Columbia University GSAPP
Fall 2017
Advanced Studio V
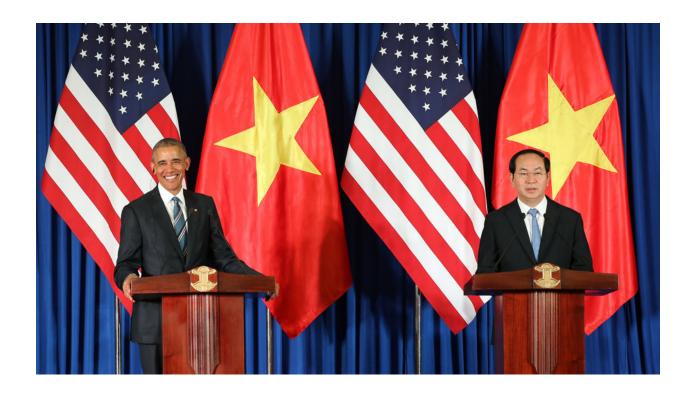
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Fulbright University Vietnam

Designing a High-Tech Start-Up Academic Institution

"...We're very excited that...the new Fulbright University Vietnam will open in Ho Chi Minh City -- this nation's first independent, non-profit university -- where there will be full academic freedom and scholarships for those in need. Students, scholars, researchers will focus on public policy and management and business; on engineering and computer science; and liberal arts -- everything from the poetry of Nguyen Du, to the philosophy of Phan Chu Trinh, to the mathematics of Ngo Bao Chau..."

President Barack Obama May 21, 2016 Hanoi, Vietnam

ABSTRACT

In 1945, Senator J. William Fulbright introduced a bill in the United States Congress that called for the use of surplus war property to fund the, "promotion of international good will through the exchange of students in the fields of education, culture, and science." On August 1, 1946, President Harry S. Truman signed the bill into law, and Congress created the Fulbright Program, the flagship international educational exchange program sponsored by the U.S. Government. From its inception, the Fulbright Program has fostered bilateral relationships in which citizens and governments of other countries work with the U.S. to set joint priorities and shape the program to meet shared needs. The world has been transformed in ensuing decades, but the fundamental principle of international partnership remains at the core of the Fulbright mission.

It is one of the most prestigious scholarships in the world.

Now the Fulbright Foundation wants to build its own university from the ground up. Our current political climate requires architects to engage in making space that connects and heals, rather than separates and divides. If, as Frank H.T.

Rhodes stated in The Creation of the Future, "The University is the single most significant creation of the second millennium," then what does it mean to create a start-up university? What is a start-up in business? What are the most successful ones? Which ones use architecture to accelerate their success? Does Silicon Valley hold the key answers to the future of creative interaction? Is the university's current spatial model, now almost 1000 years old, of academic, cultural, recreational, and dormitory buildings, plus open gathering space, still hold value? Even when the programmatic demands on a space are a direct reflection of the most rarefied contemporary sociologies, even when a project is analyzed and delivered through the most magical tech, certain fundamentals hold. There is gravity. There is weather. There is outside and, more often than not, there is inside, too. There is the need to enclose and protect. The need to modulate experience. The need to distinguish one thing from the other. The need to shelter. The need to divide. The need to connect. The need to gather and exchange ideas. The need to pass down knowledge yet open space for new modes of interpretation.

Our studio will be an examination of the Silicon Valley start-up and the University Campus plan as devices that performatively enable creative discourse. By challenging each, and the architectural techniques used, we will come to know their possibilities. By questioning both, we will master its potential. By accepting both, we will open ourselves to experiencing all the gray areas within them.

PROCEDURE

The studio projects will be individual building proposals by each student. The studio will begin with a team study of both university campuses around the world and the campuses of the high-tech companies of Silicon Valley. We will be taught a class by Vietnamese architect Andy Mai focusing on the history of Vietnamese architecture and university design, as well as Ho Chi Min City's various opportunities and challenges, during the week of 9/18. Next the site and program of the new Fulbright University Vietnam will be analyzed and critiqued, and the three person teams will jointly design a master plan for the campus, to be presented on 10/5. Then each student will select one building of their choice from their team's master plan and work as an individual to design an architectural proposal for their new start up academic building. There will be a mid-review on

10/23. A 3/4 review will take place the week of 11/13 with the heads of the Fulbright University Vietnam as your jury. The final review will be on 12/13.

PROGRAM

		PROGRAM	TOTAL (SF)	TOTAL (SM)
GROSS + PARKING	GROSS	FACULTY & STAFF	177,213	16,470
		DEDICATED LEARNING	336,050	31,231
		SHARED LEARNING	412,353	38,323
		STUDENT/ FACULTY LIFE	261,317	24,286
		RESI	1,128,081	104,840
		TOTAL GROSS	2,315,014	215,150
		GROSS PER STUDENT	*420*	*39*
		PARKING	420,647	39,094
		MECH PLANTS	51,648	4,800
		GROSS+PRKG+MECH	2,787,309	259,044

FULBRIGHT UNIVERSITY VIETNAM'S MISSION

A Start-Up University, Rooted in Vietnam and Connected to the World

Fulbright University Vietnam is a private, nonprofit Vietnamese university inspired by the American liberal arts tradition and committed to serving Vietnamese society through innovation in teaching, technology, and discovery. FUV was officially announced by President Barack Obama in May 2016. FUV was founded

on the principles of accountability, meritocracy, transparency, self-governance, mutual respect, and open inquiry.

It is vitally important that respondents to this RFP understand that FUV is a start-up venture in its initial phase of design and development. Therefore, proposals that incorporate flexibility, innovation, affordability and attention to cultural relevant iconic design are required. FUV received its establishment license from the Vietnamese government in May 2016. We are now embarking on three interrelated design and planning process: of our academic programs, our campus and facilities, and our financial and business model. The successful respondent must appreciate that these processes are unfolding at the same time. As the academic and business planning processes progress, there will be additional inputs for the design of FUV's campus and facilities, with respect to both spatial requirements and financial parameters.

The long-term vision is for FUV to become a comprehensive research-oriented university offering undergraduate and graduate teaching programs in a range of fields. Among the areas of instruction that are being contemplated include computer science, engineering, public health, law, journalism, and the visual and performing arts.

GUIDING PRINCIPLES

Innovation, Not Replication

In all of its programs, and especially at the undergraduate level, FUV will prioritize experiential and project based learning and the "flipped classroom" over traditional, lecture-based modes of instruction. Overall, this means we will require flexible, open, transparent spaces that are conducive to this kind of learning and can be repurposed and reconfigured as the institution grows and its teaching, learning, and research activities evolve. FUV is not an attempt to replicate a conventional US university; we will position ourselves at the cutting edge of innovations in teaching, learning and technology as well as in institutional governance and organization.

Laser-Focused on Socio-Economic Accessibility

FUV is not a university for economic elites, instead, it is a university for all of Vietnam. We are committed to ensuring that an FUV education is accessible to the widest possible socio-economic demographic of academically qualified students. A commitment to socio-economic accessibility must infuse every aspect

of FUV's campus and be incorporated into all design plans. FUV's campus should be cutting edge in its use of space and technology, but it is *not* envisioned as a "gold-plated" environment. Our emphasis on socio-economic accessibility and affordability makes us very different from other international university projects that focus unabashedly on recruiting students with a high ability to pay. The campus design should create an environment that incorporates outreach, socio-economic accessibility, and commercial partnering.

Creating a Vibrant Learning Experience

We believe that the learning experience FUV creates, much more than the specific details of its curricula, will define an FUV education. That experience is the result of many factors, including the culture we foster and the values that inform that culture.2 We are still defining the learning experience; we know it will encourage students to take risks, to work in teams, to push themselves out of their comfort zones. FUV's built environment will also play a vital role in shaping the learning experience.

Sustainability: A Defining Value

Vietnamese society faces enormous challenges in the environmental space. Vietnam is among the countries that will be most heavily affected by climate change and sea level rise. FUV's built environment must strive to maintain the lightest possible environmental footprint and as much as possible serve as a model of environmental sustainability, stewardship, and best practices.

Embedded in Vietnamese Society

FUV is a Vietnamese institution that is dedicated to serving Vietnamese society. We envision our campus as the physical embodiment of this ethos. To the extent possible the campus should reflect Vietnamese cultural and aesthetics; more importantly it should embody the Institution's civic mission and its determination to be a part of the communities it serves, rather than an isolated enclave. In sum, the boundary between FUV and the surrounding community, including commercial partners must be permeable.

Dedicated to Freedom and Openness

FUV will enjoy an unprecedented level of academic freedom and operational autonomy. For FUV, freedom is both a means to an end—we believe academic excellence cannot be achieved without a robust level openness—and also a

defining feature of the university's identity. FUV's commitment to liberal values is embodied in its name. Senator J. William Fulbright was known for his believe in the power of educational exchange to heal divisions and build common understanding as well as the courageous early stand he took against the Vietnam War challenging an American political establishment which continued to support it.

Technology-Driven

FUV will aggressively deploy digital learning technologies. While we value the human contact, which lies at the heart of the liberal arts educational experience, an FUV education will be a hybrid learning experience in which students learn through face to face interaction as well as through technology. We view technology as both a teaching and a financial imperative. Numerous studies have demonstrated the power of digital learning programs to enhance learning outcomes. At the same time, our commitment to minimizing costs will also demand that we deploy technology aggressively and creatively to reduce costs. We anticipate using video-based technologies that enable students to learn in real time with teachers based off site, asynchronous learning, adaptive learning platforms, and other digital learning resources such as MOOCs.

Not a Branch Campus

Taken together, the characteristics described above should make clear that FUV is not envisioned as a branch campus of an American university. In recent years, a number of leading US universities have built satellite campuses overseas, at times in partnership with local academic institutions. Many of these projects are located in the Middle East, others can be found in Singapore, China, and South Korea. ***FUV is a distinctly different type of venture.*** First, and most obviously, FUV is an independent Vietnamese university, albeit with robust connections to the United States, not the branch of a US institution. Second, most of the branch campuses mentioned above received very generous funding from foreign governments that at times amounted to a "blank check." FUV must be very sensitive to costs in order to keep the cost of an FUV education as affordable as possible. Third, because these campuses belong to traditional US universities, they have not attached a high priority to innovative curriculum design or technology. Fourth, we observe that in many cases these campuses resemble isolated enclaves, rather than institutions that are embedded deeply in the local context. Finally, it appears that in many cases these branch campuses have not prioritized recruiting

students from across the socioeconomic spectrum, instead focusing on students with a high ability to pay.

Handicapped Access
FUV's campus should be designed to facilitate access for people with physical disabilities. In this respect, we hope to set a positive example from which other institutions in Vietnam can learn. Despite the high incidence of physical disabilities within the Vietnamese population, handicapped access is not common in public buildings.

FACULTY AND STUDENT COMPOSITION

Faculty
In keeping with its commitment to innovate, not replicate, FUV will not uncritically adopt the faculty structure of a tradition private American university. FUV will not offer tenure. Because of FUV's focus on multidisciplinary enquiry and collaboration, we are hesitant to adopt the siloed, departmental structure common typical of US universities. Indeed, our focus on promoting interaction and collaboration among faculty members and between faculty and students means that we are unlikely to provide faculty with private offices.

With the caveat that the academic planning process is ongoing and the following is subject to modification, our faculty is likely to fall into three broad categories:

i. Fulltime faculty

This will be the smallest cohort but also the most important. These individuals will be the primary architects of FUV's teaching programs. They are likely to include both senior faculty as well as more junior people who may work as tutors and provide additional instruction to complement online learning resources. *This cohort may make up 33% of FUV's academic staff.*

ii. Vietnam-based part-time faculty

These are individuals whose primary academic or professional appointment is not at FUV but who participate in FUV's teaching or research activities. *This cohort may make up 33% of FUV's academic staff.*

iii. Part-time faculty who are based overseas

This is a very heterogeneous cohort and will include faculty at international universities who work collaboratively with fulltime faculty. The focus of their affiliation with FUV may be primarily research oriented or on teaching. They may

the academics with faculty appointments at US colleges and universities who spend time at FUV during down times in the US academic calendar. They may be practitioners from the technology sector who are not professional educators but who wish to contribute to FUV by mentoring our students. Others may be retired scholars or scientists who are in position to spend periods of residence in Ho Chi Minh City.

Students
FUV will strive to recruit the best students in Vietnam. While we will charge tuition, and the tuition is likely to be higher than that charged by many other institutions in Vietnam, we are determined to make FUV accessible to the broadest possible socioeconomic demographic. We will attach a high priority to recruiting a student body that comes from, around the country. At the undergraduate level, this will require that we offer on-campus housing and a robust student life/student affairs infrastructure that is appropriate for a residential university.
FUV will also prioritize cultivating exchange between its students and students from other universities in Vietnam and abroad. We will explore opportunities for FUV to host American undergraduate students interested in spending a semester or a year in Vietnam. We will also strive to support international graduate students who are interested in conducting fieldwork or research in Vietnam.

RESIDENTIAL AND STUDENT LIFE
FUV will need to offer housing for of its undergraduate students. We would also like to provide some housing for visiting faculty, a small number of graduate students, visiting research fellows, and short-term options for parents and perspective students visiting our campus.
In keeping with the university's commitment to offer an educational experience that is rooted in the American liberal arts tradition, it will be important that we create a campus that is conducive to a vibrant student life experience, with opportunities for students to participate in extracurricular, artistic, and athletic activities.

STEM INFRASTRUCTURE
FUV's undergraduate program will feature a strong STEM component, albeit not to exclusion of the social sciences and humanities. Within the sciences, it is likely that FUV will prioritize fields such as computer science and electrical and

computer engineering. FUV will need spaces—studios, workshops, "maker spaces," etc.—that are appropriate for its curriculum. However, we will not prioritize the construction of capital-intensive research facilities. This is partially to keep our initial capital expenses reasonable but, more importantly, because it is too early to determine what kinds of research infrastructure FUV's faculty requires. It is therefore of the utmost importance that we retain a maximal degree of flexibility in our physical spaces. We also believe that increasingly scientific research will not require massive up-front investment in physical infrastructure. Already, many experiments that once required expensive laboratories can now be simulated in the cloud. Technologies like 3-D printing can enable engineering students to create prototypes quickly. We envision that in the near future technologies like Augmented Reality and Virtual Reality will open up exciting new research opportunities at a fraction of the cost of traditional labs.

ESTIMATED ENROLLMENT

We cannot yet say with confidence the total student body of FUV at "steady state." Ten years out, it is possible the university could enroll between 6,000 and 10,000 students across its undergraduate and graduate programs. However, it is already clear that, for FUV to offer an educational experience that is affordable to the widest possible socioeconomic demographic, it will be necessary to ramp up quickly. Our preliminary financial projections suggest that FUV will need at least 2,100 undergraduates to operate sustainably. Therefore, during FUV's first five to seven years we project a total of 2,000-3,500 undergraduate students and 500-1,500 graduate students. We estimate that 90% of undergraduate students will reside on campus.