

n e w s l e t t e r

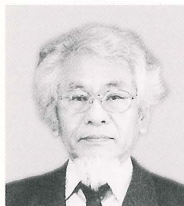


Faculty of Engineering, Kyoto University

京都大学工学部国際交流ニューズレター

April 1999 No.12

Paris and Kyoto



Kunio KATO

Professor
Department of Architecture
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As time passes, international exchange between different universities is increasing, and foreign students are becoming more commonly seen on campus. When I was a student on the 50s and 60s, we could not leave Japan freely and foreign countries were an unknown world. Today the world has become smaller. But the experience we get on the actual site of any foreign university makes us realize that a great distance exists between our university and universities abroad.

In 1959, I went to France for a few years on a French Government scholarship and studied at *l'École des Beaux-Arts* in Paris. The main campus of this school is located on the old site of the convent of the Petits Augustins on the left river side (rive gauche) of the Seine near to the Louvre. I was received in one of the workshops traditionally called "ateliers extérieurs". This atelier was under the supervision of two patron-architects, Edouard Albert, a well-known architect of the University of Jussieu (Université Paris 7), and Jean Hervé and it occupied the fifth floor of a building situated on rue Jacques Callot in a very popular area filled with cafés, boutiques, and galleries. It was set apart from the main campus area, where there were "ateliers intérieurs". Teaching methods were an authoritarian apprenticeship system, based on the seniority of the patron professors, atelier master, senior pupils down to new comers. It was a complete and radical training to form a person as an architect in full sense of the word. There was no geographically defined campus for this school, and its real educational environment coincided with so-called "Quartier Latin", a well known student district of the "rive gauche". After the violent student revolt of May 1968, the architecture department separated from *l'École des Beaux-Arts* and moved to the peripheral zones of Paris, and regrouped into eight "unités pédagogiques", that is eight schools of architecture. The destination sites are each in the downtown center of diverse districts and they occupy mostly old buildings urgently rehabilitated. Most students and teachers from the atelier of Hervé-Albert went to 144, avenue de Flandre to establish the new school of architecture qualified as *l'Unité Pédagogique n. 6*, in the semi-industrial waste lands of 19th arrondissement of Paris, where originally there stood a church and two cemeteries. Not far away, the former location of a slaughterhouse and mills had been renovated. There is now the new vast modern urban park of *la Villette*. Nevertheless the district of Rue de Flandres

still retains its popular atmosphere on the outskirts of Paris. Without any geographically defined campus, all these newly established schools of architecture are located in isolated urban patches and function just as local urban facilities. Especially in the case of the architecture school of *la Villette*, the campus seems to function only as an educational meeting place between students, teachers, researchers, and architects. It probably represents an extreme example of a completely open school. The fact that the school site has a marvelous atmosphere gives a special character distinct from the neighboring quarter. In this environment, over the academic years, students often follow several advanced disciplines in different university institutions, such as history, archeology, geography, anthropology, sociology, town-planning, etc. in which some of them defend their doctoral thesis. This type of educational environment constitutes a kind of network all over the city and encompasses the daily life of students and teachers. It acts as another "Quartier Latin" at which all kinds of advanced university study and research takes place.

The voluntary exchange of students and researchers between UP-6 and the Department of Architecture began about 1964 with financial aide from the Architectural Research Foundation (Kentiku-Kenkyû-Kyôkai). At that time after five years stay in Paris, I was employed as an assistant at Kyoto University. In March 1977, the official contract for an exchange of students between these two institutions was signed by Mr. Claude Thoret, the then-director of UP-6 and by Professor Ryôzô Tôei, dean of the Faculty of Engineering in Kyoto University. Every year the Japanese Ministry of Education is approached for scholarship funds. The purpose is to allow annual exchange of one student from Paris with one student from Kyoto. Until now, 23 students from the Department of Architecture went on to complete Masters or Doctorates. Sixteen students from Paris came to Kyoto University. The stay in Paris for Japanese students helped their advanced master or doctorate degrees. Some from UP-6 became teachers at UP-6 after obtaining their doctorate in Japan or in France and others continue to do research at CNRS (Centre National de la Recherche Scientifique), etc. Some researchers benefiting from this exchange actively published in international seminars. The main interests of French students are focused on the principles of traditional Japanese architecture and culture; modern and contemporary Japanese architecture, which are well known to them; or landscape and environmental design problems, popular areas of interest between Japan and France. Students from Kyoto University are generally interested in historical city formation in France, works of modern European architects, methodology of urbanism, and historical studies of French architecture.

In 1985 Professor Philippe Boudon, one of the leading theoreticians in UP-6, invited me to attend an international

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Rensselaer Polytechnic Institute (RPI)



木村 逸郎

原子核工学専攻教授

New York 市の喧噪を離れ、Hudson 川を約240km北に遡ると、New York 州都の Albany 市がある。この近郊には、古いアメリカの伝統が残り、また京都のように多くの大学がある。その一つ RPI は、米国最古の工業大学として175年の歴史を誇り、多くの人材を産業界などへ送り出している。我が国からも、明治初期以来多くの留学生がここで学んだことで有名である。本報執筆に先だって、旧友の R. C. Block 教授に何か RPI でニュースがないかと問い合わせたら、いま最大のニュースは米国原子力規制委員会 (USNRC) 前委員長 S. Jackson 博士が新たに学長に就任されることだという。早速ホームページ (<http://www.rpi.edu>) を開くと、彼女が現れた。RPI にも新しい風が吹いている。

さて、RPI は工業大学なので、工学部が中心であるが、他に建築学部、人間学・社会学部、経営学部と理学部がある。工学部には、以下の9学科と10センターがある。(1)医学・生物学、(2)化学工学、(3)土木・環境工学、(4)決定科学・工学システム、(5)電力工学、(6)電気・計算機・システム工学、(7)材料工学、(8)機械・航空工学・メカニクス、(9)エネルギー・環境科学 (以前の原子核工学)。また、センターには、多相流研究などトピックスを捉えたものが多い。

京都大学 (京大) と RPI との間でも、以前から多くの教官や学生の交流があり、昭和62年には両大学の機械系専攻の間で大学院特別コース学生交換の協定が結ばれたが、その後上記 Block 教授らの尽力により、平成7年には両工学部間の研究・教育協力協定が締結された。さらに、同年交換留学生の授業料不徴収の協定が結ばれ、文部省の承認も得られた。早速、京大から大学院修士課程の学生2名が RPI のエネルギー・環境科学専攻へ、RPI からは学部学生1名が京大工学部電気工学科へ留学した。

本年度で、最初の協定の期間 (3年) が満了するので、さらに5年間が延長された。そして、これまで交流が順調でなかった原因と対策について、現在 Block 教授と E-mail で討論中である。例年 RPI 側で、京大への留学希望を募ると30人以上もの申し出があるが、まず日本語教育が不十分なことが最大の障害だという。次に人数を絞っても、留学の奨学金が当たらないため、結局1人も来られないことが多くなる。一方、京大側では、まず RPI へ留学したいという学生が少ないのが問題で、情報伝達の方法を工夫すべきであると反省しているが、もう少し留学支援体制が充実していれば宣伝しやすいことも事実である。米国とは限らないが、21世紀に向けて学生の交流、とくに留学の意義は決して低下していないのに、パイプがかえって細くなったように見えるのは残念である。



RPI の校舎の一部

Coming to Japan



Axel PILGRIM

International Course Student
Department of Chemical Engineering

What is it like, to live in a foreign country like Japan? That's what I am usually asked when I return to Germany. The answer is simple: it's not so different from home. One is got his work, his salary, friends, hobbies etc., BUT...and then usually a long list follows, including all the apparent small differences compared with home. Things like ATM's that take a "nap" during the night, the great variety in the meaning of the word 'yes', or just trains that really are on time, not to mention sales clerks who smile while saying 'Welcome (*Irrasshaimase!*)' (In Germany, the customer has sometimes the status of a 'disturbing event'). Of course, the biggest gap is the language. While one can more or less survive in Europe just by using English, it is unavoidable in Japan to learn the language, especially for those who are here for the long term. Just a little bit of Japanese goes far, an experience I especially learned during my first trip to Japan in 1995.

At that time, I was taking part in a student exchange program organized by the Department of Chemical Engineering, Kyoto University. I worked as a trainee at the R&D Center of Kuraray Co., a company located in Kurashiki, Okayama Prefecture. Though Kurashiki is a city of more than 400,000 inhabitants, it can be considered countryside. The first thing I noticed on my arrival was the near absence of any roman letters, therefore I worked on the Japanese alphabet and Kanji as well as some key sentences. The success was great: I didn't mix up male and female toilets, I even could take a train without a two-sided sketch with an explanation and therefore reached the level of a 2nd year elementary school pupil. By those experiences, the general assumption in Germany that one can survive with English everywhere was somehow reduced to a rumor. (I heard that one can experience the same in Paris as a tourist...)

So you might suppose nothing could surprise me when I came to Japan a second time. Well, I already experienced those 'first impressions' you get when arriving in Japan, taking the *Haruka*-Express to Kyoto and just looking outside the window. Also, I already had eaten most of the exotic food in Japan you are served when your host wants to check you out. As for me, raw octopus makes me hungry rather than makes me disgusted. But nevertheless, studying in Kyoto was far different from working in the countryside. First of all, there is the city itself. While I was living in Kurashiki, meeting a foreigner was quite a rare event, but here in Kyoto, there are comparably many foreigners of different origin. Moreover, due to the beautiful riverside of the Kamo and the very special interpretation of traffic rules in Kyoto, the atmosphere is more 'Mediterranean' compared with a mostly industrial town like Kurashiki. But the greatest difference is work itself.

If there is something one cannot escape from in a Japanese company, it is safety control, condensed in the slogan '*Anzen Dai-Ichi*' - safety first. Of course, in most companies there are those safety measure rules like 'Never put your hands



Laboratory Trip in Summer '98, Japan Sea

in your pockets just in case you stumble!’ however, having a safety drill every morning was first for me. During roll call, we repeated the safety slogan in chorus while pointing with our index finger to the safety slogan. This safety drill was followed by a kind of road safety lecture. Everyday, a member of the office reported a ‘near miss’-story he had on his way to work to in order to warn other members to take care at certain dangerous spots. (Actually, as far as I know, most work-related accidents in the chemical industry happen while commuting...)

Of course, research in academia and in business is different in every country; however, the difference seems to be much greater in Japan. Except some basic rules like ‘Do not smoke in the experiential room!’ the rule, “No complainant, no defendant” is applied. The other main difference is the presentation of results. In my company, every member of the office had to report during each morning briefing what he had done and what he intended to do. Therefore, everybody knew what was going on in the other workgroups. After this briefing, another briefing, namely that of the working group, took place, sometimes followed by a discussion under four eyes...however, the pace at work was steady, or, that is how it appeared to me. At the university, on the other hand, the pace seems rapidly to increase when a thesis presentation comes closer: you better not ask one student to join a party just before the summer break or New Year (*chuukan happyyou*), or around March (*ron-bun happyyou*).

So is the author of this article disappointed from the work at a Japanese university? Different opinions and problems can emerge everywhere during an academic stay in Japan or in Germany, at a university or in a company. It’s good to see one’s stay in Japan as a challenge, and to seize this opportunity and accept it. I did the later, and just extended my stay here at Kyoto University.

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私を感じた日本と中国の“違い”



唐 軍

材料化学専攻
博士課程3年

日本に留学する前に、十年以上中国の大学での生活を送った。中国の大学での生活は *life in the ivory tower* といわれているのに対して、日本の大学生活はどのようなものか、ずいぶん想像をした。今、京都大学で三年間研究生活をしたが、京都大学の印象というものはとても書けない命題だと思う。普通の留学生の一人として、自分の肌で感じた両国の学生の考えの違いについて書いてみようと思う。

まず、両国の学生の料理と学問に対する認識の差について述べてみよう。日本の学生は料理に対してうるさいほど好き嫌いがあがり、口に合わないものはあまり食べようとはしないように感じる。それに対して、中国の学生はいくらまずい料理でもとりあえず食べてみる気持ちが強い。ところが面白いことに、学問においてはこの関係が逆転する。日本の学生は好きな分野であれ嫌いな分野であれそれを理解しようとしている。それに比べて中国の学生は、自分が興味を持ったものに対しては深く探求するものの、そうでないものには見向きもしないという危ない選択をしている人が多い。つまり、日本の学生がその“広さ”を注目するのに対し、中国の学生は“深さ”を注目するという傾向があるように思う。

日本の大学の研究室では、先生ない先輩が具体的な研究手順に至るまで親切にこと細かく教えることが普通になっているように思う。言い換えれば、一種の伝統のようなものとも言えるかもしれない。だから、2、3人の切れ者が研究室にいればとても強いグループを作ることが出来る。一方、中国では“先生とは困ったときの道しるべ的な存在であり、どうやって修行するかは自分次第である”と

いう昔からの方針を持っているために学生はほったらかしである。そのため自発的に勉強することになる。私はどちらがよいかわからない。むしろどちらも必要だと思う。つまり要求や指導に従って行動する習慣ばかりが身につけてしまったら、自分だけで研究を進めるインセンティブを持つことが出来なくなるような気がするし、逆に自由放任だと勉強したことが独りよがりのものになってしまう危険性があるかもしれないからだ。だから私は、“教える雰囲気”と“積極的に学ぶ雰囲気”及び“気楽に質問ができる雰囲気”のいずれも必要であると思う。

長い歴史のなかで、京都大学は科学のいずれの分野においても独創的で創造的な研究で勝負してきた。そういう環境の中で活躍してきた教授のすごさを日本に来て改めて感じた。また現在も科学の分野で京都大学はハイレベルを維持している。こんな環境にいる教授の下で研究が出来る学生は本当に恵まれていると思う。しかも手厚い指導が受けられるのだから。前にも述べたが、中国では学生は先生からあまり手厚い指導をしてもらえないので、数少ない優秀な学生以外、たくさんの学生は研究の戦場から落ちてしまっている。これは本当に残念で、大きな違いであろう。

以上は一人の留学生から見た感想であり、すべてにおいて正しいとは言えないと思う。しかしながら、多くの面で日本と中国の間の“違い”を感じたのは本当である。良くない違いはよい方に変わっていかないと、両方の大学を見た私は思う。

(Continued from Page 1)

seminar that he organized. The seminar was held in the great auditorium of *le Conservatoire des Arts et Métiers* in Paris with the theme “Encounter of Architecture and Philosophy”. At this occasion he proposed a new scope of an architecturology (his neologism!) based on the self-realisation of “Poiesis”, architectural creation, begun with the sensibility of perception. I proposed then a theory concerning the art of building as an entity balanced and oscillating between feeling and thinking, inspired from the poetic theory of Paul Valéry. Another important event was the International Seminar organised by Professor Augustin Berque, director of the research center of contemporary Japan in the “Institut des Hautes Etudes en Sciences Sociales” in the early summer of 1989. I was invited to participate and remember an agreeable discussion about architectural design and human settlement with professors Berque, Françoise Choay (urban sociology) and other competent researchers in the beautiful medieval cistercian Abbey of Royaumont, located about 30 kilometers north of Paris, a site which had been converted after World War II into a seminar house. As this site makes evident, historical heritage and urban facilities of Paris are used as places of academic encounter and research. Daily urban scenes from life overlap those of academia. Both a highly valued historical and urban environment enhances academic research and advanced education. The flexible use of space can freely accommodate an occasional change in the academic institution and system. This is very impressive for me.

Kyoto University, like most Japanese national universities, continues to have a clearly defined campus area surrounded by fences. Today the actuality is that the university organisation suffers from this system of campus land use, as well as a lack of sufficient campus area. What impression do foreign people get when they visit our spatially rigid campus secluded in the middle of Kyoto city? A sense of alienation is apparent, not only from a physical environmental problem but also to the sensibility and pragmatic aspect of its occupants.

A sudden change of atmosphere allows us to maintain human relations in a diverse manner. I clearly feel that the substantial essence of an international exchange is seeing young generations who keep Paris and Kyoto as their second home spread throughout the world.

JKUAT's Future towards the 21st Century



Kunitomo SUGIURA

Associate Professor
Department of Civil Engineering Systems

Jomo Kenyatta University of Agriculture and Technology (JKUAT) is located to the northeast of Nairobi, 35km away from its downtown. The university originally started as Jomo Kenyatta College of Agriculture and Technology for diploma level education in the early 1980s after land was donated by the first president's family. In conjunction with the Japanese Grant Aid Programme, buildings and equipment were provided.

In the late 1980s, it became a substituent college of Kenyatta University when B.S. level education was started, and maintained the support of the Japanese government. In 1993, it became the fifth independent national university after Nairobi, Moi, Kenyatta and Egerton, with a special emphasis on training more practical engineers necessary for the further development of Kenya.

The university is formed of the Faculties of Agriculture, Engineering and Science; the Japanese government being solely responsible for the faculties of Agriculture and Engineering, and the department of Computer Science. The departments of Horticulture, Agricultural Engineering, Food Science and Post-harvest Technology make up one faculty while Civil Engineering, Architecture, Mechanical Engineering, Electrical and Electronic Engineering make up the other. The diploma and B.Sc. graduates so far amount to 1200 and 563 respectively. JKUAT is becoming the most competitive university in Kenya, and this is owed to the continuous guidance of the supporting committee chaired over 20 years by Hiroji Nakagawa, Professor Emeritus of Kyoto University, and the devotion of JICA experts. It is now considered to be the most successful JICA Technical Cooperation Project.

Although the organization of the university and its education system follow the British system due to Kenya's history as a former colony, JKUAT has been deeply inspired and led by Japanese incentive. The project is operated mainly by JICA experts, which consist of a team leader, administrative staff, and "long-term" visiting experts in each department in cooperation with all of the Kenyan academic and administrative staff. In addition, upon request from individual departments, extra "short-term" visiting experts in specific fields are also invited from Japan to accomplish an effective technology transfer when needed. In particular, a large number of academic staff of Kyoto University have contributed to the foundation and expansion of the Civil Engineering and Architecture departments.

The main objective of short-term experts is the training of JKUAT academic staff as well as making suggestions to improve project operation, even giving lectures to the B.Sc. students. The first time I visited JKUAT was in 1994 upon re-

quest of the Civil Engineering Department which needed an expert in structural engineering and testing technology. Since then, I have made five consecutive visits to organize the structural engineering group. However, promoting enthusiasm in teaching and research among the Kenyan academic staff is very difficult. The cost of living in Kenya is one-fifth of Japan; whereas the average salary is less than one-fifteenth. Therefore, most of the Kenyans including firm-employed engineers face a daily battle for survival which does not allow them to devote themselves to the development of their country.

Kenyan people traditionally were pure and peaceful surrounded by all kinds of nature according to their legends until European culture was imposed on them. Kenyans still think that even though they are poor in material things, they are very rich in heart and spirit. However, colonization and capitalization which occurred after Independence have produced a lot of poverty and hunger, resulting in a lessening of harmony. The worst problem is wealth-concentration and the unfortunate desire to belong to high society by people who do not rise according to their own ability. This causes chaos, grudges, and bribery (*kitu kidogo*). In a related manner, many brilliant young students have difficulties in finance and in getting promoted, and only pursue high class scores without understanding basic principles. Lack of books and literature also limits students because quite a large number of their teachers are not capable of teaching the content of the syllabus. It is our responsibility to provide opportunities that allow young people to be exposed to all sources of information for accumulating knowledge and eventual promotion.

The life in Kenya offers Japanese a refreshing change physically and mentally as well as providing an exciting exposure to a unique culture completely different from those of Europe and Asia. Visits to African Heritage Sites also brings one to the heart of Africa which is fascinating, and makes international cooperation easier. On the other hand, many Kenyans have studied abroad in recent years and have been exposed to foreign cultures, which has encouraged them to work enthusiastically. I believe that this is the basis for mutual cooperation among people from different backgrounds. To this end, I hope the harmony between nature and life becomes a reality in the future just like it was back before, and that JKUAT may play a significant part in the development of the 21st century.



Overview of the Campus

国際交流日誌 (平成10年9月30日～平成11年3月24日)

平成10(1998)年

- 9月30日(水) 工学研究科・工学部国際交流委員会
上海交通大学謝繩武学長他4名来訪
- 10月12日(月) グルノーブル地方・大学ネットワーク(元グルノーブル理工科大学長) Maurice Renaud 会長来訪
- 28日(水) 工学研究科・工学部国際交流委員会
- 11月2日(月) 平成10年度特別コース研究留学生入学式
- 9日(月) 中国科学技術大学朱清時学長他3名来訪
- 25日(水) 工学研究科・工学部国際交流委員会
- 12月6日(日)～8日(火) 土岐憲三工学部長及び関係者一行「総合工学」学術交流事業事務打ち合わせのため、マレーシア及び

シンガポールを訪問

- 12月12日(土) 新入学留学生研修旅行(明石海峡大橋)
- 17日(木) 中国都市地震防災考察団黄田庚安徽省地震局長他7名来訪

24日(水) 工学研究科・工学部国際交流委員会

平成11(1999)年

- 1月25日(月)～26日(火) 特別コース研究留学生見学旅行(四日市方面)
- 26日(火) チェコ工科大学プラハ校 Petr Zuna 教授来訪
- 1月27日(水) 工学研究科・工学部国際交流委員会
マラヤ大学 Mohd Ali Hashim 教授及び Leela Rayarappan 秘書官来訪
- 3月11日(木) 平成9年度特別コース研究留学生修了式
- 3月24日(水) 工学研究科・工学部国際交流委員会

The Committee for International Academic Exchange, Faculty of Engineering, Kyoto University, Kyoto 606-8501, Japan

Phone 075 753 5038 / Fax 075 753 5065

606-8501 京都市左京区吉田本町 京都大学工学研究科・工学部国際交流委員会