greece with the magic of the North Adriatic.

A small but characteristic example of the Heraklion projects is FORTH's Office Building B (1995, fig.6). Even in this project of small scale and secondary importance, which as I have noticed has not been included in the Accademia's edition of Panos' oeuvre, the indisputable ὀρθολογιστικότητα and clarity of volumes bow to the sign, the strong form and the skewing of the entry and public spaces volume.

**Studio Koulermos 1990s**

At Studio Koulermos, fate and destiny had an important role in decision taking. In 1994, to appease and predetermine the decisions of the larger powers-that-be, a banner was placed above Panos' office, which included everyone's signatures and read “by this time next year we'll be at the construction site in Cyprus,” signaled the end of the competition for the Parliament in Nicosia... As for the preparation for the dreaded business meetings, they included Pa-
nostos’ unending, pointed and humorous comments, who succeeded in always erasing everyone’s anxieties, by remaking, “correctly” of course, the ties of all those who were about to take part...

During the 1900s, those business meetings led to the widening of the Studio’s scope, and to the materialization of important projects in Asia. At the opposite end of Panos’ geographic and philosophical core, the unique cultural signs of the Asian world, the history, the art, the writing, and the surrounding structures, were filtered through his eyes and were translated in building lines and forms. In the master plan for a 5,000 inhabitant development on the hills of Hiroshima (1996, fig.7), the need for heightened density led to a search of multi-story typologies with common public, open and parking spaces. On the sloping ground at the city’s edge, view and privacy, attained through a uniquely Japanese perspective on the definition of private space, produced buildings as vertical signs arising from the earth, forms and references which communicate with each other and tie the community into a unified whole.

Santa Vibiana

Perhaps Panos’ least known attempt for a large-scale project in the United States came a few months before he left for Switzerland when, along with Mario Botta, applied with a common portfolio for the commission of designing a new Cathedral Church for Los Angeles. The commission did not come. It was God’s will, he explained. It was time to return to Europe.

5. ΜΥΘΟΠΛΑΣΙΑ

Δωδεκάλογοι Ι-ΙΙ: Οι Κατοικίες των Ανθρώπων - Οι Κατοικίες των Θεών

Η διπλή δημιουργική έκρηξη, η οποία πρόδωσε την υπερβολική φαντασία και έκανε καταφανείς τις δυνατότητες του Πάνου να δένει την ιστορία με την όγκο, να ενώνει τη μυθολογία με τη μορφή, και να μεταφράζει τη μνήμη σε κτίριο, ήρθε στο τέλος της δεκαετίας του 80 και στο τέλος της δεκαετίας του 90, με τις συνθέσεις για τις κατοικίες των δύο «Δωδεκάλογων», όπως ο ίδιος τους ονόμαζε, ταξίδια - σκιαγραφήσεις του παρελθόντος και του μέλλοντος του Ελληνικού χώρου, χρόνου και μόβου.

1989: Δωδεκάλογος Ι: Οι Κατοικίες των Ανθρώπων

Ο ενθουσιασμός του Κουλέρμου για τις καινούργιες μελέτες, οι οποίες κατασκευάζονταν στην Κρήτη από τον Κουλέρμο, βοήθησε σ’ αυτή τη διεξοδική τυπολογική έρευνα και εφερεί τη διαδοχική τυπολογική έρευνα. Τα σπίτια 3 (Ηράκλειο Ι), το σπίτι 9 (Σκύρος), και το σπίτι 1 (Σαλαμίνα, Κύπρος, fig.8), που αναφέρονται στο τετράδιο του Κουλέρμου, μορφώνεται ως ένα πολυσύνθετο σύμπλεγμα που όμως διατηρεί καθαρούς όγκους, οι οποίοι αναφέρονται στο τετράδιο του Κουλέρμου.
vernacular Cypriot Dihoro gives a multifaceted complex which nevertheless retains clear volume that open to the landscape. House 2 (Rhodes), House 4 (Heraklion II) and House 6 (Antiparos) draw inspiration from specific historic buildings and contexts, while House 5 (Patmos), House 7 (Hydra) and House 10 (Cassandra) are inspired from the surrounding landscape. Dodecalogos I held such importance for Panos as to push him to present the project in as wide a cultural horizon as possible, reaching, among others, Brazil, Mexico and Japan.

The most symbolically charged compositions in Dodecalogos I had themes drawn from one of Panos’ most cherished pastimes, the study, interpretation and retelling of mythology. Thus, the tragic figure of Iphigenia comes alive in the complex and extremely theatrical spaces of House 8 (Avlida), while the Sympligades offer inspiration for the pair of volumes forming the entry of House 11 (Alexandroupolis, near the gate to the Black Sea). Finally, in House 12 (Ithaca), the theme of the Odyssey is transformed into an extremely symbolic composition, perhaps Panos’ most recognizable sign.

1999: Dodecalogos II: Dwellings of Gods

Ten years after Dodecalogos I, and while Panos’ theoretical quests were once again searching for a gate toward the poetic and the abstract, mythology came to form an idea for the creation of themed “habitations” for the twelve Olympian gods (fig.9). Dodecalogos II gave the last, but one of the strongest samples of Panos’ theoretical work, an architectural and sculptural confrontation of the abstract, the ideal and the divine with the specific, the real and human world (Υδρα) and the spíti 10 (Κασσάνδρα). Ο Δωδεκάλογος I είχε τόση σημασία για τον Πάνο ώστε να τον ωθήσει να το παρουσιάσει σε όσο πιο πλατιώς γεωγραφικούς ορίζοντες γινόταν.

Οι πιο συμβολικές από τις συνθέσεις για το Δωδεκάλογο I είχαν θέμα και έμπνευσή τους μια από τις αγαπημένες ενασχολήσεις του Πάνου, τη μελέτη, την ερμηνεία και τον επαναπροσδιορισμό της μυθολογίας. Η γραφική μορφή της Ιφιγένειας ζωτανεύει στους ανισόπεδους, πολύπλοκους και κατ’ εξοχήν θεατρικούς χώρους του σπιτιού 8 (Αυλίδα), ενώ οι Συμπληγάδες πέτρες προσφέρουν έμπνευση για το ζευγάρι των όγκων στην ανηφορική είσοδο του σπιτιού 11 (Αλεξανδρούπολη - κοντά στην είσοδο προς τη Μαύρη θάλασσα). Τέλος, στο σπίτι 12 (Ιθάκη), η Οδύσσεια μορφοποιείται σε μια άκρως συμβολική σύνθεση, σημάδι αναγνώρισης του Κουλέρμου.

1999: Δωδεκάλογος II: Οι Κατοικίες των Θεών

Δέκα χρόνια μετά τον Πρώτο Δωδεκάλογο, και ενώ οι θεωρητικές ερευνητικές αναζητήσεις του Πάνου χύρευαν μια διέξοδο προς το ποιητικό και το αφηρημένο, ήρθε η ενασχόληση με τη μυθολογία να μορφοποιήσει την ιδέα για μια δημιουργία με θέμα χώρους εννοιολογικής «κατοίκησης» για το Δωδεκάθεο του Ολύμπου (εικ.9). Ο Δωδεκάλογος II έδωσε το τελευταίο, αλλά και το πιο δυνατό δέλμα θεωρητικής γραφής του Πάνου, μια αρχιτεκτονική και γλυπτική αντιπαράθεση του αφηρημένου, του ιδεατού, του θείου με το συγκεκριμένο, τον πραγματικό, τον ανθρώπινο κόσμο όπως ο ίδιος τον είχε πλάτσει στον πρώτο Δωδεκάλογο. Η ιδέα η κατασκευή των μακέτων για τις κατοικίες των Θεών, αρχές του 1999 στο εργαστήρι της Οδού Καλλιρρόης στην Αθήνα, ήταν ένα
as he himself had conceived of in the original Dodecalogos. The construction of the models for the Houses of the Gods, early 1999 in the workshop at Kallirroi Street in Athens, was a lesson-symposium with Panos, the craftsman Fosteris, and the other friends in a continuous dialogue. The presentation of the models at the Design Museum of Thessaloniki was the last exhibit that Panos himself would prepare.

6. JOURNEY

Panos was an incurable traveller. He journeyed to Europe, to America, to Asia, searching for the novel, which was certainly there of course, impatiently awaiting its discovery. He journeyed to the imagination, moulding architectural creations which merged dream and reality. He journeyed to an eternal youth, overcome with an adolescent enthusiasm for each new class, each new design project, each new commission. He journeyed to love and to his family, bestowing to everyone who had the fortune to find themselves near him with excessive liveliness and warmth. He will always continue to do that.

μάθημα-συμπόσιο με τον Πάνο, τον τεχνίτη Φωστέρη και τους φίλους σε ένα συνεχή διάλογο. Η παρουσίαση στο Μουσείο Design της Θεσσαλονίκης ήταν η τελευταία έκθεση του Πάνου που ο ίδιος ετοίμασε.

6. ΤΑΞΙΔΙ

Ο Πάνος ήταν ένας αγιάτρευτος ταξιδευτής. Ταξίδευε στην Ευρώπη, την Αμερική, την Ασία, ψάχνοντας το καινούργιο, που όμως ήταν πάντα εκεί και που τον περίμενε. Ταξίδευε στη φαντασία, πλάθοντας αρχιτεκτονικές δημιουργίες που συγκέραζαν το ονειρικό με το πραγματικό. Ταξίδευε στην αέναη νύχτα, νιώθοντας ένα εφηβικό ενθουσιασμό για κάθε νέο μάθημα, για κάθε νέο σχεδιαστικό πρόβλημα, για κάθε νέα μελέτη. Ταξίδευε στην αγάπη και στην οικογένειά του, περιβάλλοντας όλους που είχαν την τύχη να βρεθούν κοντά του με περίσσια ζωντάνια και ζεστασιά. Πάντα αυτό θα κάνει.
SELECTED BIBLIOGRAPHY


ΕΠΙΛΕΓΜΕΝΗ ΒΙΒΛΙΟΓΡΑΦΙΑ


Figure 8
Εικόνα 8


71,514 sqm of housing and compatible uses in Santa Maria de Benquerencia, Toledo.


This project was commissioned as a result of the EUROPAN 6 Award.

Architects: Carlos Arroyo, Manuel Pérez and Eleonora Guidotti

Collaborators: Vanessa Cerezo, Ana Belén Franco, Paula Cortés, Michael Moradiellos y Sophie Devaux

Engineers: Rands Project (Javier García Salas, Ignacio Herrero)

ACH Consultoría (Juan Travesí y Alejandro Cabetas)

Client: Government of Castilla-La Mancha

(Fig.00) This is a housing estate of over 600 flats made to measure -and their corresponding urban public spaces- where a strong emphasis on the use of sustainable design criteria tries to address the rigid schemes of contemporary Spanish urban planning.
A simple diagram shows the enormous proportion of open space that the previous planning for the area intended to cover with tarmac. We now propose a tapestry of public spaces integrated into the environment, including innovative strategies that involve the citizens in the decision-making process and in the management of the living spaces.

More than half the population of Spain live in houses designed for others. Nearly all the housing units available follow a specific design according to the requirements of a nuclear family, which is no longer the living arrangement of the majority. This specific design makes it difficult adapt to the new needs, be it those of the 24% of Spaniards who live alone, or those needing space for working at home, or independence for members of the recombined families, or the needs of older people whose children live far away.

The buildings follow three of the five “volumes” referred to in the competition proposal: Strip volume, chassis volume, and wide volume.

(Eik.01) Ένα απλό διάγραμμα δείχνει τη δυσανάλογα μεγάλη έκταση ανοιχτών χώρων που βάσει προηγούμενου σχεδιασμού για τη συγκεκριμένη περιοχή προοριζόταν να καλυφθεί με ασφαλτικό οδόστρωμα. Ο παρόν σχεδιασμός προτείνει μια σύνθεση δημόσιων χώρων πλήρως ενσωματωμένων στο περιβάλλον και περιλαμβάνει τη χρήση καινοτόμων στρατηγικών που επιτρέπουν τη συμμετοχή των πολιτών στη διαδικασία λήψης των αποφάσεων καθώς και σε εκείνη της διαχείρισης των ζωτικών χώρων.

Ένα ποσοστό που ξεπερνά το 50% του πληθυσμού της χώρας ζει σε σπίτια σχεδιασμένα για άλλους. Όλες σχεδόν οι διαθέσιμες οικιστικές μονάδες ακολουθούν συγκεκριμένους σχεδιαστικούς κανόνες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνονται στις ανάγκες που ανταποκρίνοντα
The strip volume is a linear structure that permits a decision about the appropriate size and configuration of the residence for each inhabitant. The design has an important attribute of flexibility so that, in the future, it can be adapted to changes in the number and needs of the inhabitants. The exterior texture is vegetal.

The chassis volume provides flexible height, with the possibility of mezzanines of different dimensions according to the parameters regulating social housing. The exterior texture is wooden.

The wide volume is a flexible space for commercial or other uses compatible with the residential setting. The exterior texture is metallic.

Each volume is associated to a certain texture.

The three volumes are combined in the “potential section”, which permits decisions about design to be made according to parameters such as density, sun exposure, control of shade and microclimates, equilibrium between public and private spaces, and, definitively, an interweaving of the social and the urban.
As in a sports court, you choose the game and stick to the corresponding colour lines and the set of rules that go with it.

The height of the building, which varies from 4 to 8 floors, is consistent with the surroundings. It frees up space for a tapestry of filtering surfaces, which transmit to the public spaces by means of a simple yet carefully thought out design ideas of flexibility, multipurpose, economy, and sustainability.

To permit the complexity of uses, with simple and economical solutions, all the urban services are concentrated in a ring around the perimeter, to which each building is joined at a single point. Vehicles are also kept to the perimeter, where the access to underground garages and surface parking are located. There are a few places where vehicles are permitted to access key areas in the interior of the complex, but, following the co-habiting concept, the vehicle is meant to be perceived as an intruder and preference is given to the pedestrian. A few pedestrian walkways interconnect with the green spaces and other footpaths in the rest of the development.

Figure 03
Εικόνα 03

(Εικ.03) Κάθε όγκος συνδέεται με μια συγκεκριμένη υφή.
(Εικ.04) Οι τρεις αυτοί όγκοι συνδυάζονται σε ένα «δυνητικό στάδιο», το οποίο δίνει τη δυνατότητα να ληφθούν αποφάσεις ως προς τον τελικό σχεδιασμό με γνώμονα παραμέτρους όπως η πυκνότητα, η έκθεση στον ήλιο, ο έλεγχος της σκιάς και του μικροκλίματος, η ισορροπία μεταξύ δημόσιων και ιδιωτικών χώρων και, οπωσδήποτε, μια σύζευξη του κοινωνικού και αστικού στοιχείου. Όπως ακριβώς και σε ένα γήπεδο, επιλέγεις το είδος του αθλήματος και έπειτα κινείσαι μέσα στην περιοχή όπου αυτό διεξάγεται και συμμορφώνεσαι με τους κανόνες που το διέπουν.

Το ύψος του κτιρίου, το οποίο ποικίλει μεταξύ 4 και 8 ορόφων, ενσωματώνεται αρμονικά στο περιβάλλον του. Αφήνει ελευθερία χώρους ώστε να διαμορφωθεί μια σύνθεση επιφανειών οι οποίες λειτουργούν ως φίλτρα και μεταδίδουν τελικά στους δημόσιους χώρους, μέσω ενός απλού αλλά επιμελούς σχεδιασμού, τα χαρακτηριστικά της ελαστικότητας, της πολυχρηστικότητας, της οικονομίας και της αειφορίας.
The creation of microclimates is a key strategy for the design of public space.

Simple strategies are also implemented to allow for the shared surface concept. Vehicles do not feel they have exclusive right over a space that is rather perceived as a public garden.

Certain elements in public space have a more use-intensive treatment. The project has the same budget per square metre as the other developments in the area, although these designate a large portion of the surface to be asphalted. Here there is a major budget difference that minimises asphalt and load-bearing pavements and maximises simpler, green covered but low maintenance areas, to allow for certain more expensive elements in strategic points.

There are also several semi-private situations that help to provide socialisation opportunities. Urban kitchen gardens are allotted through the resident’s association. Ground floor flats have small private gardens with a limited fencing policy.

Figure 04

Carriles en volumen potencial

Carriles en volumen potencial

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The materials utilized are simple, economical, and efficient. Standard products are used in an imaginative way (concrete tubes, industrially produced structures). The vegetation is also considered construction material, and its potential growth over time is factored in.

(Img.01) The collective image is the result of summing up a variety of individual images.

(Img.02) The only element specific to urban design is “the instant tree”, a type of pergola equipped with conduits through which water that is refrigerated naturally underground circulates. This adds to the shade provided by the pergola a refreshing effect from the vegetation. The inexpensive construction means it has a limited useful life, but sufficient enough that the natural vegetation takes over.

(Img.03) Eventually, the trees will grow.

(Εικ.01) Η συνολική εικόνα είναι αποτέλεσμα συνδυασμού που συνοψίζει μια ποικιλία επιμέρους εικόνων.

(Εικ.02) Το μοναδικό στοιχείο που ανήκει στο πεδίο του αστικού σχεδιασμού καθέστως είναι αυτό του «στιγμιαίου δέντρου» - πρόκειται για έναν τύπο πέργκολα εξοπλισμένο με αγωγούς μέσω των οποίων κυκλοφορεί νερό που ψύχεται υπογείως με φυσικές διαδικασίες. Η βλάστηση αυτή δεν οδηγεί προς την ανάπτυξη κατασκευάστικων αποτελεσμάτων, αλλά συνεπάγεται την εξάπλωση της βλάστησης μέσω των οποίων η δημιουργία της σκιάς της πέργκολα αποτελεί τον πρώτο κοινωνικό παράγοντα της κληρονομικής περίφραξης.

(Εικ.03) Καθέτες, δεν θα μεγαλώσουν.
Almost all available dwellings in Spain are built in order to fit a traditional, hierarchical family model. However, reality shows a much wider range of situations and specific housing needs. This means that more than 50% of the Spanish population lives in houses designed for others.

A flexible building concept, based on 3 different spatial schemes, allows people to obtain tailored housing or work space, made to measure to fit their exact needs. Furthermore, this space can be easily modified, expanded or contracted, according to the changing demands of its inhabitants.

Built volumes are arranged into a spatial grid. Its locations and sizes are set in order to avoid light diffusion between different volumes. Different types of public spaces, with varying amounts of privacy, are arranged according to the same spatial grid. Collectively maintained gardens, small autarchic greenhouses, pergolas and synthetic flooring and benches are some of the elements it features.
S333 Architecture and Urbanism wins first prize in the international housing competition, Europan 3 on a site in the centre of Groningen. The theme for the competition “At home in the city - Urbanising Residential Neighbourhoods” seeks proposals that rethink the relationship between the city’s public and private spaces, and the spatial scaling from domestic intimacy to urban collectivity.

The competition site is located at the junction of two very different urban fabrics - the historical city centre and the city’s 1930’s extension. Known locally as the ‘Circus-terrain’, it is also contained within the most derelict of places, a series of pronounced urban areas, which separate the various urban fabrication - the historical city centre and the city’s 1930’s extension. The competition site is located at the junction of two very different urban fabrics - the historical city centre and the city’s 1930’s extension.

The new program is introduced as “event agents”, premised not on organising space but to set in motion and link into larger existing processes. These “event agents” are defined as attractors (supermarkets, cinema, theatre, health centre, hot plate), condensers (cafes, bars, social services, interactive techno devises, creche, play areas), and mediators (landscaping, inter-spatial domestic zones, street furniture, screens). The combination of these “agents” creates an environment where space is used, in the words of French sociologist Michel De Certeau, “as a practiced place”.

Proposals for the housing begin with the realisation that the domestic realm as we know it, is in a continual reevaluation generated by an increased desire to work and be active in one’s home. This is coupled with an awareness of shifts taking place in the urban realm: urban dwellers, in establishing new parameters for the domestic realm as we know it, is in a continual reevaluation generated by an increased desire to work and be active in one’s home.

Housing types are conceived as a concentration of bands, acting as anchors to the seam-less and patterned landscape. S333 proposes a third condition - the boundaries of the former mediaeval city. Known locally as the ‘Circus-terrain’, it is also contained within the most derelict of places, a series of pronounced urban areas, which separate the various urban fabrication - the historical city centre and the city’s 1930’s extension.

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that new buildings bend and angle aligning to flows of movement and views, and to the peculiarities of the site - a collection of buildings between spaces, and of spaces between buildings that deny in principle the idea of the closed block. The diagrammatic use of desire lines, attractors, condensers and mediators pushes the potential of the site, promoting movement and activity. All components combine to create a wild, charged and dense urban tapestry.

Opening the Envelope
01.09.94 - 31.07.96
Following the competition, S333 is commissioned by the municipality of Groningen to extend the strategy for Europan 3's Circus-terrain over the adjacent Bodem- and Gasfabriek-terrains (CiBoGa-terrain). S333 explores the enlarged 14-hectare site as a complex multi-layered urban filter-zone that can be both organised by lines of movement and an ecological corridor, and activated by an orchestrated structure of commercial and recreational programs. S333 collaborates with urbanists from the city and initiates a series of studies, forums and typological research to develop the principles for a Structure Plan for 1000 housing units, 1000 parking spaces, and 30,000 m2 mixed-use and recreational programs.

S333 works with Concko-Gautier Architects and FARO Architects to explore contemporary living and working patterns, issues of time-share, security and privacy. On site workshops initiated by S333 and led by Foreign Office Architects and members of London's Architectural Association Housing and Urbanism Unit map movement and spatial linkage. Research projects by Battle McCarthy Environmental Engineers examine the viability of alternative energy sourcing, re-directing heat exhaust from the adjacent hospital complex to heat the new housing. Workshops with developers and local business groups explore the potential impact of the proposed commercial programs and leisure-based facilities on the surrounding neighbourhoods. S333 works also with the city's urban ecologists and with Juurlink en Geluk landscape architects to examine how initiatives in ecological sustainability can direct the development and organisation of a critical mass of housing.

Mediators
10.12.96
S333’s research initiatives lead finally to a challenging paradox: the intense programmatic densification of the site has to be combined with a comparable ‘intensity’ of spatial openness. The impact of this conclusion is immense. The role of the CiBoGa-terrain will complete the final missing link in the city’s ecological plan, connecting the Noorderplantzoen city park to the Oosterhamrikkanal. The housing will be developed as new forms of compact accommodation that suit the intensity of spatial openness. The impact of this conclusion is immense. The role of the CiBoGa-terrain will complete the final missing link in the city’s ecological plan, connecting the Noorderplantzoen city park to the Oosterhamrikkanal. The housing will be developed as new forms of compact accommodation that suit the intensity of spatial openness.

The basic solution of the diaphragms’ layers to compact buildings is that new buildings bend and angle aligning to flows of movement and views, and to the peculiarities of the site - a collection of buildings between spaces, and of spaces between buildings that deny in principle the idea of the closed block. The diagrammatic use of desire lines, attractors, condensers and mediators pushes the potential of the site, promoting movement and activity. All components combine to create a wild, charged and dense urban tapestry.
characterised by a variety of collective and commercial program. For all the housing, parking on site will be reduced to 0.5 spaces per dwelling in favour of a call-a-car service and a network of pedestrian and cyclists.

Groningen’s city planners continue to develop the urban plan with a consortium of Dutch developers: ING Vastgoed, Moes Bouwbedrijf and Wilma Bouw. The project receives regional and national funding to research further the environmental initiatives. For both the city and the developers, the project represents an ambitious attempt to explore new forms of living with alternative models for the design and implementation of a vast and informal public realm. Over the next 8 years, 900 dwellings, 9000 m² shops, 40000 m² of offices and 1300 underground car parking places will be realised on the CiBoGa-terrain.

Landscape of behaviour
01.09.97 - 15.11.99
For the housing program, the city planners create the concept of schotsen. A schots is a compact building volume eroded by views and desire lines, and new forms of “parochial” space, which negotiates between the public and private realms. The schotsen are located within in a singular urban field - one spatial construct for the entire CiBoGa-terrain as opposed to a network of connecting streets and squares. Will Alsop is commissioned to design the programme of the urban field and proposes a ‘landscape of behaviour’, which incorporates a system of events and ‘event-like’ structures, activities and functions. One material will be applied to the surface of the entire site. Certain routes through the site will be layered with other materials to generate themed areas and “settings”. S333, Van Sambeek & Van Veen, Alsop & Störmer Architects, ONIX Architects, Meyer & Van Schooten, Marx en Stekete, Hohne en Rapp and FARO Architects are chosen chosen to develop the thirteen schotsen. The spatial quality of the urban field will be determined by the separate architectural interventions of the architectural offices involved. Each office is also responsible for generating the spatial and programmatic features of their specific parochial spaces. Some may be more private, some may be more “public”, but they are all linked to strengthen the concept of the CiBoGa filter-zone.

Phase 1: Schots 1 & 2
01.09.97 - 01.12.02
The first phase of the redevelopment of the CiBoGa-terrain, Schots 1 & 2, is designed by S333. Construction of the project starts in March 2000. The architects face a series of challenging questions.

Χώροι Διαμεσολάβησης
10.12.96
Οι ερευνητικές πρωτοβουλίες της ομάδας S333 οδήγησαν τελικά στο εξής ενδιαφέρον παράδοξο: ο έντονος, προγραμματικά συμπυκνωμένος χαρακτήρας της περιοχής ήταν απαραίτητη για να συνδυαστεί με χώρους ανοιχτούς, ο συγκεκριμένος χαρακτήρας των οποίων θα ήταν εξίσου έντονος. Οι προκαταλήψεις αυτού του συγκεκριμένου χαρακτήρα ήταν εξαιρετικά σημαντικές. Η περιοχή CiBoGa θα ήταν τελικά το στοιχείο που έλειπε για να συμπληρωθεί ο οικολογικός σχεδιασμός της πόλης – ένα πλάνο που συνέδεε το δημοτικό πάρκο Noorderplantsoen με την περιοχή του καναλιού Oosterhamrik. Το προτεινόμενο οικιστικό συγκράτημα θα αναπτυχθεί σε τελικό υπό τη μορφή ενός τύπου συμπυκνωμένου σχεδίου σύνθεσης, χαρακτηριζόμενου από μια ποικιλία δυνατοτήτων για συλλογικές και εμπορικές δραστηριότητες. Οι χώροι στάθμευσης θα αναλογούσαν στο μισό του συνολικού αριθμού κατοικιών, ενυνδαίζοντας έτσι τη χρήση υπηρεσιών μίσθωσης αυτοκινήτων καθώς και την ενδυνάμωση ενός δικτύου πεζόδρομων και ποδηλατόδρομων.

Οι πολεοδόμοι του Δήμου του Γκρόνινγκεν συνεξεύζουν να αναπτύσσουν τον συγκεκριμένο αστικό σχεδιασμό σε συνεργασία με ένα κονσόρτιομ Ολλανδικών τεχνικών εταιρειών (ING Vastgoed, Moes Bouwbedrijf και Wilma Bouw). Το πρόγραμμα αυτό χρηματοδοτείται από τοπικούς και εθνικούς φορείς ώστε να συνεχιστεί η έρευνα γύρω από τις οικολογικές πρωτοβουλίες που μπορούν να ληφθούν στο πλαίσιο του. Τόσο για την πόλη του Γκρόνινγκεν όσο και για τις τεχνικές εταιρείες το πρόγραμμα αυτό αντιπροσωπεύει μια προσπάθεια εξερευνήσεως νέων μορφών διαβίωσης μέσα από εναλλακτικά μοντέλα στέγασης και διαφάνειας ενός εκτεταμένου αλλά ανθρώπινου, ανεπίσημου, δημόσιου χώρου. Η περιοχή CiBoGa πρόκειται να κατασκευαστούν μέσα στα επόμενα οκτώ χρόνια και μια πολύ μεγαλύτερη θέση στη γύρω περιοχή.  Η ομάδα S333 συνεργάστηκε επίσης με τους τεχνικούς περιβαλλοντολόγους του δήμου του Γκρόνινγκεν, τους οποίους στη γύρω περιοχή.  Η περιοχή CiBoGa δηλαδή, θα υπάρχει μία χωρική δομή που θα χωρίσει το δημόσιο χώρο και θα συνεχίσει το δημόσιο και η οργάνωση του αστικού αυτού πεδίου θα ανατέθηκε στον Will Alsop, ο οποίος πρότεινε τη δημιουργία ενός ‘τοπίου συμπεριφοράς’, ενός χώρου δηλαδή που θα ενσωματώνει ένα σύστημα δραστηριοτήτων, λειτουργιών, γεγονότων και δομών που έχουν τον χαρακτήρα του γεγονότος. Η επιφάνεια των κτηρίων σε όλη την
What does it mean to live back in the city? How can quality be established in volume housing and highly standardised construction techniques? How can certain desires for suburban lifestyle be achieved on a dense urban site? How can a generous landscape of gardens, courtyards and ground-accessed housing be combined with extensive commercial activity within a tight and constricted location? S333 investigates a multi-layered / multi-functional project where garden and building begin to merge and blend - a volumetric landscape that explores to extremes the paradoxical relationship between the city planner’s desire for “openness” in contrast to the market requirements for density and commercial viability.

S333 immediately questions the proposed mono-functional housing program and lack of commercial activity. S333 initiates further discussion between the client and the city in order to generate and finally agree upon an alternative, more complex program of work and living units, studios and home offices, and a mix of leisure and commercial facilities.

S333 proposes supermarkets and smaller shops to activate both blocks at street level. Above, the buildings evolve independently. Schots 1 becomes a robust multi-storey urban block centered around a variety of open and semi-open collective spaces, intersected throughout by a meandering gallery system that accesses all the apartments. In Schots 2, housing is located above the shops and accessed by a sloping ground-plane. This seamless, landscaped transition from ground to first level facilitates the developers to realise many more ‘ground-bound’ housing than previously imagined. It also creates not one but several complex and dramatic “parochial” spaces.

Private gardens are removed from the public realm and resolved within the blocks in the form of winter gardens, green walls, rooftop terraces and patios. In all, 113 different housing types are generated from a ‘responsive’ standard type, designed to vary according to light, orientation, access, and by its relationship to the surrounding context.

The facades are conceived as an integral element of the new landscape. A pixilated field of wood and glass panels is designed to merge with dense vertical screens of climbing fauna and hydroponic structures. The two blocks evolve separately with different identities; Schots 1 is conceived predominantly in glass, for Schots 2 the chosen material is western red cedar. Transparent and translucent glazing is juxtaposed with the ageing colouration of timber and the seasonal variations of mass expansions of foliage. The combinations of colours, textures and materials will create a chameleon-like surface texture and tonal variation over time.

Schooten, Marx en Steketee, Hohne en Rapp και FARO Architects. Η ερευνά των S333 εστιάστηκε στη δημιουργία ενός ογκομετρικού τοπίου που εξερευνούσε στο έπακρο το πολυεπίπεδο και πολυλειτουργικό συγκροτήματος όπου κλειστοί και ανοιχτοί χώροι, κτίρια και κήποι συνδυάζονταν και συγχωνεύονταν – ενός ογκομετρικού τοπίου που έξερενούσε στο έπακρο το παράδοξο της σχέσης μεταξύ άκρως τυποποιημένων κατασκευαστικών μεθόδων; Πώς είναι δυνατό να συμπυκνώσει αυτή την περιόδευση των χώρων με σειρά εργασιών και προσκλήσεων; Όλοι οι χώροι θα είχαν εντονότερο τον χαρακτήρα του ‘ιδιωτικού’ ενώ άλλοι θα έκαναν «δημόσια’; αλλά σε κάθε περίπτωση θα συνεδριάζουν όλοι μεταξύ τους ώστε να ενισχύσουν την αίσθηση της ζωής-φίλτρου.

Φάση Α: Schots 1 & 2
01.09.97 - 01.12.02

Πρώτη φάση ανάλυσης της περιοχής CiBoGa, η δημιουργία δηλητηρίων των Schots 1 & 2, σχεδιάστηκε από τους S333. Η κατασκευή ξεκίνησε τον Μάρτιο του 2000. Οι αρχιτέκτονες ήρθαν αντιμέτωποι με μια σειρά ερωτήματος και προκλήσεων. Τι σημαίνει να επιτρέπεται και να συγχωνεύεται σε κάποιο σημείο την απόσυρση της περιοχής από το κέντρο της πόλης για να ζήσει; Πώς μπορεί να διοργανωθεί η ποιότητα στην περίπτωση κατασκευής μεγάλου όγκου κτισμάτων και χρήσης άκρων τυποποιημένων κατασκευαστικών μεθόδων; Πώς είναι δυνατό να συμπυκνώσετε αυτή την περιόδευση στις επιθυμίες ή να έχετε την επιθυμία να διαβάσετε από τις επιθυμίες των ανοιχτών χώρων και των ανυπολογιστές πολυεπίπεδων κτισμάτων και των ανοιχτών, ‘εξοχικών’ χώρων που αναλογούν στο κάθε συγκρότημα. Κάποιοι από αυτούς αυτούς θα έκαναν αυτονόμητο τον χαρακτήρα του ‘ιδιωτικού’ ενώ άλλοι θα έκαναν “δημόσια’; αλλά σε κάθε περίπτωση θα συνεδριάζουν όλοι μεταξύ τους ώστε να ενισχύσουν την αίσθηση της ζωής-φίλτρου.
Working forms
10.02.94 – 01.12.02

The working collaboration between the city, the developer and the architect enables a design approach that delays emphasis on aesthetic form to allow for more emphasis on organisation and strategy. During this process architecture’s claim of objectivity and rationality become quickly dismantled when exposed to the typical life span of the contemporary design process. What results is a series of investigations where the architect plays an intermediary role, mapping a process of events and shaping forces on a particular site that relate in space, time and ‘connectedness’. For Groningen’s planning department, the research initiatives established for the CiBoGa-terrain have grown to form an important aspect for a deeper strategy of urban development throughout the city. An effective climate of innovation has developed: encouraging openness to new ways of thinking, discovering the unforeseen and thus creating new opportunities.

A SHORT HISTORY OF SCHOTS 1 & 2, THE CIBOGA-TERRAIN, GRONINGEN, NL

Ο ρόλος του αρχιτέκτονα και οι μορφές του
10.02.94 – 01.12.02

Η συνεργασία μεταξύ δημοσιών αρχών, κατασκευαστών και αρχιτέκτονα επιτρέπει μια σχεδιαστική προσέγγιση που δίνει προτεραιότητα στην οργάνωση και τη στρατηγική έναντι της αισθητικής φόρμας. Η αντικειμενικότητα και ο ορθολογισμός που παραδοσιακά επικαλείται η αρχιτεκτονική χάνουν την ισχύ τους ως επιχειρήματα στο πλαίσιο της σύγχρονης σχεδιαστικής διαδικασίας και της χρονικής διάρκειας που απαιτεί η ολοκλήρωση της. Το αποτέλεσμα είναι μια σειρά διερευνητικών προσπαθειών κατά τις οποίες ο αρχιτέκτονας αναλαμβάνει διακεκριμένο ρόλο, χαρακτηρισμός τελικά μια διαδικασία γεγονότων και δίνονται σχήμα και μορφή στις δυνάμεις που συγκεντρώνονται σε έναν συγκεκριμένο τόπο και βρίσκονται σε άμεση συνάρτηση με το χώρο, το χρόνο και μια πλειάδα άλλων συσχετισμών. Για τις πολεοδομικές αρχές του Γκρόνινγκεν, η έρευνα που διεξάχθη στην περίπτωση της περιοχής CiBoGa αποτελεί πλέον σημαντικό όψη μιας ευρύτερης στρατηγικής για την αστική ανάπτυξη σε όλη την πόλη. Αυτό που τελικά προέκυψε ήταν ένα γόνιμο κλίμα καινοτομίας, επιδεικτικό σε νέες αντιλήψεις, που ενθαρρύνει την ανακάλυψη του απρόβλεπτου και δημιουργεί ένα πλούσιο κλίμα.
The city and consequently urban issues are becoming more and more important for the production of contemporary knowledge and culture. With this logic, the role of the architect cannot but change by putting at the heart of the design process the urban environment and society. The aim of this course is the construction of a critical approach by the students through their introduction into notions regarding urban design and the city in general. The notion of “intercosmics” is applied (see Socrates Stratis, “Intercosmics”, in the same edition) as a vehicle of analysis of notions related to the contemporary urban environment. Through the idea of “intercosmics” the students are invited to analyze contemporary urban design projects and propose ways of altering how these projects could be inscribed into the “cosmoses” of urban design (physical, temporal, pragmatic). In this edition one can see a specimen of such a study regarding two projects: the project of Carlos Arroyo, Europan 6 winner, Toledo, Spain and that of S333, Europan 3 winner, Groningen, Netherlands.
4.2 ΠΡΟΕΙΔΟΠΟΙΗΣΕΙΣ ΑΛΛΑΣΣ ΣΤΙΣ ΣΧΕΣΕΙΣ ΜΕΤΑΞΥ ΤΩΝ "ΚΟΣΜΩΝ" ΠΟΥ ΥΠΟΥ ΕΓΡΑΦΕΤΕΙ Ο ΣΧΕΔΙΑΣΜΟΣ ΤΟΥ ΜΕΛΕΤΗΜΑΤΟΣ

ΜΕΛΕΤΗΜΑ ΤΟΥ ΤΟΛΕΔΟ – CARLOS ARROYO

1. ΜΗΣΥΜΜΕΤΡΙΚΗ ΤΩΝ ΠΟΛΙΤΩΝ ΣΤΗ ΔΙΑΝΟΡΘΩΣΗ ΤΟΥ ΠΡΟΓΡΑΜΜΑΤΟΣ

2. ΚΑΜΙΛΙΝΗ ΤΟΥ ΑΣΙΚΟΥ ΠΡΟΓΡΑΜΜΑΤΟΣ

3. ΠΡΟΒΛΗΜΑΤΙΣΜΟΣ ΙΔΙΚΤΗΣΙΝ ΑΝΑΛΟΓΑ ΜΕ ΤΗΝ ΓΩΝΙΑΘΕΣΙΑ

ΛΕΙΤΥΡΓΙΑ ΠΡΟΣΟΧΗ ΤΟΥ ΚΑΘΕ ΧΡΟΝΟΥ

ΠΡΟΕΙΔΟΠΟΙΗΣΗ ΣΧΕΣΕΩΝ

Διευκρινίστε με την προσοχή στα οριστικά οι συνολικές πτυχές του προγράμματος και την εφαρμογή των μεταβλητών με την προσοχή στα σχέδια των χαρακτηριστικών κόμματος.

ΟΡΘΟΝΠΕΝΕΝ, ΝΗΛΑΤΕΗ

TOLEDO, SPAIN
The architects set out to create a promenade that would provide leisure activities for the public and act as a threshold between private development and the public beach. The Oroklini Coastal Promenade consists of a series of platforms, canopies and lighting elements unified by a meandering path that loosely follows the coastline, widening and narrowing to create a series of specific places along the way.

Η μελέτη του πεζοδρομού στηρίχθηκε στη δημιουργία ενός παραλιακού χώρου κίνησης και κοινωνικής δραστηριότητας, ο οποίος θα λειτουργούσε ταυτόχρονα και ως "κατώφλι" μεταξύ της ιδιωτικής ανάπτυξης και του δημόσιου παραλιακού χώρου. Ο νέος χώρος που δημιουργείται αποτελείται από ένα μονοπάτι, το οποίο καθώς ελίσσεται, συνδέει μια σειρά από ορίζοντες επιφάνειες μέσα σε ένα τοπίο γης και θάλασσας. Το μονοπάτι αυτό ποικίλει σε πλάτος, καθώς ελίσσεται ώστε να δημιουργούνται συγκεκριμένοι, συνδεδεμένοι μεταξύ τους, "ευανάγνωστοι" χώροι. Το προτεινόμενο σύμπλεγμα από ράμπες, διαδρόμους, γεφυρά και πλατώματα ξετυλίγεται πάνω στην παραλία σαν μια κορδέλα, η οποία μεταβάλλεται ανάλογα με την πρόθεση χρήσης και τις εμπειρίες που επιδιώκει να δημιουργήσει.
The project in concern is the first to have been realized as part of a wider complex of buildings that includes the planning and future development of a closed amphitheatre of 1200 seats and a swimming pool.

The Science Building is part of the proposal that has received the first prize of the competition, which took place in 2002. According to the essay of the competition’s jury committee, ‘the originality and specificity of the architectural concept, the complete functionality – fulfilling the functional requirements, the appropriate positioning of the new building with the existing, and the correct use of the natural topography,’ are some of the criteria on which the jury committee had based their decision while awarding the first prize to this proposal.

The conceptual setting out of the Science Building can be transcended in the DNA helix. It borrows its geometry and shapes from the sciences of Physics, Chemistry and Biology. The proposed morphology and building arrangement recall the molecular structure of matter.

As if we are standing in front of the magnifying glass of a microscope. The stoa (arcade), like the spine, crosses the building from end to end. On the stoa, stairs, ramps and all other spaces are organically assembled in a way, that the stoa is not just a passage, but a multidimensional router that enriches the overall experience and calls for your attention.

Edges, light shafts, reference points and other elements enrich the overall kinesthetic experience that results through the movement of the body in architectural space.

The composition of the building achieves a continuous flow between the outside and inside, the above and below, the closed and open, and the external with the internal.

It is the architects’ belief that true architecture, is architecture that reflects on life as much as on nature, therefore each building is conceived as a ‘life container’ that enhances and promotes creative human experience and activity.

Το υπό αναφορά έργο αποτελεί το πρώτο πραγματοποιηθέν κτίριο ενός ευρύτερου συγκροτήματος που περιλαμβάνει ένα κλειστό αμφιθέατρο 1200 θέσεων και έναν κολυμβητήριο.

Το κτίριο επιστημών είναι μέρος της πρότασης που πήρε το πρώτο βραβείο στο Διαγωνισμό, ο οποίος έγινε το 2002. Σύμφωνα με την έκθεση της κριτικής επιτροπής του διαγωνισμού, “Η πρωτοτυπία και η σαφήνεια στην αρχιτεκτονική σύλληψη και λειτουργική πληρότητα-εξυπηρέτηση των λειτουργικών απαιτήσεων-ορθή ένταξη των νέων κτιρίων στο υφιστάμενο και ορθή αξιοποίηση της φυσικής τοπογραφίας”, είναι μερικά από τα κριτήρια, βάση των οποίων η κριτική επιτροπή αποφάσισε να απονέμει το πρώτο βραβείο στον εν λόγω μελετητή.

Το κτίριο επιστημών οι χαράξεις, ιχνηλατούνται στην έλικα του DNA. Δανείζεται η γεωμετρία του σχήματα από τις επιστήμες της φυσικής, της χημείας και βιολογίας. Έτσι προτείνεται μια μορφολογία και μια κτιριακή διάταξη που παραπέμπει στις μοριακές δομές της ύλης. Σαν να βρισκόμαστε μπροστά στη μεγέθυνση μιας εικόνας που θα μπορούσε να δει κανείς στο μικροσκόπιο.

To κτίριο είναι σπονδυλωτό, με μια κεντρική στοά που το διαπερνά απ’ άκρη σ’ άκρη. Στη στοά αυτή βρίσκονται οργανικά ενταγμένα τόσο τα κλιμακοστάσια και οι ράμπες όσο και όλοι οι υπόλοιποι χώροι. Έτσι η στοά δεν είναι μονόχα μια διαδρομή, αλλά ένας διανομέας πολυσήμαντος που ενισχύει την εμπειρία και το ενδιαφέρον.

Γωνίες, ξέφωτα, διπλά ύψη, οπτικές φυγές και άλλα στοιχεία εμπλουτίζουν την κιναισθητική εμπειρία, που προκύπτει από την μετατόπιση του σώματος στον αρχιτεκτονικό χώρο.

Η σύνθεση του κτιρίου εδραιώνει μια συνεχή ροή του έξω με το μέσο, του πάνω με το κάτω, του κλειστού με το ανοικτό, του εσωτερικού με το εξωτερικό.

Είναι τοποθετημένος στο αρχιτέκτονα του έργου, ότι αληθινή αρχιτεκτονική είναι η αρχιτεκτονική που συναρτάται με τη ζωή όσο και με τη φύση. Ως εκ τούτου ένας "δοχείο-δότης ζωής" είναι το κτίριο μας.
THE SCIENCE BUILDING
With the primary objective being the implication of students in the pragmatic process of conception and implementation of an architectural idea, the department of Architecture at the University of Cyprus contributed in the realization of a TIMBER STRUCTURES workshop, with the participation of twelve students from four architecture schools throughout Europe.

The architectural product went through the various equally important and interdependent stages of design, construction, transportation and assembly, and was finally installed at Eleftheria square.

The resulting structure, along with the inherent possibilities or limitations of its material, attempts to convey the potential of the architectural process, a potential that, through the conditions of design and construction, becomes an urban reality, incorporating form, color and texture. Through its material presence, the structure initiates a spatial condition, transforms the spatial experience of the square as a whole, and attempts to respond to the challenges of the build environment and of the everyday reality of the city’s inhabitants.

An important outcome has been the gathering and actual cooperation of architecture students from different academic backgrounds, a matter which is highly important in the architectural education of students. Furthermore, the entire process allowed the integration of all the workshop activities in the area of the walled city, successfully energizing the public and achieving its integration into the process of architectural creation.

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Theo David
Theo David is a tenured Professor of Architecture teaching Graduate and Undergraduate design at Pratt Institute, New York, USA. He is president of the advisory committee of the Department of Architecture, School of Engineering, University of Cyprus.

Christos Hadjichristos
Christos Hadjichristos is an Assistant Professor in the Department of Architecture, School of Engineering, University of Cyprus.
http://www.eng.ucy.ac.cy/ARCH/EN/People/CHadjichristos

Loukas Kalisperis
Loukas Kalisperis is Professor and Chair of Graduate Studies, Department of Architecture, Penn State University.
http://www.arch.psu.edu/people/kalisperis_detail

Panos Leventis
Panos Leventis is Director of the Drury University Center in Volos, Greece. He was Visiting Lecturer in Department of Architecture at the University of Cyprus in 2005.
http://www.drury.edu/multinl/story.cfm?nlid=48&id=18670

Pierre Von Meiss
He is a Professor emeritus of the EPFL, in Switzerland. He is member of the advisory committee of the Department of Architecture, School of Engineering, University of Cyprus.
http://people.epfl.ch/peter.vommeiss

Byron Mikellides
He is a Professor of Architectural Psychology in the Department of Architecture at Oxford Brookes University. He is member of the advisory committee of the Department of Architecture, School of Engineering, University of Cyprus.
http://www.brookes.ac.uk/schools/be/staff/byronmikellides

Marios C. Phocas
Marios C. Phocas is an Assistant Professor and Interim Head of the Department of Architecture, School of Engineering, University of Cyprus
http://www.eng.ucy.ac.cy/ARCH/EN/People/MCPhocas

Panayiota Pyla
Panayiota Pyla is an Assistant Professor of Architecture, in the Department of Architecture, School of Engineering, University of Cyprus
http://www.eng.ucy.ac.cy/ARCH/EN/People/PPyla

Socrates Stratis
Socrates Stratis is a Lecturer in the Department of Architecture, School of Engineering, University of Cyprus
http://www.eng.ucy.ac.cy/ARCH/EN/People/SStratis

Panayiotis Tournikiotis
Panayiotis Tournikiotis is Associate Professor of Theory in the School of Architecture at the National Polytechnic University of Athens.
http://www.arch.ntua.gr/english/staff_en/StaffDetailsEn.asp?code=Tournikiotis