COLUMBIA TECTONIC

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ON LOCATION IN FLORENCE, KYOTO, AND SHANGHAI

WHAT HAPPENS TO YOU WHEN YOU...LIVE UNDER A DESK?

AND MORE...

photos and artwork by Samantha Rotstein

OUR MISSION STATEMENT

We are members of two factions of architectural endeavor: Columbia University's undergraduate architecture program and the Columbia Architecture Society. While the program commits its students to developing technical skills and critical understanding of design, history, and theory, the Society is a loosely structured group that focuses on social and intellectual gatherings in the hopes of increasing students' awareness of architecture. *Columbia Tectonic* strives to intermediate between these two modes of thought, by using the understanding we gain through the program to analyze the diverse environments that we encounter. *Columbia Tectonic* provides a forum where students can reflect both on the generalities and particularities of architecture, and on Columbia University's program itself. As the architects of tomorrow, we hope to shed some insight on what we really think about our developing world. Within this journal lie both the way we enjoy architecture outside of the classroom, and the way we learn to think about it inside.

COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK

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Tom Wolfe's Skewer of Modern Architecture

A Look at From Bauhaus to Our House

by Alex Greer

Wolfe would choke on his own cynicism if he wasn't so immune to it by now. That said, the spear that he drives through modern architecture from post-WWI to the late seventies is greased up pretty well, and, if you buy into his basic principle you'll be gladly helping him jam that spear through Gropius, Le Corbusier, Mies, and all the followers, that basic principle being the following: architects shouldn't masturbate.

That can actually be rephrased—Wolfe's real problem is with the architects who move their operations into compounds and spend more time writing manifestos than designing buildings. As ironic an article as this can be for a literary publication about architecture, Wolfe's jabs are really aimed at the architects whose energy is spent searching for the antithesis of bourgeois: "The definitions and claims and accusations and counteraccusations and counterclaims and counterdefinitions of what was or was not bourgeois became so refined, so rarefied, so arcane, so dialectical, so scholastic…that finally building design itself was directed at only one thing: illustrating this month's Theory of the Century concerning what was ultimately, infinitely, and absolutely nonbourgeois," (pg. 18).

From Bauhaus to Our House takes the International Style as the antagonistic vessel through which he traverses the sea of this century's architecture. Starting with Walter Gropius and his concern for "starting from zero," Wolfe analyzes the sociopolitical influences, intellectual powerhouses, and fashion trends of the time and their interaction with American buildings. The book ends up reading more like a fiction piece, but you'll get interesting factoids out of it nonetheless, and a retelling of the only encounter between Frank Lloyd Wright and Le Corbusier. It'll also give you the ability to name drop more architects than can fit in Boeing's Everett Plant—check it out: Bruer, Albers, Moholy-Nagy, Bayer, Mies van der Rohe, Louis Kahn, Stone, Saarinen, Goff, Greene, Morris Lapidus, John Portman, Robert Venturi, Peter Eisenman, Michael Graves, John Hejduk, Richard Meier, Charles Gwathmey, Leon Krier, Aldo Rossi, and Charles Jencks.

This isn't a text for the uneducated in architecture—unless you plan on being thrown into hatred for modern architecture in the same time you learn its facts—but it does indirectly shed some light on the subject. He touches upon the major schools (such as Bauhaus, post-Modernism, the Yale Box), major buildings (Le Corbusier's Villa Savoye, Gordon Bunshaft's Lever House, Robert Venturi's Guild House), and even non-architectural objects inspired by the movements, like the Barcelona Chair that he hates oh-so-much. If nothing else, his biting wit and sarcasm are amusing, and he manages to hit on a couple of true points: "Here we come upon one of the ironies of American life in the twentieth century. After all, this has been the American Century, in the same way that the seventeenth might be regarded as the British century. This is the century in which America, the young giant, became the mightiest nation on earth, devising the means to obliterate the planet with a single device but also the means to escape to the stars and explore the rest of the universe. This is the century in which she became the richest nation in all of history, with a wealth that reached down to every level of the population. The energies and animal appetites and idle pleasures of even the working classes—the very term now seemed antique—became enormous, lurid, creamy preposterous. The American family car was a 425-horsepower, twenty-two-foot-long Buick Electra with tail fins in back and two black rubber breast on the bumper in front. The American liquor-store deliveryman's or cargo humper's vacation was two weeks in Barbados with his third wife or his new cookie. The American industrial convention was a gin-blind rout at a municipal coliseum the size of all Rome, featuring vans in the parking lot stocked with hookers on flokati rugs for the exclusive use of registered members of the association. The way Americans lived made the rest of mankind stare with envy or disgust but always with awe. In short, this has been America's period of full-blooded, go-to-hell, belly-rubbing wahoo-yahoo youthful rampage—and what architecture has she to show for it? An architecture whose tenets prohibit every manifestation of exuberance, power, empire, grandeur, or even high spirits and playfulness, as the height of bad taste." (pg. 53) ♔

Salk Institute, La Jolla California by Louis I Kahn 1965, photo by Samantha Rotstein

What Makes

Shanghai

Interesting?

Photos by Shan-Shan Qi

by Michelle Kang and Shan-Shan Qi

There are plenty of reasons why Shanghai is so often in the international spotlight. Its rapid growth has made it the largest city in the most populated country in the world. The city's density is higher than NY and Paris, with an even more compact urban core than traditional Western cities. Shanghai's leap into the global business sector has established the city as Asia's most powerful financial marketplace, which many say is overtaking Hong Kong. The city is also experiencing an urban design renaissance, attracting architects from all over the world to come and out-design the surrounding skyscrapers. Architecture in Shanghai ranges from the elegant to the outlandish, with new buildings being constructed practically every day. It is a commonly said that 1/5th of world's construction cranes are in Shanghai, and though no one has any way of proving that, it is obvious that the construction boom that began in the late 1990's has impacted the urban landscape in an irrevocable way. In addition to its financial and architectural prominence, Shanghai is fascinating for its uneasy mix of historic legacy and modern development. By combining the weight of traditional Oriental culture and the light, almost buoyant appeal of all things Western, Shanghai is a city constantly in flux. The city is self consciously participating in its own urban re-identification.

Shanghai was a port city of minor importance until Western colonial interest generated an economic boom that by the end of the nineteenth century had catapulted the city into one of China's most important trading centers . Up until 1992, however, the communist government in Beijing had stipulated that a relatively high percentage of Shanghai's municipal tax revenue be instead redirected to central government coffers. As a result, Shanghai's infrastructure deteriorated, resulting in poor housing and run down factories. Once the strict tax policy was lifted, Shanghai was suddenly able to pay for improvements on dilapidated infrastructure. Today, Han Zheng, the current mayor, is capitalizing on the rapid growth of his city, his main task being to build the city into an international shipping, financial and business center. In a speech he gave to the China Daily CEO Roundtable in June 2005, he said: "Shanghai has mapped out an industrial structure that puts service industry first, manufacturing second, and agricultural third. As it has done since the 1990s, Shanghai is going to give priority to the modern service sector." Other issues he must balance include historic preservation of buildings and the threat of growing unemployment, as well as the widening gap between the rich and the poor.

Development and construction are inextricably linked to Shanghai's current self-image. Part of the rush to build is motivated by high-profile events that are meant to showcase the city as a global metropolis. Shanghai's EXPO 2010 is a modern day world's fair, complete with a comprehensive redevelopment of the waterfront and a spiral-shaped tower all emphasizing the theme of "Better City, Better Life." Other private architectural projects, including the World Financial Center by the New York firm Kohn Pederson Fox Architects, put Shanghai in the spotlight for urban design issues. Many architects revel in the relatively freestyle approach they can have in Shanghai versus in much more architecturally conservative Western cities. Shanghai's architectural scene is a place of experimentation; though there is repeated use of traditional Chinese elements (such as skyscrapers suggesting tiered pagodas) there are numbers of new towers topped with highly novel and strange-looking domes and caps.

Yet despite all the modern dynamism, perhaps the most interesting aspect of Shanghai is not just its swift rebirth into a sleek modern city. Though the city is relatively new compared to other millennia-old Chinese cities, Shanghai has a strong cultural heritage that must coexist with its new self-image. How well older forms of vernacular architecture will hold up against advancing developers is unclear. Though culture is adaptable and can seemingly absorb Post-modern influences almost instantly, the same cannot be said for physical infrastructure and buildings, all of which are fighting to claim ground Shanghai's dense and crowded landscape.

Tomorrow Square, People's Park   photo by
                                                  Joseph Rome

ISSUES OF GROWTH

There are a number of factors to emphasize when considering the state of Shanghai's extraordinarily rapid growth and development. Though already a world metropolis before the communist revolution, the city has ballooned over the last twenty years, as China adopted a "social capitalist" policy that permitted money and people to once again pour freely into its cities. Shanghai province, composed of 18 different regions, has perhaps 18 million residents, which includes an estimated 5 million undocumented migrant workers. The population within Shanghai's metropolitan core, composed of 9 of the 18 regions, is around 13 million. The density of the urban core is roughly equal to that of Tokyo, and is 1.5 times as high as New York and 3 times that of Paris.[1] It is projected that the permanent population of Shanghai province will reach 20 million in 2010.[2] Population growth is one of the major concerns, if not the foremost, that drives all development plans in Shanghai.

Other important factors are the increasing awareness of environmental issues, especially with respect to Shanghai's water supply. The urban/regional divide is also an important concern, as Shanghai's Master Plans from the early 90's have stressed a comprehensive growth plan that identifies regional strengths and seeks to allocate different levels of industry along Shanghai's outer rings. Shanghai's urban planners are now seeking to keep issues of larger regional growth in mind, and many new design and development projects are taking place in what used to be the suburban backwaters of the province.

● *HOUSING*

Since 1980, Shanghai has experienced massive growth in residential development, aided by the introduction of a market real estate system. The severe housing shortage of the 1980s has improved somewhat, most notably through the construction of many luxury and middle-class residential towers and buildings. Yet overcrowding is still an issue, as almost half of Shanghai's population lives in less than 5% of the city's total land surface.[3] Though the burst of construction might seem to alleviate the housing shortage, only the wealthiest of Shanghai's citizens can afford to live in the new

[1] China Daily, "City planners enter uncharted waters," 12 December 2004.
http://www.chinadaily.com.cn/english/doc/2004-12/22/content_402296.htm
[2] 2004 Shanghai Economy & Property Market, 24 March 2005. http://www.firstchina.com/news_detail.asp?id=13
[3] Urban Age, "Shanghai: Housing and Neighborhoods."
http://www.urban-age.net/10_cities/02_shanghai/shanghai_H+N.html

condominiums. In response, Shanghai's government has begun regulating housing prices to make living in the city more affordable for residents. Many of the poorer residents, however, are displaced by slum clearance projects and are forced to relocate to neighborhoods on the periphery of the city. Their housing is limited to older developments in areas further from Shanghai's center.

Shanghai also has large tracts of 'traditional' housing developments, consisting of neighborhoods of one or two-story *Lilong* housing. (*Lilong* is a type of tenement developed in late 19th and early 20th century Shanghai by and for its Chinese residents. *Lilong* houses incorporate an older, local style of architectural construction, the *shikumen,* which literally means "stone-gate".) The juxtaposition of tall residential towers, concentrated in the downtown districts of Pudong and Puxi (Shanghai's "urban core"), alongside these low-rise houses (in the outer-ring areas of Shanghai) creates an interesting dynamic—a clear illustration of the growing clash between modern and historic architecture.

Puxi
photo by Joseph Rome

● *TRANSPORTATION*

Shanghai has ambitious plans to modernize its transit system, but any new infrastructure will have to be built within the limitations of the city's already heavily developed landscape. Two main transportation issues face

today's planners: the increasing use of cars for a growing commuter population, and the expansion of a comprehensive metro-rail system to serve those living within the central districts.

Only two decades ago, cars were a luxury and a relative rarity for most Shanghai residents. However, after China reduced tariffs on foreign cars upon joining the WTO, the price of cars has plummeted. By 2020, projections predict that the number of cars will increase to 2.5 million, while the number of motor trips per day will more than double to 7 million.[4] To support this traffic, the city's roads will have to be lengthened and tirelessly maintained. Yet Shanghai already suffers from lack of space, necessitating plans for extensive and costly elevated highways many of which are already under construction. In addition to the shrinking amount of open space, other potential problems include rising energy consumption and concurrently rising pollution levels. These problems lead many to question whether Shanghai should develop the scarce farmland on the city's periphery for highway and transit purposes.[5] Another recommendation to accommodate growing traffic is to increase the public bus system's capacity to handle most short/medium trips into the city.

Shanghai's Metro system is also rapidly expanding. The city instituted a 5-year plan from 2001-2005 that built 180 km of rail along 5 lines. The Metro uses a combination of underground and elevated tracks. In 2000, a special track using German-designed maglev technology was built to provide a direct connection from the Metro to the Pudong International Airport.[6] In the next 25 years, the city plans to build 11 more metro lines (more than 300 km) and 10 light rail lines, which will reach beyond the Pudong/Puxi center core to serve residents of Shanghai's suburbs. The Metro's current daily capacity is 1.4 million, but is expected to reach 10 million by 2020.

Shanghai Customs House
photo by Joseph Rome

● *WATERFRONT DEVELOPMENT*

City boosters and planners see great potential in Shanghai's waterfront property for creating an attractive city image. The Huangpu River, the main waterway through the city and which once defined the border of downtown, is now suddenly at the center of the city; this move is thanks to the intense, rapid development of Pudong ('Pu' as in Huangpu, and 'dong' means 'east', thus Pudong literally means 'East of the Huangpu'), the financial/economic district on the East bank of the river. The Huangpu has historically been lined with factories and other major port facilities, but a recent relocation of port functions from the Huangpu to the nearby Changjiang (Yangtze) River opens up possibilities for new civic development. Based on three separate area studies
done by SOM, Sasaki Associates, and Philip Cox and Partners in 2000, planners have created an extensive redevelopment plan that seeks to make the waterfront the heart of the city's cultural, social and civic life. Plans include increasing public accessibility to the waterfront and creating visual and physical linkages from the city to the water (by extending streets, creating pedestrian walkways, incorporating transit terminals adjacent to the waterfront,

[4] "Shanghai Metropolitan Transport White Paper", Embarq and Shell Foundation, April 2002.
[5] "Urban Age: Mobility and Transport" http://www.urban-age.net/10_cities/02_shanghai/shanghai_M+T.html
[6] "Shanghai, China."
http://www.urbanrail.net/as/shan/shanghai.htm

etc).[7] Shanghai's highly anticipated EXPO 2010 will also make use of the Huangpu waterfront; the urban planning firm in charge of EXPO 2010's design, Albert Speer and Partner, plans to use the waterfront for many of the expo's main events.

The JinMao Tower, SOM
photo by Joseph Rome

Suzhou Creek, which feeds into the Huangpu River just north of the Bund, is also targeted for new construction. Because of extensive factory and warehouse use, the Creek has suffered from poor water quality that often turned the water black. Shanghai's Urban Planning Bureau commissioned California-based firm EDAW to study the creek and make recommendations. The redevelopment project aims to create greenways and parkland along the creek, while preserving the Creek's historic bridges.[8]

The bund, looking over to Zhujiazuo
photo by Shan-Shan Qi

● *LUJIAZHUI*

Comparisons of Shanghai to other large Western mega-cities have become inevitable, and even famous Western landmarks have been appropriated for Shanghai's use. Thus, Pudong's Lujiazhui Financial District has garnered the nickname "Shanghai's Wall Street." Lujiazhui has become the epicenter for all of Shanghai's business and service functions. The district itself was the result of careful planning in the early 1990's, whose goal was to consolidate the business sector into a condensed commercial district. The government designated Lujiazhui (and other areas in

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[7] Richard Marshall, "Shanghai's Waterfront—Presenting a New Face to the World." Shanghai: Architecture and Urbanism for Modern China. 2004.

[8] Ibid.

Pudong) an Economic Technological Development Zone, hoping to attract foreign capital and investments in the area.[9] The district has flourished almost overnight, and its financial success is manifested in the construction of large corporate buildings and skyscrapers. Some of the new buildings which have now become famous include the pagoda-like Jin Mao Tower by SOM, the Oriental Pearl TV Tower (which resembles a space shuttle punctuated with pink spheres) by Chinese architect Jia Huan Cheng), the Shanghai Securities Exchange Building by the Canadian firm WZMH Architects,

and the World Financial Center, which is scheduled to be completed in 2007 by Kohn, Pederson and Fox.

Lujiazhui is a prime example of the types of projects that bring Shanghai closer into the spotlight of global prominence. With so many star architects building in such a small area, Lujiazhui has become a new source of Shanghai's urban self-image. The district embodies the chaotic assemblage of enormous new construction, often citing the past, that marks the city's 21st century makeover.

View of the financial district
photo by Joseph Rome

HaSuDeSpa

by Nicholas Muraglia

The studio – work space or living space? As an architecture student, the line can become fairly blurred at times, whether willingly or not. Especially when deadlines near and anxiety rises, it is inevitable that at one point or another you will be spending more time within the chipboard-lined, utilitarian confines of archiland than you will anywhere else. Why, then, do we still insist on psychologically associating the studio purely with the workspace? Through those endless days and nights at the studio, it may prove beneficial to our own sanity to create a habitable space out of the work environment; we must rid ourselves of the notion that the architecture studio must remain the white-walled, Spartan, highly uncomfortable and strictly utilitarian space that it is right now.

Of course, our individual definition of what is a "comfortable space" can vary from person to person, and it would be highly inconsiderate to pull a Martha Stewart and start decorating the entire studio with pastel cushions and floral print curtains. How, then, can we create a pleasurable,

comfortable, individual space which would not come into conflict with other tastes?

The answer lies right at your feet. Let's use pretentious archispeak and refer to it as the Habitable Sub-Desk Space. Often used for storage or ignored altogether, that relatively large space underneath your desk can serve as a wonderful tool for establishing the ideal living-work space. You may have seen this space used before – the sight of a droopy-eyed and delirious studio neighbor crawling underneath her desk for a quick powernap is not too uncommon. But why not further develop the "pleasurable living" program of this space?

There are multiple advantages of the Habitable Sub-Desk Space – first and foremost, it allows a convenient and quick refuge from the fluorescent-lit and stressful world of pre-crit madness, without ever leaving the studio. This is particularly important for those students living far from Barnard Hall or Schermerhorn, and in general for the lazy and sleep-deprived who don't want to walk. The Habitable Sub-Desk Space is dark and relatively silent, especially when a screen or curtain is attached to the edge of the desk. With a blanket, a few pillows and a little creativity, you can transform that dirty, cockroach-infested storage spot into an oasis of pleasure and comfort, of individual expression without compromising the focus and serious work atmosphere of the studio above. ♛

"Desk Crit"- Barnard and Columbia's Architecture Program

Critic: Kate Krieger

As a transfer student, I have had the opportunity to experience two methods of learning architecture: the University of Michigan's professionally geared program and Barnard's liberal arts program. Generally, the Barnard-Columbia program is more conceptual and theory-based, with the expectation that students who intend to pursue a career in architecture will attend graduate school, where they will learn more of the conventions for generating drawings and structures. The program I experienced my first year, by contrast, is a more conventional program where students learn structures, drawing, and computer programs for their career prior to entering graduate school. Personally, as a student who intends to attend graduate school for a career in architecture, I find the Barnard-Columbia program more challenging and useful as a conceptual base. Graduate school provides a student with the technical tools he or she needs to pursue a career in architecture, so it is more important during the undergraduate studies to build an extensive and rigorous design base. Below are the strengths and weaknesses of the Barnard-Columbia undergraduate architecture program.

Strengths:

-Extensive model-building;

Models are often abstract forms, especially in the first two studios, that are not meant to be buildings, but are meant to represent a concept. During this time, students learn different methods of conveying their ideas and improve their craft.

-Freedom within project requirements

Project descriptions leave a significant amount of room for interpretation; this encourages the student to be creative in his or her execution of the project.

-Liberal Arts focus

Barnard's studio major encourages a strong art history and theory background. The breadth in courses provides the basis for inspiration; concepts learned in lecture courses can be incorporated into the design of studio projects.

-Photoshop

Photoshop is a fairly widely used program, enhancing a student's ability to graphically convey his or her concepts.

-Facilities

The introductory studios are in a wonderful setting; high ceilings (maybe 12 feet), large windows, bringing in lots of natural light, and located right in Barnard Hall, next to the computer lab. Three studio classes are housed in this room, each class given a long bay of desks and locking drawers.

photo by Samantha Rotstein

Weaknesses:

-Insufficient computer software education	While Photoshop is used to varying degrees, depending on the preference of the critic, other programs, such as AutoCAD and Illustrator, are not a standard part of the curriculum. Short workshops are occasionally offered in the architecture computer lab, mostly of Vectorworks or Maya. These are often at inconvenient times and not widely attended. Furthermore, since the computer lab is stocked with only Mac computers, and AutoCAD is only available for PCs, the only exposure to AutoCAD afforded to students is during an internship.
-Facilities	*Studios*: Upper level studios, namely Design I, II, and III, are in the basement of Schermerhorn, on Columbia's campus. Aside from our creepy-crawly roommates and the lack of natural light, this studio is relatively far from the one computer lab offered to the architecture undergraduates. *Computer lab*: Hours are limited to the evening, unless a student obtains special permission to use the lab. The one color printer available to us was been broken the *entire* fall semester, forcing us to bring our printing needs to Village Copier, who rips us off.
-"Perceptions of Architecture" (lecture class)	The one specifically required lecture class. Many of us hate it. Although it is valuable to have contact with practicing architects, we don't all want to learn about modernism/postmodernism, and it's unfortunate that every architecture student is forced to have a lecture class solely on this topic.

Recommendations:

As far as the curriculum goes, *please modify the topic of Perceptions of Architecture!* Villa Savoye is not the end-all be-all of architecture. We don't all love modernist and/or postmodernist architecture. What *is* the difference anyway? As for studios, a stronger drawing background would be helpful. In particular, we were assigned axonometric drawings and perspective drawings in an introductory studio without having a proper background in constructing them. As the Barnard-Columbia program is committed to a strong conceptual program, rather than a program that prepares a student to go out into the career right out of undergraduate school, it is not necessary to require that a student take a course in AutoCAD. However, for the students who do not learn it at an internship, it would be very valuable for a basic class in AutoCAD to be offered. Not only does AutoCAD enable students to work faster at creating drawings for studio, but it is often difficult for a student to get an internship without AutoCAD experience.

Furthermore, seeing as we are in the studio constantly, because that's what architecture students do (we just love work), it is important to us that we have the right tools that will make our time in the studio as painless—I mean as *comfortable*—as possible. First, if something breaks—*like the color printer*—please have it fixed or replaced in a timely manner. Second, we have a wish list: a vending machine near the studios, a couch for napping since we often are stuck in the studio all night long, a refrigerator so we don't have to waste time going out to buy food when we're starving and delirious at 4 AM, and perhaps a microwave. ♕

photo by Samantha Rotste

Poetry

by George Lambrou

P e r p e t u a l

those sandy triangles of mystery
the robust columns on the high city
that oval space of ignobility
those vibrant domes of the Third Rome
the soaring tower turning time c
home
those lost giants swallowed by history

photo by Samantha Rotstein

On-dol

By Erica Lee

Generally a traditional Korean-style house consists of *dae-cheong maru* (living room between the rooms), *an bang* (room for the host and his wife and often the largest room), *geon-neon bang* (rooms for elders and children), kitchen, and *sa-rang bang* (room for reading, painting, and also for guests). Historically, Koreans orient the façade of the house to face field or stream and the rear part of the house to face mountains. Underneath the floor is a unique heating system called *on-dol*, literally, "warm stone." As the word implies, in this heating method, flat stones spread underneath the floor are heated by flues through which hot smoke from a fire hole in the kitchen is channeled. Koreans used to sleep, eat, and read on the floor; therefore, having a warm floor during the winter was crucial. The stones retain the heat for pretty long, so if somebody starts a fire in the hearth to cook dinner in the kitchen, the heat will be trapped in the stone until the next morning.


House with On-Dol
photo by Joseph Rome

Today, this type of traditional houses is hard to be found. The population of South Korea as of 2005 reached 47,254,000. Unfortunately, the size of South Korea is only one seventh Texas, and the traditional houses have been replaced by rectangular, identical, and somewhat boring looking apartments. Yet remarkably, *on-dol* are still almost everywhere placed between each story. ♔

On-Dol Heating System
photo by Joseph Rome
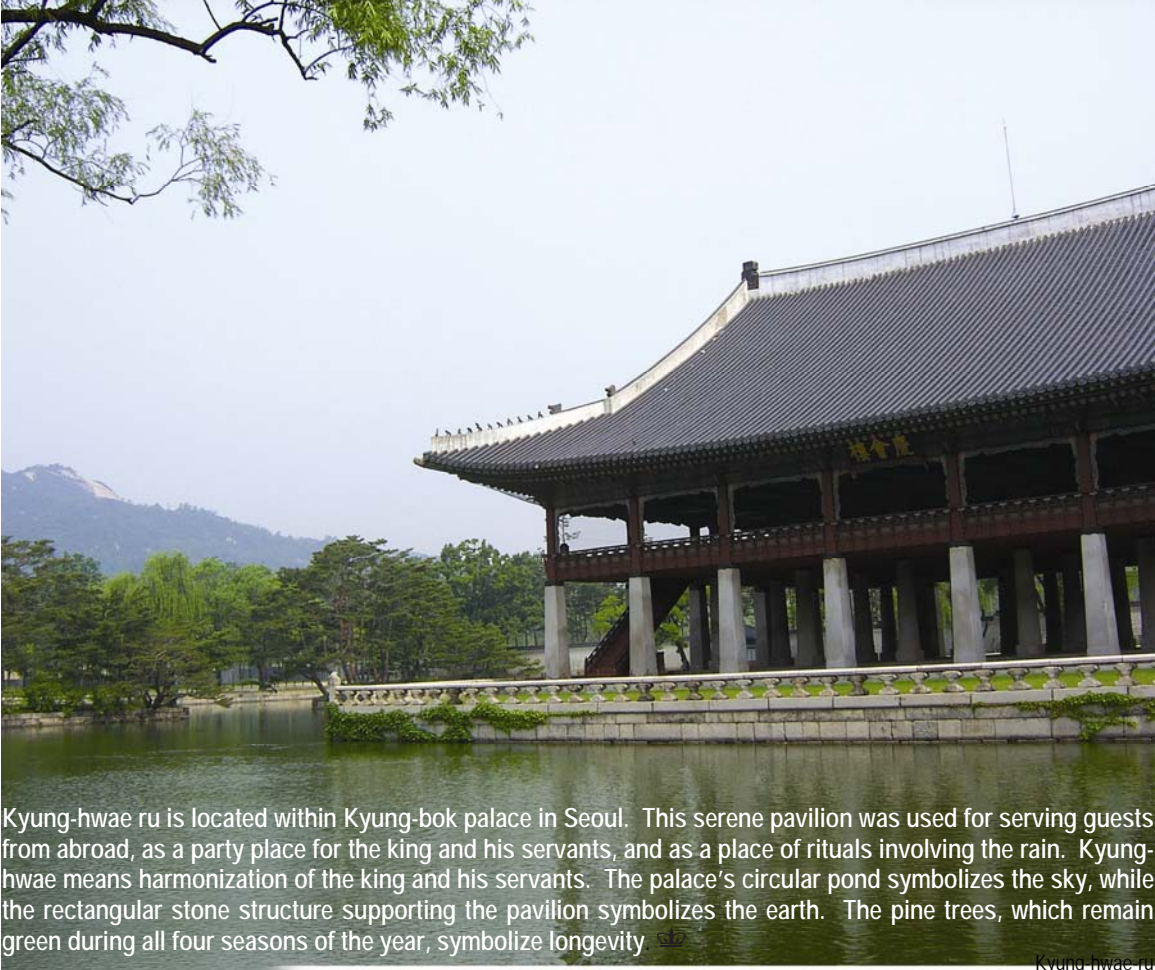
Kyung-hwae ru is located within Kyung-bok palace in Seoul. This serene pavilion was used for serving guests from abroad, as a party place for the king and his servants, and as a place of rituals involving the rain. Kyung-hwae means harmonization of the king and his servants. The palace's circular pond symbolizes the sky, while the rectangular stone structure supporting the pavilion symbolizes the earth. The pine trees, which remain green during all four seasons of the year, symbolize longevity.

Kyung-hwae-ru
photo by Erica Lee

KOREAN PALACE SPACES

By Erica Lee

SPOTLIGHT

ON
Nick DeRosa

"...I guess it goes hand in hand with our memory, with our preconceived image of what Low Library looks like. Since we know more or less the shape and features of the building, we are able to interpret and fill in the gaps of the rectilinear lego units to create the whole image of a "curve" or a "ionic order of capital" in our minds."

"I think units are easier to work with..."

Interview with Nick DeRosa

by Nicholas Muraglia

NM: What is it?

ND: It's a Lego model of Low Library, about the size of the 212 tables. It took about 2 months to make, I was working on it here and there.

NM: When?

ND: I did it the summer before my freshman year at Columbia. It was a lazy summer - I had this internship at an insurance company and I had a lot of free time.

NM: So basically it was like a creative counterbalance to your job?

ND: Yeah, exactly. I always loved making [non-architectural] models with paint and such beforehand.

NM: How did you do this?

ND: Before coming to school, I had all this Columbia "propaganda" mail at my home, and of course there were tons of pictures of Low Library from different viewpoints. I built it fairly intuitively from these different photos. There's even an interior - the dome can come off, and you can see inside.

NM: You didn't use any official plans or sections?

ND: No. Actually, the back of Low library wasn't pictured in any of the images, so I had no idea what it looked like. I had to work from my imagination and improvise.

NM: So there was a personal design element involved in this as well?

ND: I guess you could say that...

NM: What did it feel like to work with a specific unit - that of the Lego - in comparison to traditional modeling techniques where you work "from scratch"?

ND: I think units are easier to work with, since they can accurately depict what you want in the simplest way. Especially since Low Library was built in a classical order composed essentially of units, using legos worked very well to convey the materials and masonry used in Low. Even with things such as the arches in the interior of Low or the ornamental capitals of the columns, you're able to associate jagged curves and blocks with various architectural components of the building. I guess it goes hand in hand with our memory, with our preconceived image of what Low Library looks like. Since we know more or less the shape and features of the building, we are able to interpret and fill in the gaps of the rectilinear lego units to create the whole image of a "curve" or a "ionic order of capital" in our minds.

NM: After spending such a long time on this model, and then seeing it every day as a student here, how does it feel to intimately know every single architectural detail of the building? To be honest, I still feel like a tourist whenever I see Low. I can't pass by it without turning my head towards the main rotunda. It never loses its effect - I'm still not done with Low. It's such an interesting building, there's something beautiful in the simplicity of it.

NM: Are you planning on building any Lego models of other structures?

ND: Well, I would have done the whole campus if I had more Legos!

NM: Has work on this model related to your work in architecture in any way?

ND: I've always been interested in taking classical units and applying them in my work in a new way. The repetition of the unit- like you'd see in Greek temple columns for example - is so appealing and beautiful in itself. I try to use the idea of the classical unit in a more contemporary way♙.

The Florentine Bubble
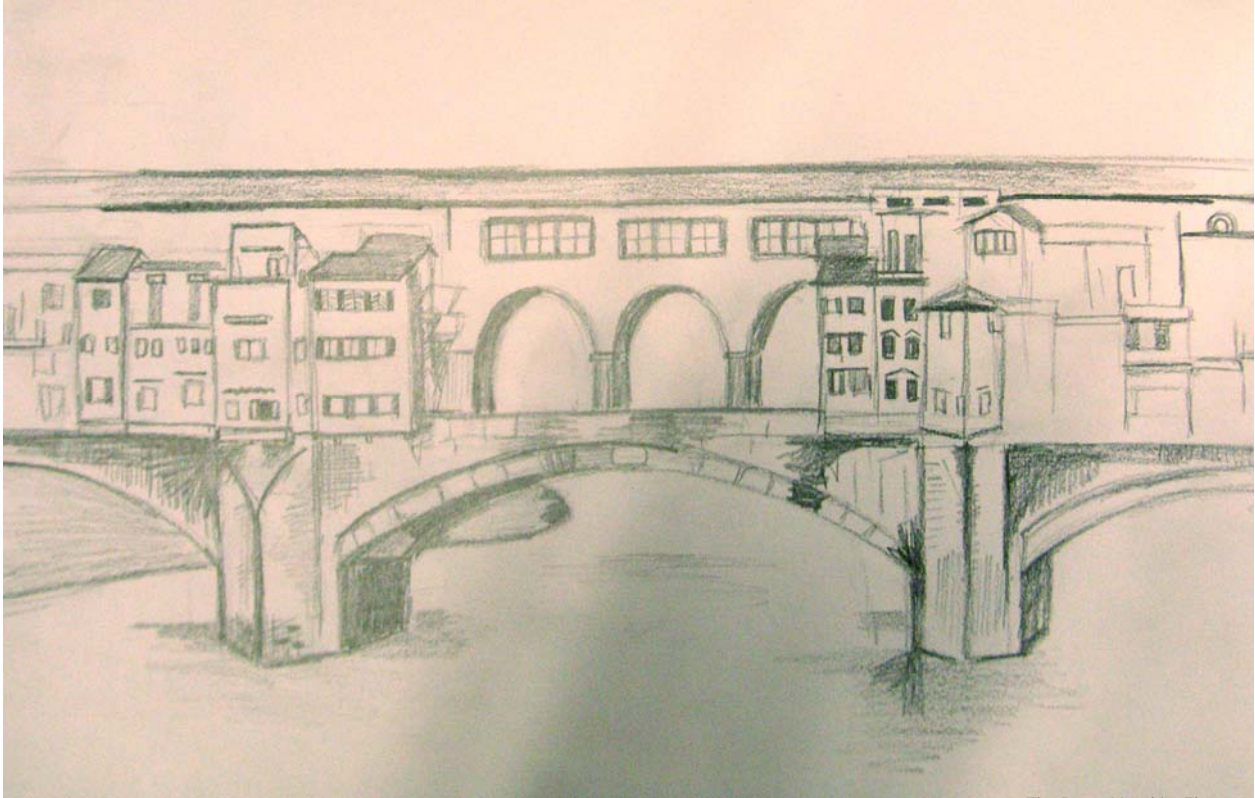
The Ponte Vecchio, Florence
artwork by Kirsten Hansen

by Samantha Rotstein

       Florence is a city of the Renaissance, or "Renascimento." The city's artwork was done largely during this period, and is found, for the most part, within churches and piazzas. You might find Renzo Piano in Rome, but when you move back into Tuscany, there's not a modern building for miles. Even the Michelucci works are hard to find, except the train station, *Santa Maria Novella*, which is currently under construction. The *Chiesa Dell' Autostrada*, for example lies well outside the city center, and is hard to see unless you have access to a car.

       What we have here is a city in which people live in brightly colored boxes topped with terracotta. Places seem to be distinguishable primarily by the different statues, markets, and other features which inhabit the piazzas, found every few city blocks. And because most places have been around for so long, they can all technically be considered "historical;" this causes a preference for restoration to the tectonic innovation which I

deem necessary in such an architecturally stagnant society.

       This innovation is desirable not only because of the lack of distinguishable architecture, but also because of the problems inherent to a Renaissance city: the physical city plan was created for a society and technological level that no longer exist. Here, cars must be miniaturized to fit the size and scale of city streets; an Audi A6 happens to be 6 inches from the ground and about 2 feet smaller in length. But beyond this, the majority of Florentines find it sensible

Shadow of the Duomo on the surrounding city grounds, Florence
photo by Samantha Rotstei

to navigate the city streets on bicycles and "motorini," or tiny motor bikes. The sidewalks on less populated streets can measure as little as eighteen inches, and are, like the streets, fabricated from uneven cobblestones that are impossible to navigate. When these cobblestones crumble from wear and tear, they are replaced, not with a more resilient material, but with new stones, that function more poorly than the previous ones; because we no longer cut these stones by hand, but by machines that do not account for natural composition, we get what some restorers call "the onion layer effect," in which the layers of stone peel up quite easily due to both contact with weather and actual use.

What Florence silently suggests, is "death to the architect." The need for city renovation and art restoration is never ending, as suggested both by the more than numerous restoration schools scattered around the center and by the Florentine obsession with what to do about the effects of bird droppings on the infinite supply of churches. But it would be a laugh to the Tuscans to see a 3D rendering of a glass wall interspersed with the houses and hotels along the Arno River. A trendy restaurant called

"Angel," rather than destroying the frescoes on the walls and the sculptures in relief, hangs up white sheets flooded with light, in order to create a stylish setting for the contemporary taste of the restaurateurs.

The restaurant and its popularity indicate the human want, the need even, for architectural advance. In such a technologically advanced world, the human mind is endlessly evolving to keep up. Our abilities to "multi-task" and juggle bring us even closer to computers. We can no longer stand to look at one-dimensional architecture. We can appreciate it as a historical fact, and as part of the intricate architectural foundation that has brought us to the levels at which we are presently creating; yet the Florentines need to see their city evolve into space that lives and breathes.

This could mean putting grass in the piazzas, since it doesn't exist anywhere else except the countryside. It could mean expanding sidewalks and streets, to fit real people. And it could even mean—and what a concept—knocking down a few old buildings and letting the professionals take over. ♔
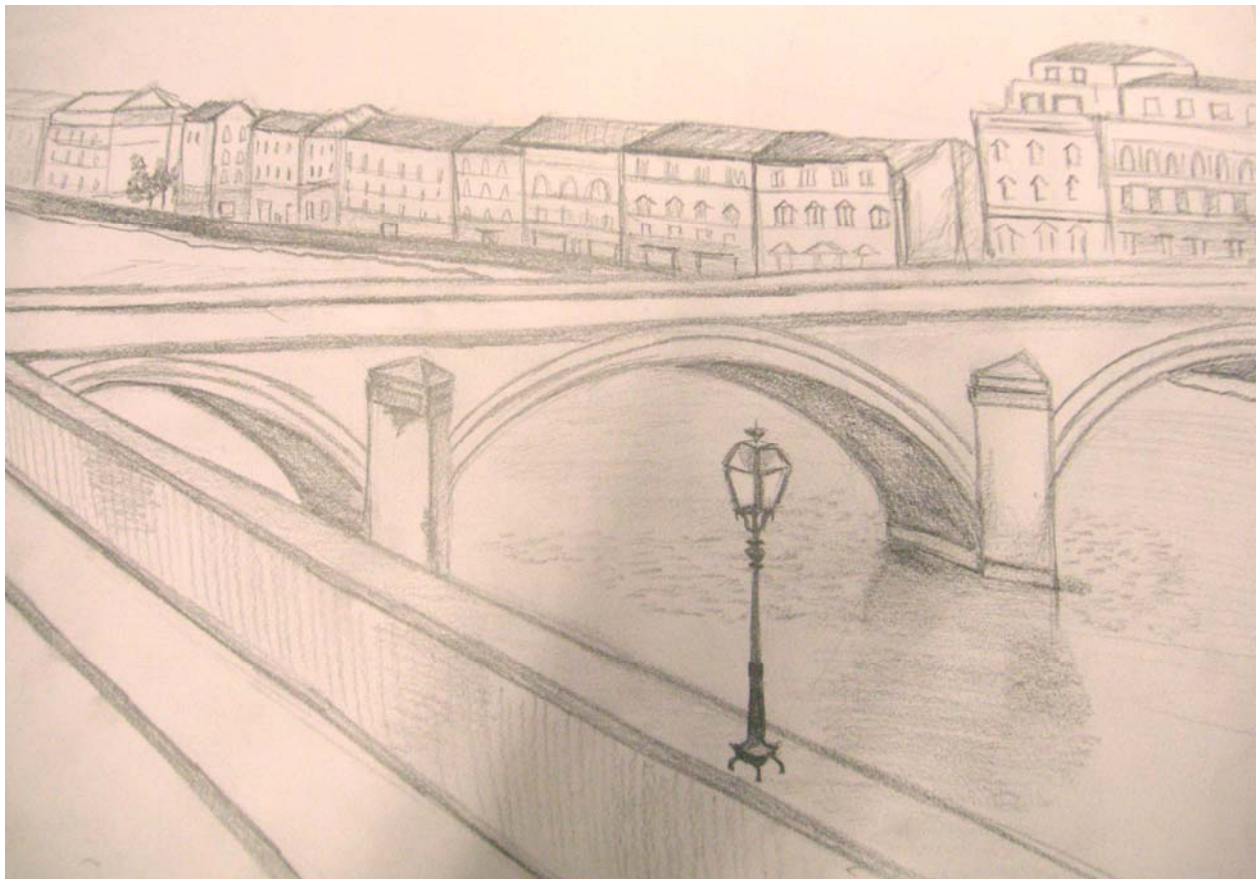
The Arno River, Florence
artwork by Kirsten Hansen

MoMA

by Lidia Bardhi

In the summer of 2006, as a high school senior, I had the great pleasure of interning alongside the amazing staff at the Architecture & Design Department at the Museum of Modern Art. Not only did I become acquainted with the world of architecture and design, but I also learned what it really means to be a curator, and how the depart-

MoMA
photo by Rick Fudge

ment works together in harmony to provide amazing collections to the public. History has it that the world's first curatorial department that devoted itself solely to the fields of architecture and design was established in 1932 at the Museum of Modern Art. Since then, the museum has had its share of collections built on the concept that architecture and design are "allied and interdependent arts" parts of a greater whole. Throughout the years, the collection has come to include a vast array of architectural drawings, design objects and models from periods such as Modernism and artists like Frank Lloyd Wright, Sven Wingquist and Josef Hoffmann.

On my daily adventures in and out of the doors of the department, I was given tasks such as organizing and alphabetizing old files and folders, which had been misplaced, as well as creating a new address book for the committee members of the department. Certainly, this may not seem like the most glamorous job in the world, but everyday turned out to be a new learning experience. From

my early subway ride from Queens to Manhattan, to rummaging through artists' files from 1954, to coming up with an interesting design for the address book, architecture and design became a pivotal part of my life. Sitting on a corner chair beside dusty old photographs, I marveled at the evolutionary path that the fields have taken over the years. I studied the captions beside the art works, calculated the physics of design in a modern chair, and became dumbfounded by the intercalated thought process that each mark, sculpture and print entailed. I became thirsty for the life that design encompasses. The workload did not need to be huge, because I was able to do everything with an ease that flowed naturally; I simply fell in love with it all. Soon, I found myself lost in each collection, walking daily about the same museum exhibits. To another person, this may seem monotonous, but to me, simply passing a slight glance at a Frank O. Gehry Bubbles Chaise Longue chair was insufficient. It demanded more attention; each piece demanded more.

MoMA
photo by Rick Fudge

As all summer internships come to an end, my daily adventures at Architecture & Design came to an end as well. However, I will never forget the kindness and generosity that the department showed towards me. Today, as a student of Barnard College, I plan to major in architecture and fulfill my deeper thirst for knowledge. ♕

Atelier Ten Discusses Easy Ways to Make Your Environment More Eco-friendly

by Rachel Blatt

Atelier Ten Environmental Designers opened their doors to the public last October as part of OpenHouseNewYork. Visitors toured the design studio on East 20th Street while the designers showed off the newly expanded studio and explained how the firm is trying to incorporate sustainable measures into their workspace.

Rainforest Depletion is a global problem. There are small changes that everyone can make to reduce the destruction of rainforests.

To reduce dependence on wood products Atelier Ten suggested:

- Using tree-free printer paper. Rather than being made from wood pulp it is instead made from agricultural residues (i.e. sugar cane husks), fiber crops (i.e. hemp and flax), textile wastes (i.e. cloth scraps), and wild plants (i.e. wild grasses and bamboo).
- Using wheatboard instead of particleboard. Wheatboard is made by heating straw until it fuses together. The straw naturally binds to itself when heated so no chemical glues are used as in traditional wood particleboard.
- Using FSC certified wood. The Forest Stewardship Council (FSC) gives its certification to companies that use responsible methods of forest management in harvesting wood.

Another way everyone can live more sustainably is by reducing their carbon footprint. Your carbon footprint is your contribution to the production of carbon dioxide, a green house gas.

While everyone inevitably produces carbon dioxide there are measures that can be taken to reduce the effects of human activity on the environment.

These include:

- Recycling. Beyond recycling paper, bottles, and cans, Atelier Ten had other suggestions. They use recycled cardboard binders in their office. At the end of their recent remodeling project they asked the contractor to sort and recycle demolition materials. When making big purchases, like chairs, fixtures, and computers, they compared the recycling and environmental practices of the companies they were buying from.
- Lighting. Electrical production creates a great deal of carbon dioxide. They suggest using natural light whenever possible. The blinds in their studio are perforated to let in some light while still blocking glare. The overhead lights in the studio were set up with daylight sensors that kept the room evenly lit while reducing the amount of electricity needed when the room was flooded with sunlight.
- Travel. Atelier Ten has two offices, one in London and one in New York. The company is tracking the emissions their employees' travel creates. They are planting trees to counter all the carbon dioxide they create. When they need to get across town they call Ozocar, a hybrid car company, instead of another taxi service. They also encourage employees to walk or bike to work when possible.

Atelier Ten Studio: workstation, including recyclable chair
photo by Rachel Blatt

These simple measures have resulted in a firm that consumes about 15% of the energy used by other companies of its size. Atelier Ten is one company that practices what it preaches. ♔
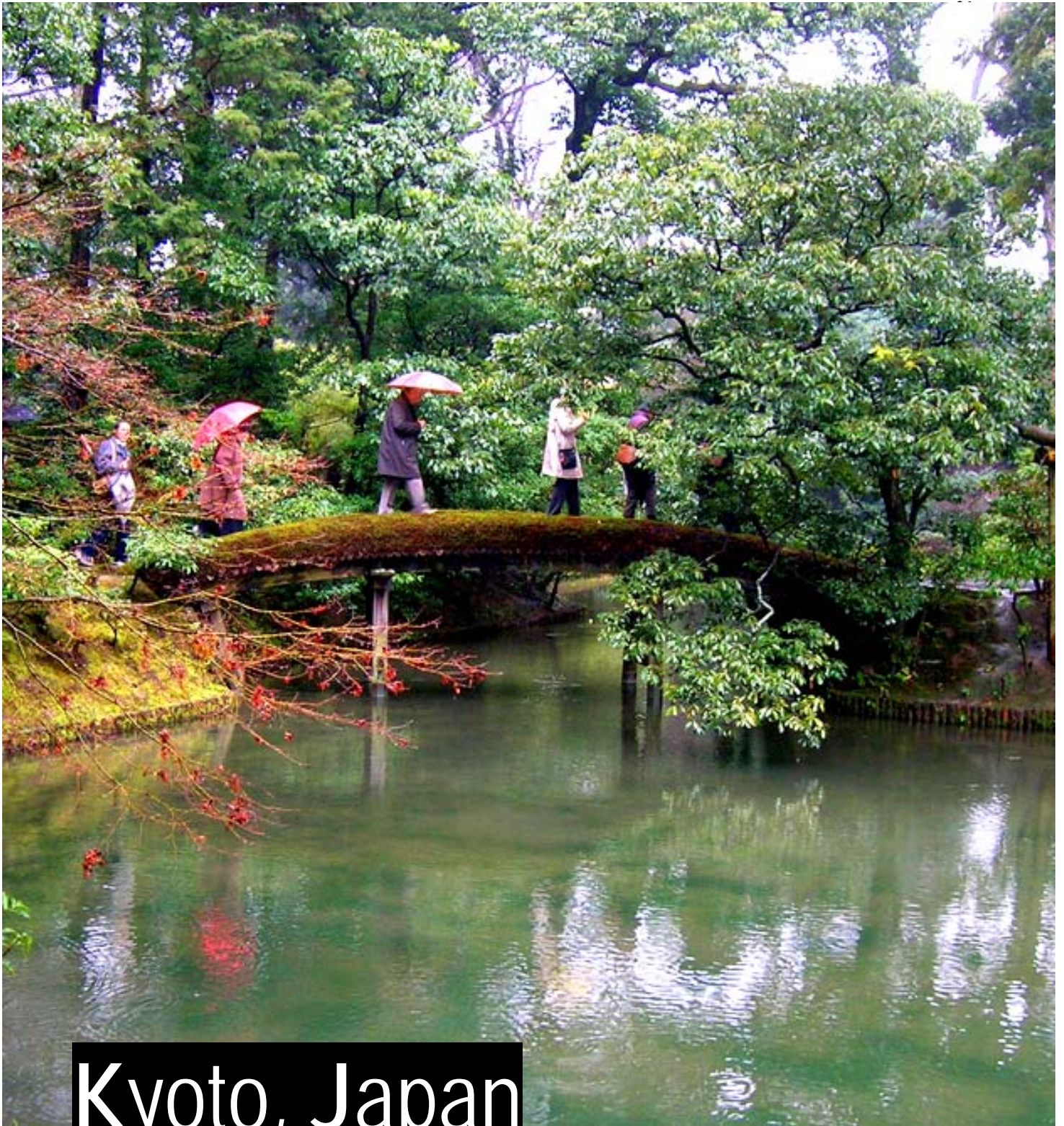
Kyoto, Japan

An Introduction to the most perfect building…EVER

by Joseph Rome

From somewhere between 1620 and 1650, the heads of the Hachijo-no-miya family, a subsidiary house broken off from the main imperial line, perfected and enlarged their country estate until it became one of the most acclaimed architectural achievements in all of Japan. Sited just to the west of the meandering Katsura river on their farm holdings in Katsura, an area halfway between the then downtown of Kyoto City and the forgotten ancient capital of Nagaoka-kyo, the villa served as a relaxing retreat from the family's main mansion at the "nobility town" (*yashikimachi),* the reservation in Kyoto city to which the new Tokugawa military government bodily confined the vestigial Japanese aristocracy. In the 1880s the villa came under direct ownership of the main imperial house – which still owns the property – and it has since been referred to as the Katsura Detached Palace, Katsura Rikyu in Japanese. Fortunately, the villa has been treasured by all its owners, who have kept it assiduously maintained and refurbished, meaning that the villa exists today much as it did when first completed.

A view over the pond at the main palace and the Geppa-ro
photo by Joseph Rome

Acclaimed in its own era by visitors who were both privileged enough to attend the elegant parties held there and intellectual enough to appreciate them, the suburban villa is considered by historians as one of the earliest examples of the Sukiya style of architecture that came to dominate urban Japanese architecture by the end of the Edo Period. For example, Suden, abbot of the powerful Zen temple Nanzen-ji, gushed in his diary that the Katsura villa was the most elegant and sophisticated building he had ever seen. An elegant agglomeration of nearly every preceding Japanese architectural style, the Sukiya style is associated with the cosmopolitan yet elegant touches for which Katsura Rikyu is famous. This eclectic reinterpretation of older styles shares a lot with the

baroque style popular in Europe at around the same time, not least in the effort that both Sukiya and Baroque architects put into constructing magnificent sightlines and views. Indeed, the most striking thing about walking through the grounds in Katsura Rikyu is the way that your attention is controlled and directed; for example, after concentrating on hopping across a section of stepping stones, you raise your head to realize that you have turned a corner and are now looking across a small inlet to a bordered by a teahouse and framed by the shadows of tall cypress trees.

Top: stepping stones leading to the outdoor corridor on the main palace and the moon-viewing pavilion

Bottom: stepping stones leading to the main palace. Note the dynamic contrast between the rough stones and moss and the sharp angles and crisp surfaces of the palace; also note how the two areas elegantly int-egrate into a compositional whole

photos by Joseph Rome

A powerful force at the time, the 'Sukiya spirit' came to embody the rejection of the fixed iconography reserved for houses for the ruling samurai class by the creative and increasingly powerful noble and merchant classes. Though examples of the Sukiya style could be found all over the

Tea house interior
photo by Joseph Rome

country by the end of the Edo Period (1603-1867), the early villas in Kyoto formed the prototypes for the later evolution of the style. However, after Japan's famous opening to the west during the Meiji period (1867-1912), Japanese architects began to devalue their own traditions in favor of Western models, and Katsura Rikyu fell into obscurity outside of traditional tea ceremony circles.

Ironically, Katsura Rikyu is perhaps more famous among architects today not as an example of the Sukiya style, but as a precocious example of modernism. In 1933 the visiting German architect Bruno Taut "discovered" Katsura Rikyu, upon which he felt vindicated that the centuries old and non-Western origin of the villa attested to the universal truth of the modernist ideal non-ornamentation, an attractive idea for a generation of philosophically-minded European architects; Japanese architects operating in the heavily nationalist 1930s, on the other hand, may have been more interested in the way that a well-regarded foreign architect proclaimed that all architecture and traditions associated with the Imperial line were far superior to vulgar samurai artistic traditions like those that informed the gaudy Tokugawa mausoleums at

Nikko. In any case, while critical discussion of Katsura Rikyu has since changed significantly, the point is that for the past 70 years Katsura Rikyu has been roundly considered one of the most perfect creations of Japanese art regardless of the critical criteria.

Tea preparation area
photo by Joseph Rome

seamless integration of buildings and garden. The villa occupies sixteen acres of flat wetland, yet the both hills and ponds have been carefully added. The principle building is the main Shoin, by far the largest structure and the sleeping quarters for the Hachijo princes; however, various lesser buildings are scattered around the site, including four teahouses (Shoken-tei, Shoi-ken, Geppa-ro, and Shoka-tei), a Buddhist memorial hall (Onrin-do), two outer guest houses, several wooden gates, and dozens of stone lanterns. In addition, there seems to have been a fifth teahouse that has since disappeared. The garden is traversed via stepping stones, and these paths are designed to show off the exquisiteness of the buildings as much as the windows show off the garden from the inside of the buildings.

Ornamentation is spare, but by no means absent. Decorative stone lanterns dot the grounds, each one slightly different than the other. The walking paths are carefully articulated, often with carefully carved stepping stones that control your movement even as they delight the eye. Though flowers are rare, the grounds are something like a giant garden; rare species of trees, like the \\\\\\ imported from islands hundreds of miles to the south, are all carefully selected, placed, and pruned so as to create a cohesive yet dynamic composition. On the buildings themselves, various materials, from luxurious sandalwood traceries to humble thatch roofs, are all put to good use. One building, the Geppa-ro, has a subtle nautical theme; not only is a thin curved ceiling beam daringly used to suggest the bottom of a boat, but the southern windows are positions in such a way that you feel as if you were floating on the wide pond. ♔

View of the main palace
photo by Joseph Rome

Sheer Love of the Game

by Samantha Rotstein

We are Columbia students; members of the "Ivy" League. Whether we were told at a young age or upon entering Columbia, most of us have heard that we were able in ways that others were not. We came into a university that accepts approximately less than ten percent of applicants, and that somehow makes us "special." Some of us have attended college preparatory schools, or boarding schools, and we've usually paid exorbitant amounts of money for SAT tutors. Having been through all of this, it's only logical that we've spoiled ourselves into an oblivion of thinking that we would be the future millionaires of America.

So what effects does this have on our *actual* potential? How can we pop the bubble in which we've become so comfortable? We all expect to make back the huge amounts of money that we put into our education. We expect to work our way to the top at a huge velocity— or even to start out at the top.

What will we do? Poor architecture students! Little do we know!

Architecture students getting their masters may spend more or less than seven years at a university, learning top-of-the-notch computer programs, and removing layer upon layer of skin during encounters with exacto knives. We will still start out making forty-thousand dollars a year—maybe less if you're not from one of the coasts. We will take all of the licensing exams and LEED certification exams and still know nothing of the over $100,000 salaries with which first year lawyers have become acquainted.

What can we actually expect? Monster.com's "Salary Wizard®" calculates that for those with a bachelor's degree in architecture and 0-1 years of experience, the median salary is $42,366 for architects in New York and $40,463 for Los Angeles. The median for an attorney with similar experience is a whopping 98,208 for New York and $93,798 for Los Angeles. I know a hat full of lawyer jokes, but the only architect joke I know is his salary.

photos and artwork by Samantha Rotstein

So why do we do it? Sheer love of the game. Nothing is more refreshing than being reamed by a critic during a pin-up; hearing that our work is boring or that it misses the point completely is a break from the normative speeches about how Columbia students are the best of the best. We're all here because a small unit of admissions officers saw potential and created an elite group—Ivy League super-students. But that doesn't mean jack when you're getting a smack in the face from Hernan Diaz Alonso during a critique of the way you think an elephant would perceive the Wooster Group's *House/Lights*. Columbia's program prepares us for the real world—for working overtime on an RFQ and for trying to convince the client that it's worth another couple of million for the masonry. ♔

How long 'til we make it back? See what the class of 2007 can expect:

Time in College/Experience (years)	Columbia University's Total Estimated Cost	Architect's Median Salary, New York, New York	Architect's Median Salary, Los Angeles, California
1	$47,229	$42,366	$40,463
2	$47,229	$48,156	$45,994
3	$47,229	$48,156	$45,994
4	$47,229	$55,814	$53,308
TOTAL	$188,916	$194,492	$185,759

Assuming that we've received no financial aid, a New Yorker will get it back after four years, while an Angelino falls short by approximately $3,000. This is without taking taxes into account. A hard road lies ahead.

Pilgrimage to Poissy

by Molly Rae Thorkelson

That overly pervasive stark white box known as Villa Savoye sits in a slightly seedy suburb to the west of Paris. Photographs and descriptions of the 1928 home designed by Le Corbusier depict a bucolic rural setting, bounded on all sides by abundant trees and verdant meadows. Since Savoye's construction in 1928, though, Poissy has gone from being a countryside retreat for Parisian elite to a sprawling suburb replete with factories, highways, and housing projects. The Villa is the last vestige of rural retreat in the neighborhood. It is bounded by weathered concrete Unité d'habitation-inspired public housing projects and a long, low-lying brick school that peers over Savoye's walls.

Villa Savoye, Le Corbusier
photo from Molly Thorkelson

In fact, Villa Savoye's life as a spacious upper-class country retreat was short lived. By the mid-1930s, it already suffered from severe structural decay, enough to necessitate the villa's abandonment in 1938 by its owners. Poverty stricken from the war, the house sat in near ruin for over two decades. In the 1950s, the construction of an automotive factory meant widespread growth in Poissy, and the formerly rural landscape began filling in with houses and shops.[1] In 1959, the house was appropriated by the

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[1] Murphy, Kevin D. "The Villa Savoye and the Modernist Historic Monument" *The Journal of the Society of Architectural Historians* 61.1(2002): 68-89.

[2] Murphy, Kevin D. "The Villa Savoye and the Modernist Historic Monument" *The Journal of the Society of Architectural Historians* 61.1(2002): 68-89.

town against the owner's wishes to build the school that now stands next door. The house was integrated into use in the school system, where alterations further degraded the original design and structure. The appropriation of the house prompted international outrage that eventually led to the designation of Villa Savoye as a bâtiment civil, a French national monument.[2] Thus, Villa Savoye has spent most of its life as a museum of its notions rather than as a fully operating machine. It survives today in the least functional of conditions: as a museum.

Corbusier's prototypical machine for living was in fact designed mostly for a life for leisure. Most of the "mechanical" aspects of living (housework) would have been done by maids, anyway. A relatively small kitchen opens onto an enormous living room with a terrace. A bathtub the size of small pool sits in a hall-like bathroom. The cleverness is not in functionality, but in the details—abrupt cut-out glimpses of the outdoor scenery and angled views down into the living room and terrace from the ramps create a novel kind of social and physical engineering of space. The contrast between its formal, geometric exterior and its veritable maze of rooms creates a kind of experiential architecture that is not conducive to machine-like living, but rather to methodical contemplation. Villa Savoye is a highly aesthetic box.

The high wall that bounds Villa Savoye on all sides is a testament to the contradictory worlds the Corbu helped to create. On the outside, the barren "tower in the park" housing projects tell the bleak tale of the architect's urban-scale utopian visions adapted for working class exile in the Parisian suburbs. The manifestations of modernism's mistakes are ironic besides a national museum that is an ode to modernism's value. Surrounded on all sides, Villa Savoye hides in its physical shell of wall, shrub, and tree, and its bureaucratic shell as a national monument.

In *Oeuvre complete*, Le Corbusier wrote that "the house is placed in the middle of a field, without disturbing anything." In time, the house has stood alone as French life has plodded on around it. The house perhaps did not much disturb its surrounding physical landscape. Immediately beyond its walls, though, Le Corbusier's early theories on modernism are evident right up to Villa Savoye's main gates. Only when the carefully preserved leisure-class Villa Savoye is juxtaposed with the real life unité d'habitation-inspired housing projects do the realities and intentions of modern living become evident. ♔