Laura Lee, FAIA

Carnegie Mellon University
School of ARCHITECTURE

(4 1 2) **2 6 8 - 5 5 6 3**
(f a x) **2 6 8 - 7 8 1 9**
llee@andrew.cmu.edu

Pittsburgh, Pennsylvania
1 5 2 1 3

Portfolio

Portfolio

1   Emerging Professionals Companion

2   Case Studies Starter Kit

3   Cranbrook Conference

4   Awards
1994 - 2002

5a   2002 National Internship Summit
2002

5b   Architectural Internship: Everbody's Issue   [Publication]
2003

6   Issues of Professional Practice   [Architecture Course]
1995 - present

7a   Case Studies Program   [Architecture Course]
2000 - present

7b   A Case Study of Case Studies   [Presentation]
2002

8a   First Year Architecture Design Studio: Methods and Transformations in Form
First Year Architecture Design Studio: Methods and Transformations in Space
2002

8b   Second Year Architecture Design Studio: Composition
Second Year Architecture Design Studio: Materials and Assembly
1994 - 2002

9a   Second Year Architecture Design Studio and School of Drama: Design Build Stage Set
1998 - 2001, 3 years / semesters

9b   College of Fine Arts Interdisciplinary Workshop
1996 - 2001

9c   Rome 2001 + 2002: Discovering the City: Multidisciplinary Study Abroad Program
2001, 2002 (1999 in Barcelona)

10a The Higher Instiute of Architecture, Henry van de Velde, Antwerp, Belgium
The City as Perceived and Imagined   2002
Face to Face   2003

10b The Royal Danish Academy of Fine Arts
Buildings for Cities:Cities for Buildings   1995
City(e)scape   1997

A Guide to the

Emerging Professional's Companion

A Resource for Architectural
Education and Experience

For:

Emerging Professional's Companion

A Guide to the EPC

All Groups

What is the Emerging Professional's Companion?
The EPC is an online resource for emerging professionals. Primarily intended as a means for interns to earn IDP credit, this resource also can be used by educators in professional practice courses, by young architects seeking continuing education credit, by AIA components developing programming for emerging professionals (e.g., mentoring programs, study groups), and by firms looking for in-house curricula.

All Groups

Getting started
Starting in summer 2004, you will be able to go to a Web site and find exercises to earn credit for your professional practice course, the Intern Development Program, or AIA continuing education. The EPC's 16 chapters are aligned with NCARB's 16 IDP training areas. Each chapter begins with an in-depth narrative of the subject and provides related interactive material.

Students
Interns
Supervisors
Mentors
Firm Educators

**Intern and professional
development credit for IDP**
Interns can receive IDP supplementary education credit for work completed in the EPC. It will be particularly helpful for interns who have found it difficult in their work setting to earn sufficient credit in a timely manner, or who simply want to build up their skills and competency in the IDP training areas.

Students
Educators

Classroom assignments
The EPC is an excellent tool for professional practice instructors to use with students. Students can be directed to the Web site to download and complete exercises either as an individual or a team assignment. Topics such as ethics and design and construction liability provide real-world scenarios for students to engage in and learn from.

Interns will work closely with their supervisors, mentors, and peers to review their work at regular intervals. The opportunity to analyze the work, one-on-one, is a major distinguishing attribute of the EPC. Verification of work performed will be submitted to NCARB, and IDP training units will be granted based on a table of credits established by NCARB. Practitioners can receive continuing education credit for their integral participation in this process with their interns.

Firm Educators
Interns
AIA Components

Study groups and networking
Intern study groups have formed at some components around IDP topics. AIA components, firms, and individuals can build on this idea and start discussion groups on the topics included in the Emerging Professional's Companion. Interns earn credit in IDP, and licensed professionals can self-report for continuing education credit with their AIA component provider.

Firm Educators
Interns
AIA Components

Parallel workshops
AIA components are encouraged to develop a parallel workshop series for Associates and Young Architects based on the content of the Emerging Professional's Companion. The AIA can provide you with a list of potential speakers, or you can use your own local resources. These courses, developed for AIA continuing education credit, will provide your membership with the latest practice information and draw nonmembers who see significant value in component programs.

Firm Educators
Interns
General
Membership

Firm education curriculum
The AIA has developed the Emerging Professional's Companion with firm education programs in mind. Whether your firm is just starting its in-house program or is looking to supplement an existing program with fresh content, the EPC will be a valuable resource for developing new, interactive programs. Our goal has been to provide you with the latest information about the profession, and we encourage you and your staff to think critically about how that information affects your everyday practice. Experts from your firm can lead the sessions, or the AIA can provide a list of experts who may be able to help you develop a program.

Firm Educators
AIA Components
General
Membership

Continuing education
The AIA is developing a national model program to encourage practitioners to self-report continuing education credits for their integral work with interns and the Emerging Professional's Companion. In addition, young architects will be able to self-report their credit for EPC work done on their own time. We encourage components and firms to serve as providers for their local programs, including workshops, discussion groups, and mentoring programs. Contact the AIA for more information on these programs.

Case studies create materials that introduce the complexity of practice. Constituents include: Students who develop the discipline of investigation. Interns who nurture an understanding of the culture of practice. Educators who gain a heightened awareness of the conduct of practice. Practitioners pursuing leadership and excellence through reflective practice. Allied Disciplines, and related professionals seeking to make connections to architecture. The public, including clients, who seek and accessible means to understanding architecture.

28 Cases

1 Educator

3 Teaching Assistants

Completed Case Studies

2003

Patenoe Events / Sports Center	$ 6 million	130,000 sf
Collaborative Innovation Business Center	$ 20 million	NA
Renovation to Children's Museum	$ 206,900	NA
947 Liberty Lofts	$ 708,900	NA
Erie Federal Courthouse Complex	$ 30 million	NA
Mellor Institute Biology Lab	$+1 million	NA
Henderson Student Housing Renovation	$ 3 million	16,298 sf
North Shore Parking Garage	$ 21 million	393,480 sf

2002

Ainslie Business Park	$ 37 million	total approx. 680,000 sf
United Cerebral Palsy Center	$ 2.05 million	20,000 sf
Providence Family Support Center	$ 3.6 million	29,000 sf
Cygnus Manufacturing Corporation	$ 6 million	130,000 sf
McClellan Elementary School	$ 7 million	32,000 - 45,000 sf
Holly Lane Residence	$ 908,900	3,800 sf
Brentwood Town Square	$ 206,900	200,000 sf
Stella Wright, Hope VI Housing, New Jersey	NA	NA

2001

Addition to Baker Academic Hall	$ 8 million	30,000 sf
Posner Hall Rooftop Addition	$ 5 million	23,000 sf
Alcoa Riverfront Park	NA	47 acre masterplan
Penn Center West	$ total approx. 60 million	total approx. 375,000 sf
Philip Pelusi Salon	$ 472,900	2,850 sf
Duquesne School of Law	$ 8 million	35,000 sf
Bon Meade Elementary School	$ 6.5 million	66,000 sf
North Hills School	$ 9.5 million	NA
The Palace Theater	$ 3 - 5 million	NA
Asbury Villas Assisted Living	$ 8.2 million	71,000 sf
Bouquet Gardens University Housing	$ 10 million	163,000 sf
National City Bank Prototype	$ 408,900	1,900 - 4,800 sf

Goals

Building community and **channels of mutual influence** between the academy and profession
For students: preparation for practice, verbal written communication, analysis, research skills
For practitioners: teaching, mentoring, reflective and best practices, and continuing e

28 Interns   28 Practitioners   145 Students

1000 Pages

BUILDING KNOWLEDGE CASE STUDIES IN ARCHITECTURE

Case studies develop a new body of knowledge regarding the practice of architecture for traditional as well as non-traditional projects. The information impacts students, educators, interns, practitioners, allied disciplines, clients, and the general public – better informing all of these constituents. The academic objective is to provide a context, based in the reality of individual projects and simultaneously providing continued education for the practitioner as well as a method of learning for the student.

The goals of this program and collaboration are to capture the experience of architects, to prepare students for practice, and to foster mutual influence between the academy and the profession. Writing case studies offers students a rare opportunity to partner with practitioners to analyze the process of architecture through direct observation and intense research. Case studies generated in the program analyze, evaluate, and document the complex nature of practice and interrelationships of people, ideas, contracts, goods, and services; to understand interdisciplinary roles and responsibilities.

The final student reports authored in collaboration with practitioners and interns present the web of decision-making in the life cycle of building and capture comprehensive knowledge of innovative project delivery. This process develops critical thinking skills among all players, defines successful design strategies for the future, and improves communication between multiple stakeholders in the production of architecture.

ACSA/AIA Teachers' Seminar - July 8-11, 2004 - Cranbrook Academy of Art

Conference Co-Chairs:
Marvin Malecha, FAIA, North Carolina State University
Laura Lee, FAIA, Carnegie Mellon University
Richard Green, FAIA, The Stubbins Associates/University of Hawaii

Case Studies

in Architecture

Keynote Speaker

Daniel Friedman, FAIA
University of Illinois, Chicago

Seminar Tracks

Practice
Richard Green, FAIA, The Stubbins
Associates, University of Hawaii
Scholarship/Research
Harrison Fraker, FAIA, University of
California, Berkeley

Plenary Sessions

Case Methodology

Process, Guidelines

Perspectives and Domains

Types and Performances

Context-Based Applications

Conference Theme

The Teachers' Seminar at Cranbrook Academy of Art in Michigan is an intensive four-day program provided by the Association of Collegiate Schools of Architecture (ACSA) and The American Institute of Architects (AIA) focusing on case studies in architecture. The case study will be explored as a teaching model, a vehicle for scholarship, a research paradigm, and as a basis for the teaching office. The goal of the 2004 seminar is to explore and develop a more robust case study method for architecture. Case study development has the potential to build a body of knowledge for the future of the profession and will inform students, educators, interns, architects, and the public of the practice of architecture.

The seminar will be co-chaired by Marvin Malecha, FAIA, Laura Lee, FAIA and Richard Green, FAIA with Harrison Fraker, FAIA. Reference points for discussion will be provided by exploring the case study in law, business, and medicine, where it has long been a model for education, research and practice. The case study method in architecture is emerging as a powerful way for students to gain invaluable practice knowledge, for interns and practitioners to reflect on their practices, and for architects and educators to contribute to a knowledge-based profession. The focus will be on the case study in architecture within various domains of the discipline. In addition, perspectives from architectural criticism and journalism will demonstrate what brings a case study to life. Pioneering case study models in architecture will be presented and examined.

Who should participate:
This seminar will be of interest to faculty in all areas, but especially to those who teach professional practice. We particularly encourage and need practitioners with all levels of experience; leaders in firm education programs; interns and students. Although not required, faculty/practitioner teams are encouraged to come together and bring an intern and/or student as preparation for doing a specific case study. Teams will have a chance to develop a strategy and an action plan as appropriate for their context.

Through an interactive process, participants will learn how to:
- develop a case study in collaboration with a firm or school of architecture;
- integrate the development of case studies into teaching and practice;
- advance scholarship and research in architecture, and
- "tell the story" to bring practice and experience to life.

The Case Study Starter Kit
Each attendee will receive a Case Study Starter Kit, a teaching aide that documents the evolution of the case study in architecture and provides several models used in architecture schools and firm training programs. In addition to providing guidelines for developing a case study, proceedings from the Large Firm Roundtable meetings and the Open Meetings of the Case Study Work Group provide multiple perspectives on the value and challenges of the case study effort. Selected case studies will also be included.

The Case Study Initiative
The AIA Case Study Work Group, comprised of practitioners from large, mid-size, and small firms as well as representatives from schools of architecture, is developing a unique approach to the case study in architecture. Sponsored by the Large Firm Roundtable (LFRT) and the Educator/Practitioner Network (EPN), the AIA Case Studies Initiative was launched in September 2001 to produce an online database of case studies that analyze and document projects in the context of professional practice. From the very beginning of the effort as an extension of the LFRT discussions between deans and practitioners (1998-2000), it has been conceived that case studies could originate in either venue with the hope that bridges would be built between them. In a series of annual Open Meetings further consideration was given to the case study as a tool for scholarship, research and academic advancement. It is intended that a broad collection of case studies will begin to alter the understanding we have of practice while assisting students and recent graduates to gain insight.

The case study format is structured to make knowledge readily accessible, with stories of practice from various perspectives, measures of success, analysis of lessons learned, and a learning plan. This knowledge will be available to students, educators, interns, practicing architects, and the public, in an effort to better inform all of these constituencies.

Please see *www.aia.org/education/casestudies* for the first peer reviewed cases as well as submission guidelines.

Project #   **4**
Project Title   Awards
Dates   1994 - 2002
**Role**   Award Recipient

Awards
1995   **AIA Pittsburgh, Design Honor Award** with Prof. J. Dominiczak, Ph.D
1998   **Henry Hornbostel Teaching Award**
1999   **AIAS National Educator Honor Award**
2002   **William H. and Frances S. Ryan Award for Meritorious Teaching**

Synopsis
> The 1995 AIA Pittsburgh, Design Honor Award (Open Plan Category) with Prof. J. Dominiczak, Ph.D acknowledges the work of the exhibition Uncovering the City: Architectural Dialogues as a provocative rethinking of the plan of cities and possible means of reinterpreting and mapping cities. (See sample images below.)
> The 1999 Henry Hornbostel Teaching Award from the Carnegie Mellon University College of Fine Arts (CFA) recognizeseffectiveness in design education and successes in interdisciplinary courses and projects.
> The1999 AIAS National Educator Honor Award recognizes the overall quality of teaching; outstanding dedication and commitment to the profession; ability to transcend barriers and make connections beyond the academic arena by successfully integrating practice and design education in the classroom; support of student initiatives; and serving as an exemplary role model, mentor, and educator. (See following article.)
> The 2002 William H. and Francis S. Ryan Award for Meritorious Teaching from CMU represents the culmination of years of dedication to student learning, pioneering of methods in interdisciplinary thinking, and overall pedagogical innovations. Most importantly, the award recognizes the broader applicability of methods used in architectural design. First time nominees are rarely selected, and Lee is the youngest professor and first architect to win the award in its history.

Images from the Exhibition
Uncovering the City : Architectural Dialogues
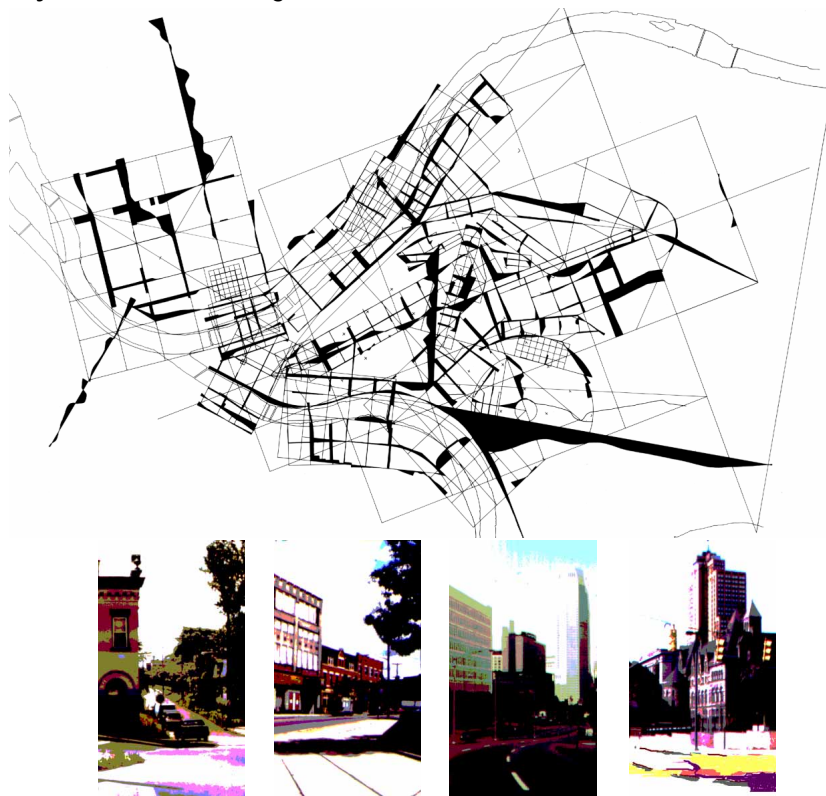
A Mentor With a Message

Professor Laura Lee of Carnegie Mellon University

In the words of AIAS member Michele Adrianse, "As a student of Professor Laura Lee, I have experienced first-hand the time and effort she devotes to all of her pupils. She has a deep love of architecture and has successfully instilled that love into many of the students with whom she comes in contact. Her example as a professional assures me that architecture is the career I want to pursue."

As an instructor of an interdisciplinary fine arts course at Carnegie Mellon, Laura Lee has been able to introduce students in the rest of the Carnegie Mellon University to the virtues of architecture and the environment. She has been at the forefront of leaders at CMU in pursuit of more interdisciplinary courses, as well as events and activities, that bring together students and faculty from diverse departments. Adrianse states, "Her efforts have enabled students in architecture and many other majors to greatly broaden their horizons."

Building on her years of experience as a practitioner with The Design Alliance, Inc., Laura Lee also teaches professional practice, forging student understanding of the numerous types of practice and the financial, legal, and ethical issues that face practitioners today. Extremely adept at drawing, physical modeling, and computer-aided design, Professor Lee has also taken on the challenges of teaching Computer Modeling I, integrating computer tools with drawing and shop, into early design education.

Department Head Vivian Loftness noted, "Notwithstanding these accomplishments, Laura Lee is singular in deserving a teaching award for her tireless commitment to every student she teaches. She dedicates evenings, weekends, and holidays to them, taking each success as a personal success. Her devotion is above and beyond the normal faculty load, working hour per hour as hard as each of her students to help them realize their visions."

1997-98 AIAS National Director Suzanna Wight sums it up best, "Laura Lee has always distinguished herself as a mentor to architecture students at Carnegie Mellon. Still, she is much too modest to recognize any of these actions as extraordinary. In fact, I believe that she would tell you that it is simply her job, and she loves it, and more specifically she loves her students." 45

The AIAS National Educator Honor Award is the most prestigious award that the AIAS confers on an educator.

RIGHT: Professor Laura Lee's efforts have enabled students in architecture and many other majors to greatly broaden their horizons.
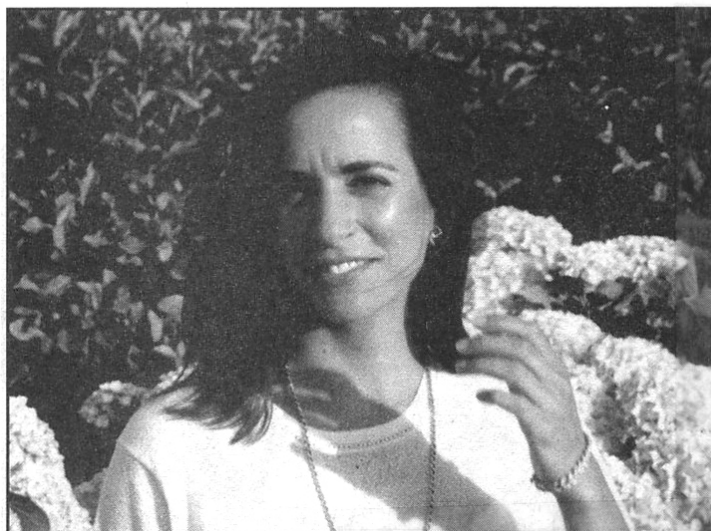
Project #   **5a**
                       ArchVoices
Project Title   2002 National Internship Summit
Date   2002
Role   Co-chair

Project #   **5b**
Project Title   Architectural Internship: Everbody's Issue
Completion Date   2003, published by ArchVoices
Role   Co-editor

Publications   AIA Journal #2, AIA Press, 2003, by **Laura Lee, AIA** readership of 65,000 AIA members, *reproduced below*

The objectives of the 2002 summit were to:
1. Formulate specific benchmarks for successful implementation of each of the nine Collateral Internship Task Force (CITF) recommendations
2. Explore and discuss existing academic-, practice-, and state- board-based models for implementation in other jurisdictions
3. Institute methods to communicate and expand the ongoing national dialogue regarding architectural internship.
To read more about the 2002 summit, visit

The 2002 Internship Summit took its cue from goals already identified by its 1999 predecessor. After inviting open participation on the Web, the group held a meeting at the University of Oklahoma, October 3-6, of 55 participants, five of whom were selected by popular vote, with the rest chosen by task force. Laura Lee, AIA, associate professor at the Carnegie Mellon University School of Architecture, served as co-chair with John Cary Jr., Assoc. AIA of the 2002 Internship Summit and provides this synopsis.

In the 2002 Internship Summit, the organizers asked three questions via their Web sites:
1. Can we identify a shared value that should guide ongoing changes to architectural internship and education?
2. Why is this value important?
3. What is one specific change or initiative that would exemplify this value?
Summit participants convened with the conviction that shared values are necessary to shift the culture of internship from a "program" to a truly comprehensive professional development experience. Of those individuals present at the summit, interns spoke most passionately on behalf of some 35,000 peers nationally by redefining their core needs:

leadership, mentorship, diversity, clarity, responsibility, and respect.
Summit participants, including students, interns, educators, young professionals, senior practitioners, and allied professionals, responded to the need for broad-based support for internship through effective communication and dissemination of collective initiatives.
The 1999 Summit achieved a united collateral front and proposed ideal internship models characterized by continuity, diversity, flexibility, and clarity. Through engagement and collaboration, the 2002 Summit reinvigorated the momentum and set forth goals to formulate specific benchmarks for successful implementation of each of the nine Collateral Internship Task Force (CITF) recommendations. The participants aimed at developing meaningful connections for internship with respect to the ever-shifting political, social, and economic conditions of practice. We examined other professional models; explored leading academic-, practice-, and stateboard-based programs; assessed alternative paths within architecture; and compared the criteria for evaluating education (NAAB), internship (the IDP), and examination

(the ARE). We identified a series of quantitative metrics to measure the current status and future progress of internship towards a structure based on learning and competency. Participants also affirmed the need for the profession to ensure contemporary relevance of internship through periodic comprehensive review of the criteria and procedures— internship requires validation at least every three years. The profession knows that we must work together to understand the acuity of the problems and exigency of moving forward in an intelligent and unified way. Internship in the twenty-first century demands the interaction of not only the collateral organizations, but also every stakeholder in the process. Integrated internship will only evolve from holistic, organic, and synthetic models of experience—beyond just beginning a career to providing a foundation for life-long learning. It is the ethical imperative of the academy and the profession to prepare aspiring professionals to make contributions in the world as well as establish and maintain channels of mutual influence. As conduits for the exchange of knowledge and innovation, interns are the life blood and the future of the profession.

2000

99   01   02   03

1999

The first issue of what would later become ArchVoices newsletter is published.

"Architects Must Reform Internship Now," by Reed Kroloff, is published in the May issue of *Architecture*.

The *International Union of Architects (UIA) Accord on Recommended International Standards of Professionalism in Architectural Practice* is approved at the XXI UIA Assembly in Beijing, China.

"Common Good," by Eric Adams, is published in the June 1999 issue of *Architecture*.

The AIA Board of Directors adopts a policy advocating that students of accredited degree programs be eligible to take and be prepared to pass the ARE upon graduation.

Comparative National Analysis of Structured v. Unstructured Internship Programs is conducted by Hill and Quinn.

An *Evaluation and Assessment of the Architectural Internship Development Program* is presented to the NCARB by Hill and Quinn.

"Lost in Space," by Robert Ivy, is published in the October issue of *Architectural Record*.

Learning to Lie: Falsification in Architectural Internship, is presented by Hill and Quinn at the ACSA West Regional Meeting in Portland, Ore.

In December, the AIA Board of Directors votes to change the structure of its Intern/Associate Committee in order to communicate with Associate members more effectively.

2000

The *2000–02 AIA Firm Survey* includes a new employment category for "non-registered architects," accounting for 17% of all architecture firm staff nationwide.

The AIA Board of Directors approves the formation of the National Associates Committee (NAC), comprised of regionally-elected Associate member representatives.

The AIA asks three states (California, Illinois, and Virginia) to conduct 18-month pilot "Competency-based IDP" (C-IDP) studies, starting July 2001.

"Internship is a problem that literally threatens the future of the profession. The program is a disaster area and the number of people sitting for the licensing examination has fallen frighteningly as a result. If this trend continues, this profession could simply cease to exist. One million dollars would fund a number of pilot programs aimed at creating a viable alternative system."

Reed Kroloff. "The Best Gifts $1 Million Can Buy." Architecture. December 2000

2001

The *CITF Final Report* is published and presented to the Five Presidents' Council.

"The CITF believes the profession is best served by a continuum of learning, where the lines defining education, experience, and examination converge. In this model, knowledge and skills are acquired throughout the continuum, thus enhancing the development and stature of emerging architects."

CITF Final Report. 2001

2000–2001 NCARB Practice Analysis Report is published, "validating the IDP and ARE."

On the two-year anniversary of the 1999 Summit, seventeen national intern and young architect leaders write an open letter to collateral organization boards and all 50 state licensing boards, calling for their leadership in planning a 2002 Internship Summit.

The NCARB Board of Directors rejects, 11–1, that students should be able to take the licensing exam immediately after graduation, as recommended by the CITF. It also rejects, unanimously, conferring the title of 'Architect' on graduates of NAAB-accredited architecture programs, as recommended by the CITF.

The Texas Board of Architects and Engineers allows interns to begin taking the ARE if they have completed a professional degree program as well as six months' experience under the direct supervision of a licensed architect.

AIA California Council (AIACC) and the California Architects Board (CAB) establish a Competency-Based IDP Task Force.

2002

The 2002 National Summit on Architectural Internship and its dedicated website are announced.

ArchVoices launches the first website dedicated to uniting information and resources on architectural education and internship.

The 2002 National Summit on Architectural Internship, organized by ArchVoices, is hosted by the College of Architecture at the University of Oklahoma, October 4–6.

The 2002 Summit earns coverage in numerous print and web-based publications including *AIArchitect*, *Architectural Record*, *Architecture*, and *DesignIntelligence*.

2003

157 young professionals submit essay proposals to the inaugural ArchVoices Essay Competition, coordinated and planned by a group of participants from the 2002 Summit.

The *2003 ArchVoices/AIA Internship & Career Survey* is sent by email to 20,000 young professionals.

"Building a Profession: A Sociological Analysis of the Intern Development Program," by Dr. Beth Quinn, is published in the May issue of the *Journal of Architectural Education*.

"IDP is not performing as a structured internship. Most importantly, while it adds legally mandated requirements for interns, it has not changed the requirements for employers. It functions for employers just as some interns report: as only paperwork. For interns, IDP provides a model of diverse training, but it offers no institutional guarantees of diversity or effective protection against the exploitation that has plagued architectural internship."

Dr. Beth Quinn. "Building a Profession: A Sociological Analysis of the Intern Development Program." Journal of Architectural Education. May 2003

The *DMG Final Report* is published for review and action by the Five Presidents' Council.

The second edition of the *AIA Journal*, focused on "Tomorrow's Architects," is published.

The *2003 ArchVoices/AIA Internship & Career Survey Final Report* is published.

Architectural Internship: Everybody's Issue, is published.

Visit www.archvoices.org/chronology for an unabridged chronology of internship.

VOICES OF INTERNSHIP

Welcoming new voices through the ArchVoices Essay Competition

To increase peer communication and better understand the daily experiences of young professionals, ArchVoices launched an essay competition in January 2003 — the first of its kind for young professionals. While ArchVoices has catered to the needs of interns through its newsletter and initiatives like the 2002 Internship Summit, much of its efforts have related more to policy matters than to the daily experiences and aspirations of interns. The competition was organized by a core group of interns who participated in the Summit. It took place in two stages, and was juried by a distinguished group of leaders within the profession. 157 young professionals from eight different countries submitted essay proposals to Stage I and 29 were invited to submit full essays to Stage II.

Visit www.archvoices.org/competition to read all 157 essay proposals and winning essays.

"In school we are taught that architecture is not simply a job. It is a lifestyle. It is a way of looking at the world. It is a verb. It is a constant exploration where one looks for and finds inspiration in the world around them, and then applies that inspiration to create something completely new. And that thing we create is beautiful and makes a difference in the world. And though in school we may slave away on hypothetical projects that will never be built, we can rationalize that it is all done in preparation for that first 'real' job. But in those first few months of that first real job, interns often find themselves as far away from architecture as ever. Instead of creating beauty, we find ourselves staring at colored circles on a 13-inch computer monitor, trying to remember at what point things had gone so horribly wrong."

Excerpted from "Circles for a Living" by J. Brantley Hightower, Lake/Flato Architects Inc. San Antonio, TX

"In the first days of our architectural education, we learn of Vitruvius's *De Architectura*, one of the first published treatises on architecture. Early on, three words ring in our ears: utilitas, firmitas, e venustas. But what begins so simply becomes muddied as we trudge through the murky waters of architectural education. 'Commodity, firmness, and delight' are quickly replaced with 'Eating oysters while boxing gloves, naked, on the nth floor.' Glitzy encyclopedias like *S,M,L,XL* replace *De Architectura* as our canonical text, and the graphic and linguistic bombardment unleashed by architectural education complicates the seemingly cut and dry world of Vitruvius."

Excerpted from "Residing in the Space Between" by Jeff Pontz, University of Michigan Ann Arbor, MI

"We have a fear that our work ultimately doesn't matter, that another warm body will replace our chair once we're gone. That isn't so, however; we are impacting our coworkers and our clients. We are advancing architecture, even if nothing is built. Never underestimate the power of your influence, exampled by the comments of passing architects in my professional career. If young architects recognize this beginning phase of their career as a 'residency' trial period of experimentation, and exposure, then more optimism will return."

Excerpted from "The Architectural Residents" by Kara Byrn, Ratio Architects, Inc. Indianapolis, IN

"I worry about a profession that laments the triumph of 'maximizing shareholder value' over civic space, while applying the same bottom-line thinking to the training of its next generation. Surely we can do better. If the profession wants to argue for the public realm as the sine qua non of a meaningful architecture, it can make a truly persuasive case by being its own best example. If we really believe that an excellent architecture requires a truly public investment, then we have no other choice but to begin to make that kind of investment in ourselves."

Excerpted from "On Excellence" by Fouad Khalil, SMBW Architects. Richmond, VA

"We are interns and every minute counts. Nine hour days on a rare occasion, though 11 hour days are more routine, 45 minute 'power' workouts at lunch, 'gourmet' sandwiches phoned in and delivered from the deli that you only know is located around the corner; because you have read their address on your credit card receipts. This is the only way to make it all happen, take it all in, get it all done; to move ahead, to build a presence, to acquire a name."

Excerpted from "Professional Overload and Cry for Relief" by Maria Sutter. New York, NY

Project #   **6**
                     Carnegie Mellon University
Project Title   Issues of (Professional) Practice (in Architecture) Course
Dates   1995 - present, 8 years / semesters
Role   Course Author and Teacher

Publications   in over 20 public presentations to ACSA, AIA, AIAS, NCARB
The course methods were featured in the interview "Laura Lee: She's Bridging the Gap between School and Practice"
in the publication "Direct Connection" by the NCARB in 2000 with a readership of 85,000 architects and interns.

Synopsis
The focus of the practice education sequence in the School of Architecture and particularly the "Issues of Practice" course is the application of knowledge to practice. Practice is a culture that extends beyond skills and training. Students are prepared to assume professional roles through direct involvement with practitioners. Strategic planning, business, law, communication, and leadership are fundamental lessons. Clients, schedules, and economic factors are stressed. Students resolve social, political, and ethical issues to make professional judgments on behalf of or as members of society.

Specifically, "Issues of Practice" is based on broadly applicable strategies with a focus on the value of design. Content provides a fundamental understanding of a) the current state and future of the profession, b) the dynamics of mainstream practice settings and alternative professional pursuits, and c) architectural project delivery and firm management. Students engage not only the "academic" fundamentals of practice, but also the complex context of practice constraints. An inclusive and holistic view is provided through the case studies program and numerous connections and interactions with all levels of the practice community.

CONTEXT: The Practice Education Sequence

Within the School, the **Issues of Practice** course in the final year of study serves as the core for a practice management sequence of required courses for all students in the Bachelor of Architecture degree program. Faculty leading each of the four courses closely coordinate content and use common cases throughout the sequence to achieve depth and breadth of understanding practice issues.

Psychology of Habitation   *third year, spring*
Human and Cultural Factors   *elements related to human patterns and use*   PERFORMANCE
        issues / theories: users needs, territoriality versus abandonment   *observation, interview, programming*
                             psychological and social response to spatial characteristics   *research methods*
                             societal obligations of designers   *post occupancy evaluation*
        tools / methods: scientific method applied to the built environment   CLIENT/USER/OWNER CENTERED
                             research, interviews, questionnaires, data-collecting instruments

Building Economics   *fourth year, fall*
Economic Factors   *variables related to economic trends, building types, construction*
        issues / theories: time: life cycle assessment / view, economic return   FINANCE
                             design and development economic feasibility; choice   *feasibility and planning*
                             architects role in economic development   *design considerations, alternatives*
                             (introduction in practice / leverage of knowledge)   CONTRACTOR/DEVELOPER/
        tools / methods: cost analysis methods, means documents   FINANCIER/INVESTOR CENTERED

Issues of Practice   *fifth year, fall*
Business Factors   *organization as related to process of design and construction* SERVICE
        issues / theories: context of architecture and professional practice   *external/internal roles/responsibilities*
                             architects professional roles and responsibilities   *staffing, schedule, budget*
        tools / methods: structures as influenced by history, philosophy, market   *organizing, management*
                             approach according to internal office and external constraints   **ARCHITECT** CENTERED
                             organization of project and resources, schedule and financing

Decision Making and Ethics   *fifth year, spring*
Ethical Factors   *dynamics of comprehensive problem solving*   ANALYSIS
        issues / theories: naturalistic decision making, rational, bounded rational   *decision making models and theories*
                             pluralism of moral theories   *ethics (values, consequences, rules)*
                             ubiquity of ethics in decision making   SUMMARY: ALL STAKEHOLDERS
        tools / methods: utility = value * probability   cost benefit analysis under risk
                             choice theory   planning (critical path method)

ISSUES of PRACTICE: Course Components

Four innovative components in **Issues of Practice** described in the following page include: **Case Studies in the Practice of Architecture** > intense collaboration between students, interns, and practitioners to research, document, and analyze a firm's project from inception through post-occupancy. **Ethics Roundtables** > architects, clients, consultants, and contractors debate contemporary ethical issues with students through an examination of common conflicts in the profession. **Excursions** > required activities beyond the university setting to observe and understand the various roles of the architect and the value of community and professional service. **Professional Development** > extensive research for short- and long-term career planning followed by preparation of resumes, cover letters, portfolios, and interviewing for positions upon graduation.

ISSUES of PRACTICE: Course Overview

S C H E D U L E + **C O N T E N T** : F A L L 2 0 0 1

			lectures	workshops/cases	guests/roundtables	*assignments due*	
m	aug	27	introduction				
w	aug	29	video views				
f	aug	31		resume			
m	sept	03			labor day: no class		
w	sept	05	**1. context**				
f	sept	07	**01**	cover letter		*resume*	*(5%)*
m	sept	10			Guest: John Frohnmayer		
w	sept	12	**2. choices**				
f	sept	14	**02**	portfolio		*cover letter*	*(5%)*
m	sept	17			Guest: Syl Damianos		
w	sept	19	**3. preparation**				
f	sept	21	**03**	interviewing		*portfolio*	*(5%)*
m	sept	24			ethics roundtable 1		
w	sept	26	**4. types**				
f	sept	28	**04**		Intern Development Program (IDP)	*excursion #1*	*(5%)*
m	oct	01			Guest: Maura Guttman		
w	oct	03	**5. structures**				
f	oct	05	**05**	FIRM Visit: Interview		*folio package*	*(5%)*
m	oct	08			Guests: 5 New York Alum		
w	oct	10	**6. project overview**				
f	oct	12	**06**	FIRM Visit: Case part 1		*firm interview*	*(8%)*
sat	oct	13			**Architect's Saturday**		
w	oct	17	**7. legal parameters**				
f	oct	19	**07**		mid semester: no class	*case: part 1*	*(8%)*
m	oct	22			mid semester: no class		
w	oct	24	**8. protocols, constituencies**				
f	oct	26	**08**	FIRM Visit: Case part 2		*excursion #2*	*(5%)*
m	oct	29			ethics roundtable 2		
w	nov	31	**9. stories, ideas, measures**				
f	nov	01	**09**	FIRM Visit: Case part 3		*case: part 2*	*(8%)*
m	nov	05			liability quiz		
w	nov	07	**10. client, services, process**				
f	nov	09	**10**	FIRM Visit: Case part 4		*case: part 3*	*(8%)*
m	nov	12			risk management		
w	nov	14	**11. business, delivery**				
f	nov	16	**11**	FIRM Visit: Case part 5		*case: part 4*	*(8%)*
m	nov	26			A. R. E. practice test	*case: part 5*	*(8%)*
w	nov	28	**12. project evaluation**				
f	nov	30	**12**	SITE Visit: Case Summary		*case summary*	*(8%)*
m	dec	03			ethics roundtable 3		
w	dec	05		Case Presentations: two sessions (6 + 6)		*case presentation*	*(8%)*
m	dec	10				*excursion #3*	*(5%)*

Left margin vertical text: [module . 1] [mod.2] [mod . 3] [module . 4] [module . 5]

Right margin vertical text: [architects] [firms] [projects] [projects]

Project #	**7a**
	Carnegie Mellon University
Project Title	Case Studies Program (in the Issues of Practice course)
Dates	2000 - present, 3 years / semesters
Role	Course Author and Teacher
Publications	in over 15 public presentations to ACSA, AIA, AIAS, NCARB

Synopsis

A core component of Carnegie Mellon's practice education agenda are case studies. Case studies are developed on the premise that intellectual capital requires investment in the fundamental body of knowledge for which members of the discipline and profession are uniquely qualified and responsible. Case studies are a means to develop this body of knowledge and respond to the inherent conflict and potential created by the position of professional schools within university settings. Whereas case studies have been a part of education in allied professions such as law and business for many years, architecture has not developed a comprehensive or sustainable method for the definition and growth of knowledge in the profession. Within the academy and from a national platform, I have been a leader in developing case studies as the most sophisticated, collaborative, and sustainable educational model for the future of architecture. | Case studies develop a new body of knowledge regarding the practice of architecture for traditional as well as non-traditional projects. The information impacts students, educators, interns, practitioners, allied disciplines, clients, and the general public -- better informing all of these constituents. The academic objective is to provide a context, based in the reality of individual projects and simultaneously providing continued education for the practitioner as well as a method of learning for the student. | The programs developed at Carnegie Mellon and disseminated nationally analyze, evaluate, and document the complex nature of practice and interrelationships of people, ideas, contracts, goods, and services; to understand interdisciplinary roles and responsibilities. The final student reports authored in collaboration with practitioners present the web of decision-making in the life cycle of building and capture comprehensive knowledge of innovative project delivery. This process develops critical thinking skills among all players, imparts successful design strategies for the future, and communicates with multiple stakeholders in the production of architecture. | The goals of this collaboration are to capture the experience of architects, to prepare students for practice, and to foster mutual influence between the academy and the profession. Writing case studies offers students a rare opportunity to partner with practitioners to analyze the process of architecture through direct observation and intense research. | **Each case below is an average 35 page document..**

2003 FIRMS	**PROJECT**	**PRINCIPAL**	**Intern/Architect**	**Students**
Apostolou Associates	Peterson Events / Sports Center	Paul Apostolou	Rick Sabeh	6
Davis Gardner Gannon Pope	Collaborative Innovation Center	Kevin Gannon	Carmen Gong	7
Celento Henn	Renovation to Children's Museum	Rebecca Henn	Matt Diersen	4
EDGE Studio	947 Liberty Lofts	Dutch McDonald	Jen Bee	6
Kingsland Scott Bauer Associates	Erie Federal Courthouse Complex	David Bauer	Brian Green	6
Lami Grubb Architects	Mellon Institute Biology Lab	Suzan Lami	Brian Viehland	7
RSH Architects	Henderson Student Housing Renovation	David Noss	Todd Peters	6
WTW Architects	North Shore Parking Garage	Rich DeYoung	MaryAnne Stone	6
2002 FIRMS	**PROJECT**	**PRINCIPAL**	**Intern/Architect**	**Students**
Baker and Associates	Airside Business Park	Greg Patterson	Keith Williams	6
Damianos Group	United Cerebral Palsy of Pittsburgh	Syl Damianos	Matthew Roule	5
Desmone Associates	Providence Family Support	Chip Desmone	Joseph Chaffin	6
Fukui Architects	Cygnus Manufacturing Corp	Felix Fukui	Dana Stanik	6
Hayes Design Group	McClellan Elementary School	Kevin Hayes	Glenn Gilbert	6
Makato Architecture and Design	Holly Lane Residence	Chas DeLisio	Debra Elliot	6
Rothschild Architects	Brentwood Town Square	Damiel Rothchild	Michelle Adrianse	6
Urban Design Associates (UDA)	Stella Wright, Hope VI, New Jersey	Paul Ostergaard	Andrew Dresdner	6
2001 FIRMS	**PROJECT**	**PRINCIPAL**	**Intern/Architect**	**Students**
Burt Hill Kosar Rittleman	CMU Baker Hall	Naomi Yoran	Melissa Sarko	4
The Design Alliance	Alcoa Corporate Center	L. Dabinett/D. Ross	Rebecca Gerkin	4
Environmental Planning + Design	Alcoa Riverfront Park	Jack R. Scholl	Andrew Schwartz	4
Gardner + Pope Architects	Penn Center West	Gary Gardner	Yoko Mori	4
Gerald Lee Morosco	Philip Pelusi Salon	Jerry Morosco	Eric Nicklaus	4
Gerard Nagar Associates	Duquense School of Law	James Gerard	Dawn Danyo	4
HHSDR Architects / Engineers	Bon Meade Elementary School	Andreas Dometakis	Matthew Franz	4
LDA Companies	North Hills School	Christopher Haupt	Brian Leet	4
Perfido Weiskopf Architects	The Palace Theater	Sheldon Goettel	Sergei Matveiev	4
Perkins Eastman Architects	Asbury Villas	Alan Schlossberg	Lori Shaw	4
Renaissance 3 Architects, P.C.	U Pitt Bouquet Gardens	Deepak Wadhwani	Rebecca Leet	4
Strada	National City Bank	Ed Shriver	Jeffrey Leon	4

A Case Study of Case Studies

Laura Lee, AIA, Associate Professor, Carnegie Mellon University
Chair, Educator Practitioner Net, AIA National
Member, Case Study Work Group

Case Study Work Group Open Meeting : North Carolina State University : Raleigh, North Carolina : 6 February 2002

Project #	**7b**
Project Title	A Case Study of Case Studies
Date	2002, Raleigh, North Carolina
Role	Author and Presenter
Publications	In Proceedings of Open Meeting #2
	AIA National Case Studies Work Group

Context : International / National

Precedents and Models

AIA DEVELOPMENT CHECKLIST AND SUBMISSION GUIDELINES:
CASE STUDIES IN THE STUDY AND PRACTICE OF ARCHITECTURE

Dublin Institute of Technology
Henry Van der Velde Institute
Katholic University of Leuven

James Horan
Richard Foque
Herman Neuckermans, Ann Heylighen

Carnegie Mellon University
Harvard Graduate School of Design
Illinois Institute of Technology
North Carolina State University
University of California, Berkeley

Omer Akin, Stefani Danes, Laura Lee, Robert Ries
Victoria Beach, Carl Sapers
Donna Robertson, Edward Uhlir, Robert Jones
Marvin Malecha, Hunt McKinnon
Harrison Fraker, Mike Martin

Stubbins Associates
Ethics and the Practice of Architecture

Richard Green
Gregory Palermo, Patrick Sullivan, Barry Wasserman

Case Study Work Group Open Meeting : North Carolina State University : Raleigh, North Carolina : 6 February 2002

Structure : Initiation and the Firms

Semester

TEAM COMPOSITION
1 principal, 1 intern, 4 students

SCHEDULE AND CONTENT
7 weeks, team meets every Friday in firm's office

REQUEST FOR PARTICIPATION
mentorship, teaching, continuing education credit, recruiting

RESPONSES FROM FIRMS
connection to the school, reflection on one's own education

CRITERIA FOR SELECTING FIRMS
experience, diversity, project type

ORIENTATION SESSION
context, goals, on teaching, checklist, cycles, responsibilities

Case Study Work Group Open Meeting : North Carolina State University : Raleigh, North Carolina : 6 February 2002

Context : Academies in the USA

Programs and Curricula

SETTING
Graduate versus Undergraduate
Required versus Elective course

TYPE
Case Method versus Case Study
Team Composition / Project Location
Project Completed or In Progress

CARNEGIE MELLON SCHOOL OF ARCHITECTURE
PRACTICE MANAGEMENT SEQUENCE: CASE METHOD
Psychology of Habitation [third year]
Design Economics [fourth year]
Issues of Practice [fifth year, fall]
Decision Making and Ethics [fifth year, spring]

Case Study Work Group Open Meeting : North Carolina State University : Raleigh, North Carolina : 6 February 2002

Structure : Teaching and the Students

Week

CRITERIA FOR SELECTING STUDENT TEAMS
Transportation, Management, Writing, Graphics

MONDAY
Lecture: Conventions
Readings: Theory and Examples

WEDNESDAY
Simulation: Case Method
Workshop: Innovations / Legal Context / Liability

FRIDAY
Interview: 1 hour
Submission: 4 pages plus graphics

WEEKLY EDITING PROCESS
Instructor: synthesis of lecture / reading / workshop
Teaching Assistant: learner / student
Principal and Intern: the facts

Case Study Work Group Open Meeting : North Carolina State University : Raleigh, North Carolina : 6 February 2002

Context : Carnegie Mellon University

Issues of Practice

MAINSTREAM CONTENT
The Profession
Firms: types, management, financial structure
Projects: delivery methods, management, organization

NON-TRADITIONAL CONTENT
Mentorship
Ethics Roundtables
Excursions and Guests: Leadership and Community Service
Professional Development: Personal Promotion

CASE STUDIES PROGRAM
Lectures and Readings
Workshops
Cases

Case Study Work Group Open Meeting : North Carolina State University : Raleigh, North Carolina : 6 February 2002

Structure : Conducting Interviews

Day

1 THE FIRM
description, philosophy, business structure, organizational structure

2 ABSTRACT
description, conceptual position, project teams, project graphics

3 PERSPECTIVES   scope of services, delivery (design and construction) web of decision making,
roles and responsibilities (r-chart)

4 PERSPECTIVES
schedule, budget, contracts

5 ANALYSIS
selection, client/user, design process, documentation and bidding

6 ANALYSIS
construction related services, post-occupancy / project evaluation

7 SUMMARY
site visit, meetings with client, contractor, consultants, users

Case Study Work Group Open Meeting : North Carolina State University : Raleigh, North Carolina : 6 February 2002

Project #	**8a**
	Carnegie Mellon University
Project Title	First Year Architecture Design Studio: Methods and Transformations in Form Fall Semester
	First Year Architecture Design Studio: Methods and Transformations in Space Spring Semester
Dates	2002 - present, 2 years / semesters
Role	Program Coordinator, Course Author, Lecturer, and Studio Critic
Publications	Exhibition, May 2003, Hewlett Gallery, Pittsburgh, Pennsylvania

Synopsis

Fluid connections between drawing and modeling.   Devoping skills in service to design knowledge
personal sketchbook, workshop, woodshop, digital media, freehand drawing, hard-line pencil and ink drafting, physical modeling,
public speaking, writing   integrity of eachmedium- when and how it should be best used

First Year Architecture Design Studio: Methods and Transformations in Form   Fall Semester

The intent of the studio is to provide a conceptual understanding of architecture without the necessity of talking through buildings. Emphasis is placed on the *teasing out* or the discovery of *architectures* (as opposed to *Architecture*) inherent in systems of both landscape environments and natural form, tendencies and infrastructures. Focus is placed not so much in the observation of the autonomous object but rather the sets of relationships and systems *at work*, between and contained within objects and elements.

The semester is divided into two halves: The first 7 weeks is devoted to observations and formal manipulation of systems from natural specimens. Students document, diagram, and map out these systems initially, also taking note of spatial/temporal quality of natural systems. The design process then shifts into methods of transformation to turn these observed systems into dynamic systems of architectural *syntax* that students formally *author*. | The second 7 weeks is devoted to observations of specific landscape environments. Students are asked to quantitatively map elements and relationships between elements that begin to define the use and ambient qualities of the environment (re: movement, light, wind, precipitation, etc.). Students are then given a program to be adapted to these environments using mappings as a formal design catalyst.

First Year Architecture Design Studio: Methods and Transformations in Space   Spring Semester

The spring semester, "methods and transformations in SPACE" of the first year architecture program extends from experiences in the fall semester "methods and transformations in FORM". Architecture as a spatial practice is introduced. Design projects evolve from previous studies of STRUCTURE SURFACE and VOLUME in plant and landscape paradigms. SYSTEMS and SEQUENCES previously explored in NATURE are developed in CULTURAL contexts through a progressive series of projects. Spatial temporal experiences and "narratives" are created by mapping human behavior and studying precedents. Architectural and interdisciplinary analyses launch each project as a vehicle for generative design strategies. Design methods and process are made explicit.

|		
1. SHOP	**ELEMENT**	
A Screen	a full scale woodshop project	
Studio	Danish precedents, human dimension, light, view	
Drawing	Perspective: magic and office method, freehand	
Computer Model	Form – Z for light, Microstation for drafting	
2. ROOM (Private)	**INTERIOR**	
A Room	inside outside	from literature / drama
Studio	building precedents, domestic, character identity	
Drawing	Perspectives con't; Light: Shade and Shadow	
Computer Model	Microstation for modeling	
3. PLACE (Public)	**BUILDING**	
Urban Infill	outside inside	from dance / film / music
Studio	interdisciplinary precedents, temporal sequence	
Drawing	Light: Shade and Shadow; Light: Color	
Computer Model	Microstation for animation	
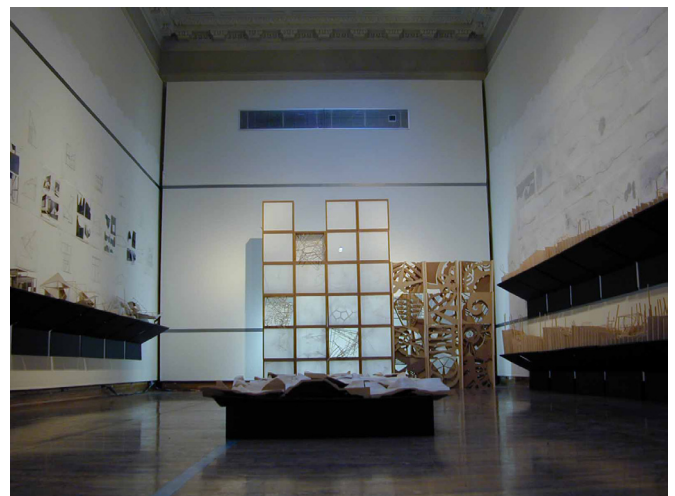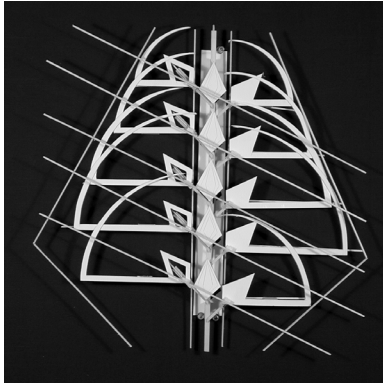
Fall Semester: Project 1
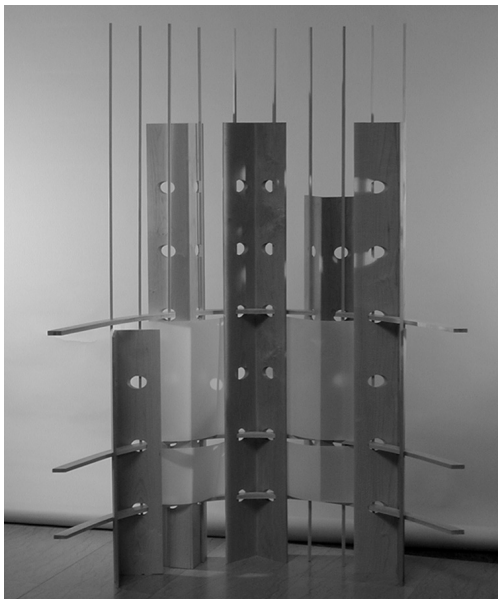**Andrew Caruso: Relief Model**
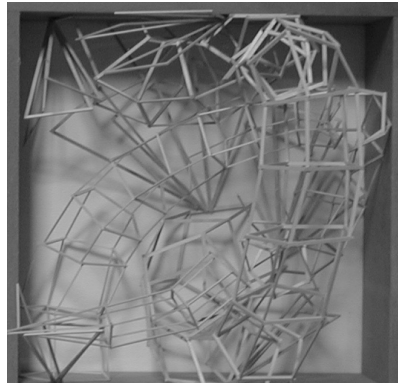
Fall Semester: Project 2
Emily Rice: Projection Box
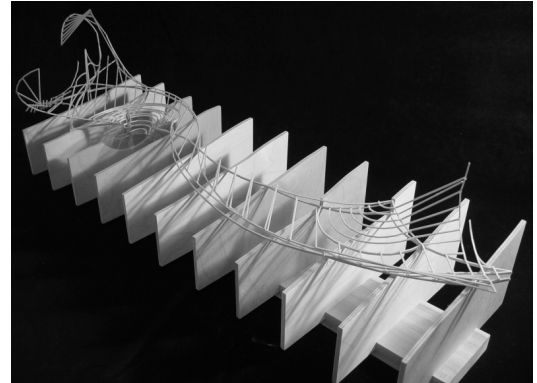
Fall Semester: Project 3
Jenna Kappelt: Landscape Path

Spring Semester: Project 1
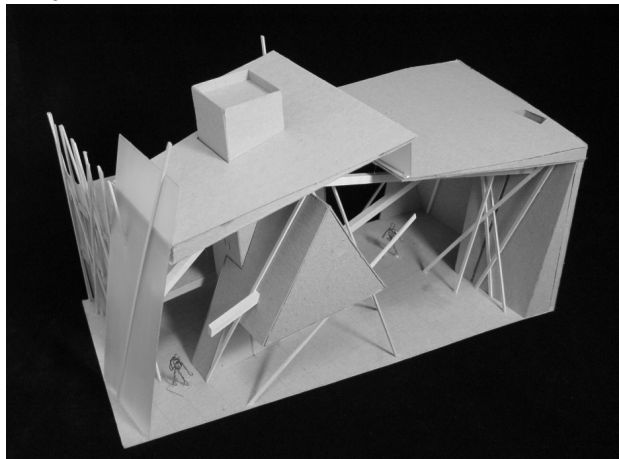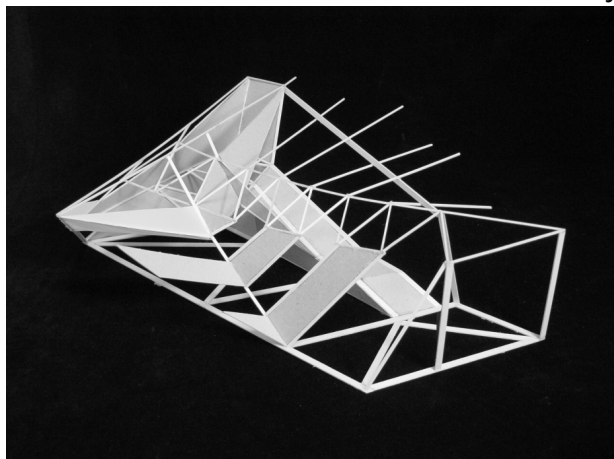**Emily Rice: Full Scale Screen**

Fall Semester: Project 1
Jenna Kappelt: Full Scale Screen

Spring Semester: Project 2
Burak Kilic: Room Study

Spring Semester: Project 3
Emily Rice: Urban Infill

Project #   8b
                       Carnegie Mellon University
Project Title   Second Year Architecture Design Studio: Composition   Fall Semester
                       Second Year Architecture Design Studio: Materials and Assembly   Spring Semester
Dates   1994 - 2002, 8 years / semesters
Role   Program Coordinator, Course Author, Lecturer, and Studio Teacher

Publications   ACSA International Conference Proceedings 1993, 1994, 1995
                       ACSA Annual Meeting Proceedings 1994, 1995
                       Design Communication Association 1994

Synopsis

Architectural structures from single places to whole environments share essential characteristics with biological systems. They contain within them the historical tracings of their past, they are in transitive mutual interaction with their environment, they sustain life within them, they change over time, they are dependent on the harmonious integration of their various functions, they become functionally disabled when communication between their interdependent elements is blocked. When these avenues of interdependence are compromised, the overall body may make adjustments or compensation which may turn out to be adaptive or lethal. The complexity and sensitivity of "organic" architecture structures demands respect and understanding for their adoption and growth. Such sensitivity is best served by a model that specifies the approach, the interaction, and the intervention.

The design method involves a three-part process, which was originally designated as analysis, evaluation, and synthesis. *Analysis* is aimed at capturing the spirit of place through time and spatial morphology. *Evaluation* is a test of the "structure" as a search for the meaning and potential of analytical findings. Ultimately, the *synthesis* of values leads to an interpretation of both the existing and proposed structures. Associated with each stage in the process are corresponding investigations into issues of scale (site, building, interior, detail), perception (visible, semi-visible, invisible), and representation (drawing, relief, model).

In the studio, learning is student-centered, where Lee serves as a partner in the process. Design problems are structured to encourage students to ask their own questions. The explicit teaching of design is an implicit teaching of thought processes. Diversity of human perspectives and interdisciplinary synthesis expand students understanding of the creative process. Collaboration and teamwork present architecture as a collective act. Values -- human and environmental -- are the foundation for architectural inquiry and production. The process acts as a framework for individual self-development and critical thinking.
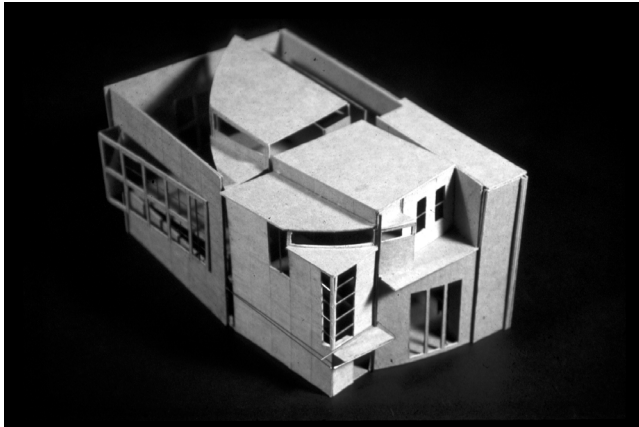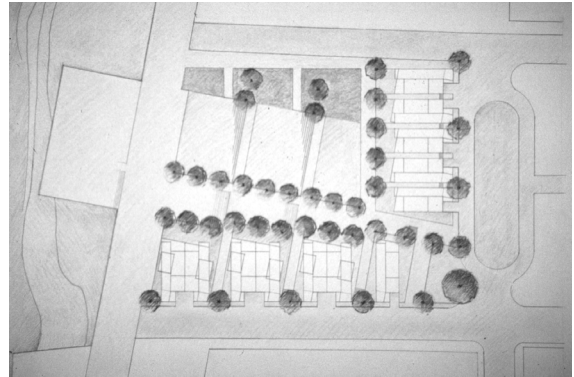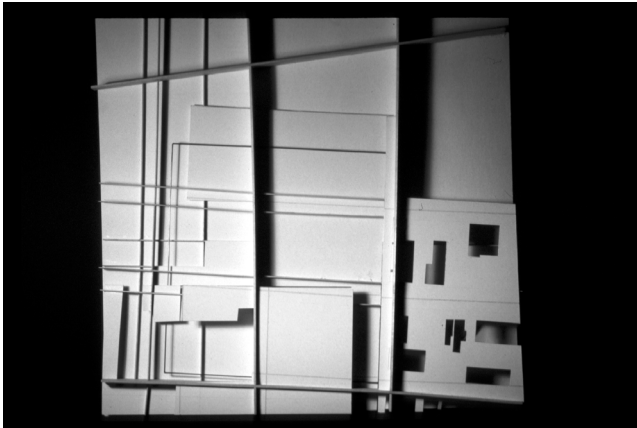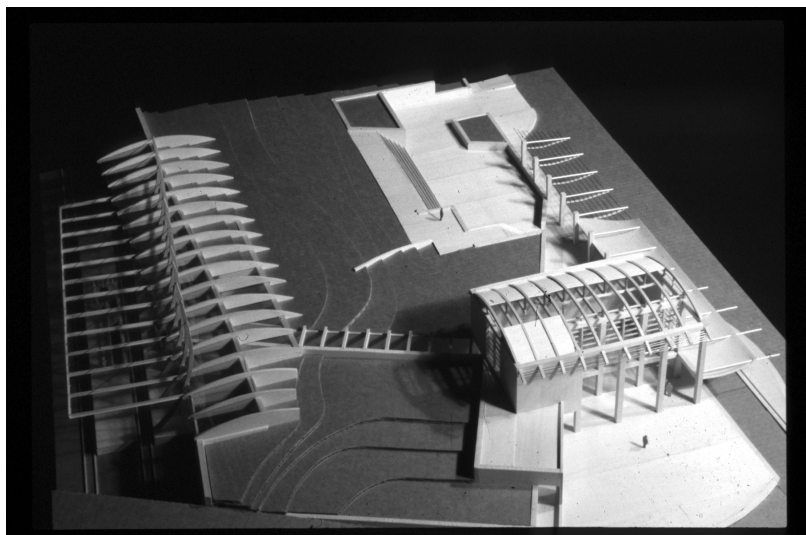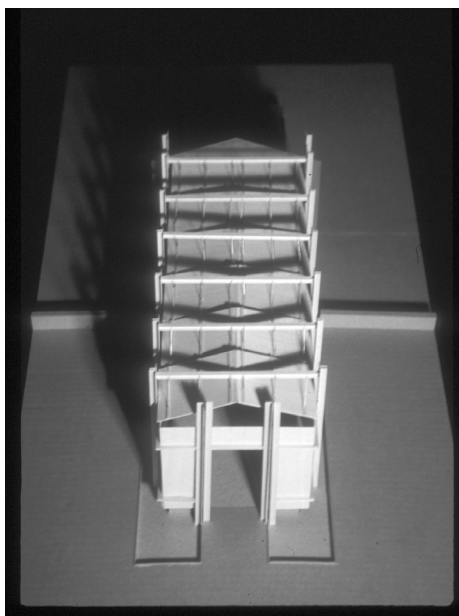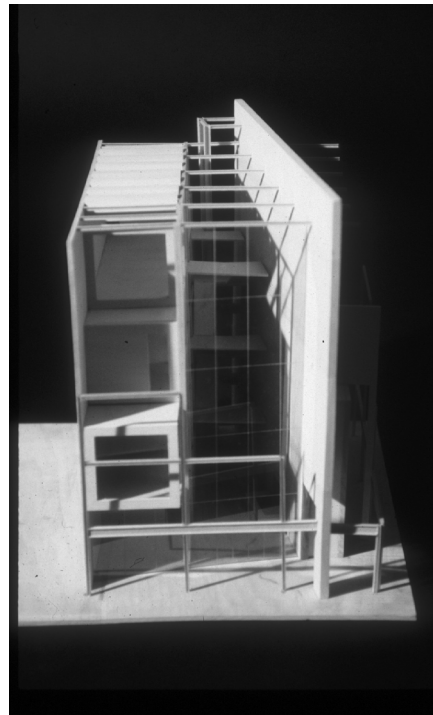
Michelle Mondazzi: Urban Relief Model
Mae Hogan: River Museum
Delphine Ammann: Chapel

Sacha Leong: Southside Housing
Nobu Nakaguchi: Library
Nazim Nice: Train Station

Project #	9a
	Carnegie Mellon University
Project Title	Second Year Architecture Design Studio and School of Drama Design Build
Dates	1998 - 2001, 3 years / semesters
Role of Nominee	Course Author and Teacher

Synopsis

In cooperation with the School of Drama, sophomore architecture students design and build a stage set for a play/performance. The project approach is in response to the semester theme: (the fundamentals of) construction and (the expressive use of) materials. The method of inquiry is based on the design and detailed resolution of the elements of architecture - floors, walls, roofs, openings, as well as furniture, lighting, costume and graphic design. The project is interdisciplinary in character. Principle Drama faculty include a Scene Designer and Director. | The project presents the opportunity to experience a design practice situation involving clients [director, actors], consultants [production and stage managers, lighting and costume designers], a budget [$1000], and a fixed schedule [installation deadline/load-in]. Under the direction of a project manager [the studio instructor] a comprehensive set of construction drawings will be produced for the construction process. Most importantly, the success of the project is dependent on the unique skills of each individual in a collaborative setting.

Set and Masks by Students: Romulus the Great

Architecture Student Designers: Nathan the Wise

Project #   9b
           Carnegie Mellon University
Project Title   College of Fine Arts Interdisciplinary Workshop
Dates   1996 - 2001, 6 year / semesters (team taught in 1996, 1997)
Role   Course Author and Teacher

Synopsis

Through course lectures, workshops, and assignments students develop the ability to:

1. identify relationships
2. utilize non-literal language and non-linguistic forms of communication
3. recognize multiple solutions; understand that solutions are generated from perspective
4. maintain flexible in thought
5. generate judgments in the absence of rules
6. appreciate imagination and trust intuition as a source of content
7. understand the world from an aesthetic framework
8. acquire a multisensory experience of space
9. appreciate the temporal aspects of experience
10. feel the whole organism; act and react holistically
11. communicate and collaborate; visualize, represent and disseminate knowledge
12. perceive the importance of subtlety and nuance

	Architecture	Music	Drama	Design	Art
Formal	Floor	Mouthpiece	Script	Page	Canvas/Paper
	Wall	Body	Stage Set	Margin	Paint/Charcoal
	Roof	Bell	Lighting	Ink	Fixative
	Opening	Finger Keys	Curtain	Edge	Frame
Conceptual	Hearth	Conductor	Plot	Image	Focal Point
	Ground	Rhythm	Rising Action	Text	Foreground
	Frame/Roof	Movement	Climax	Guidelines	Background
	Enclosure	Finale	Falling Action	Layout	Color Scheme
Real	Presence	Notes	Characters	Gradient	Composition
	Significance	Melody	Character Development	Message	Interpretation
	Materiality	Performance	Delivery/Portrayal	Texture	Medium
	Emptiness	Rests	Scene Change	Simplicity	Negative Space

Project #   **9c**
      Carnegie Mellon University in Rome
Project Title   Rome 2001 + 2002: Discovering the City: Multidisciplinary Study Abroad Program
Dates   2001, 2002 (1999 in Barcelona)
Role   Program Director, Course Author and Teacher

Synopsis

Manifesto

Multidisciplinary Study

The arts allow us to construct meaning from the world in which we live. Using the "ways of seeing" of architecture, art, design, drama, history, music, and the humanities – discover and develop interpretations of Rome as a site of cultural investigation.

Collaborative Learning

Develop skills and knowledge through shared learning, rather than in isolation and in competition with others. Collaboration builds confidence and understanding in unexplored areas.

Site-Based Experience

The experience of a place, Rome - its culture, history, and physical form - is the launching pad for exponential learning. Stimulate questioning that provides connections and enables us to find new meanings.

Personal Engagement

Develop capacities to evaluate, speak and act on the basis of our own reasoned beliefs. Create opportunities to learn from experiences and develop critical faculties in reflecting on those experiences.

cross boundaries; it's essential and healthy
feel the whole organism; act and react holistically

utilize non-linguistic forms of communication
generate solutions from multiple perspectives

acquire a multi-sensory experience of space
understand the world from an aesthetic framework

use your imagination and trust your intuition
appreciate the temporal aspects of experience

Exhibition of 2001 Student Work, Hewlett Gallery, CFA : November 12 – 16, CMU Multidisciplinary Study Abroad Program

Discovering the City
Rome Summer 2002

June 1 – June 30, Course 62-300, 18 unit elective, $3850 including housing

APPLICATIONS and BROCHURES available in the CFA Dean's Office and the HSS Main Office and Study Abroad Office.

Open to and seeking students in ALL majors! Application Deadline CFA Dean's Office December 3, 2001.

Information Session Hewlett Gallery, CFA, November 13, 2001, 5:00 pm

Laura Lee, Architecture
Cindy Limauro, Drama
Mark Mentzer, Design
Franco Sciannameo, Music
Susie Silver, Art

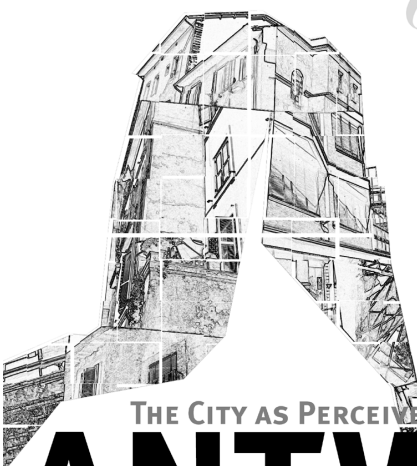|	
Project #	´10a
	The Higher Instiute of Architecture, Henry van de Velde, Antwerp, Belgium
Project Title	The City as Perceived and Imagined 2002
	Face to Face 2003
Dates	2002, 2003
Role	Workshop Author and Teacher

Synopsis

The Antwerp Design and Seminars and Lectures at the Higher Institute of Architectural Sciences Henry van de Velde is a prestigious and esteemed international event. Its aim is to stimulate cross boundary thinking in architectural design and to familiarize students with an interdisciplinary approach to design problems. It is considered a token of professional recognition to be invited as a workshop leader at the ADSL. |

Laura LEE, AIA, Architect

Associate professor, School of Architecture, Carnegie Mellon University, Pittsburg, USA

Face to Face [Vis à Vis]

Face to Face is an interdisciplinary study of facades as an interFACE between exterior and interior worlds. Through hands-on, collaborative workshops, students will transcend existing boundaries of thought and discover new ways of perceiving and imagining facades. The program is inspired by the creative disciplines of art, design, drama, music, and writing. Investigations will proceed from personal scale self-portraits to architectural scale portraits for Antwerp. The workshop exercises present broadly applicable design methods and strategies while encouraging experimentation with contemporary media and techniques such as collage, folding, kinetics, transparency, and animation. Students will learn to analyze and create facades for physical presence as well as emotional, intellectual, and sensual response.

Antwerp Design Seminar and Lectures *Antwerp, Belgium*
Hoger Institut voor Architectuurwetenschappen, **Henry Van der Velde**

Laura Lee, Architect
Professor of Architecture
Carnegie Mellon University
Pittsburgh, Pennsylvania, USA

THE CITY AS PERCEIVED AND IMAGINED

The house is one of the greatest powers of integration for the thoughts, memories and dreams of mankind, writes Gaston Bachelard assigning a monumental task to the art of architecture, and he concludes: It is an instrument with which to confront the cosmos.

But, even more than the house, the city is an instrument of metaphysical function. It is an intricate instrument of structuring action and power, mobility and exchange, social organizations and cultural structures, identity and memory. The city is undoubtedly the most significant and complex of human artifacts; it controls and entices, symbolizes and represents, expresses and conceals. Cities are inhabited excavations of the archeology of culture exposing the dense fabric of life. The city contains more than can be described. It is a maze of clarity and opacity that exhausts the capacity of human description and imagination; disorder plays against order, the accidental against the regular, and surprise against the anticipated.

M	**Spirit of Place**		
14.00 – 15.30	Lecture + Discussion	World View(s)	
16.00 – 18.00	Workshop	Urban Narratives	
T	**Urban Structure 1:10000**	**Analysis 2d / drawing**	
08.30 – 10.30	Lecture + Discussion	Visible and Invisible	
11.00 – 12.30	Workshop	Urban X-rays	
14.00 – 15.30	Field Study	Scavenger Hunt: Gathering Evid	
16.00 – 18.00	Workshop	Urban Collage	
W	**Urban Interior 1:1000**	**Evaluation 2.5d / relief**	
08.30 – 10.30	Lecture + Discussion	Point - Counterpoint	
11.00 – 12.30	Workshop	Urban Voids	
14.00 – 15.30	Field Study	Image Morphing of Typologies	
16.00 – 18.00	Workshop	Urban Slices	
T	**Urban Object 1:100**	**Interpretation 3d / model**	
08.30 – 10.30	Lecture + Discussion	Architecture as Interface	
11.00 – 12.30	Workshop	Urban Solids	
14.00 – 15.30	Field Study	Between Street and Interior	
16.00 – 18.00	Workshop	Urban Faces	
F	**Synthesis**		
08.30 – 10.30	Workshop	Exhibit	
11.00 – 12.30	Rehearsal	Performance	
14.30	Presentation		

THE CITY AS PERCEIVED AND IMAGINED is an interdisciplinary, collaborative adventure based in and on the city. Through hands-on, interactive workshops, students will transcend existing boundaries of thought and discover new ways of perceiving and imagining space. The program presents broadly applicable methods of design analysis, evaluation, and interpretation.

Students studying or interested in architecture, interiors, urban / exhibit / industrial / graphic design, and photography are welcome!

THE CITY AS PERCEIVED AND *imagined*

ANTWERP

Project #	10b
	The Royal Danish Academy of Fine Arts, Copenhagen, Denmark
Poject Title	Buildings for Cities:Cities for Buildings
	City(e)scape
Dates	1995, 1996
Role	Course Author and Teacher

Synopsis

Buildings for Cities:Cities for Buildings
The mission of the studio workshop is, very simply, to define the unique qualities of a given place [*the city of Copenhagen*] and determine a set of values for the translation of its urban structure into a corresponding architectural form.
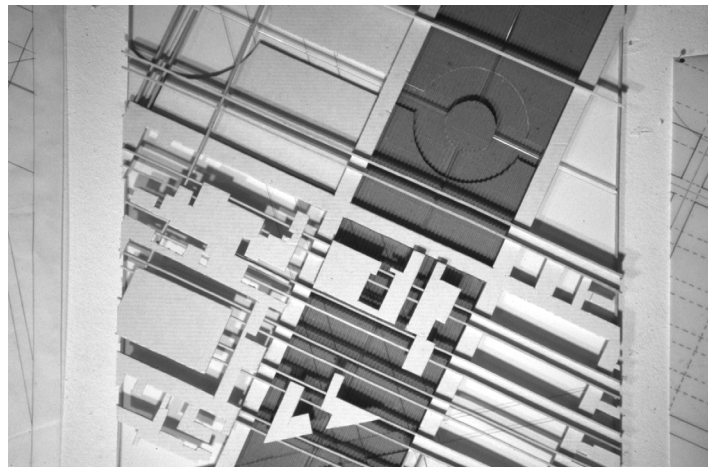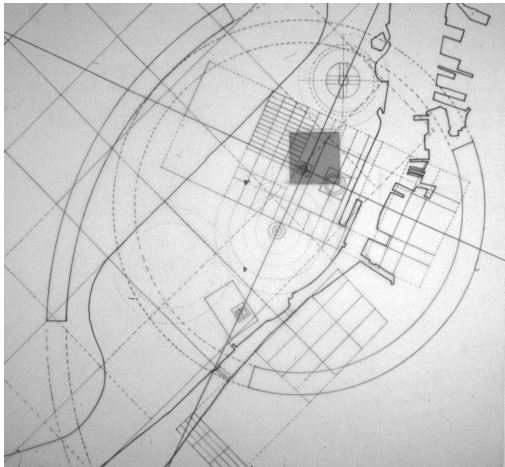
City(e)scape ... is an urban adventure to discover the spirit of a place. The quest, conducted in design teams, is to uncover and the unique urban qualities of the city of Gdansk, communicate your findings through drawings, and present a comprehensive book of spatial guidelines with recommendations for all future design in this city.

The project - to develop a 'code book' for Gdansk - is divided into 2 phases. The first phase, in Copenhagen [analysis 1] focuses on reading drawings to understand the city's structure using a method of plan coding. The second phase, in Gdansk [analysis 2] focuses on reading space and begins by verifying the plan code in three dimensions (in perspective drawing). This follows with finding supporting data for the code by studying urban interiors (in section drawing) and architectural facades (in elevation drawing). The result of both phases is presented as a 'code book' that identifies data unique for the city of Gdansk based on its structure code (1:2000), urban interiors (1:100) + architecture exteriors (1:100).