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NEWSLETTER OF THE AMERICAN SOCIOLOGICAL ASSOCIATION SECTION ON

SCIENCE, KNOWLEDGE *and* TECHNOLOGY

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FROM THE EDITOR:

My apologies for the lateness of this issue. I hope to be able to put out issues more frequently. Our main contributor to this issue is Carlos Kruytbosch of NSF, well known to SKAT members for his work in editing Science Indicators.

I hope you will fill out and return to me promptly, the form requesting information about your activities. We have been soliciting and publishing this information about once a year. Contributions to the newsletter are eagerly welcomed, even though, as with most journals, not all of them can be published and many require abbreviation or other editing. Not ordinarily accepted: advertising; authors' reviews of their own books; material that appears to have been sent to all ASA newsletters and has no particular relevance to SKAT. I am especially eager to receive suggestions about what you would like to see in the Newsletter.

Please send your contributions, queries, suggestions and filled-in forms to Professor Maurice Richter, SKAT Editor, Sociology Dept., SUNY-Albany, 1400 Washington Ave., Albany, New York 12222; office phone 518-442-4675, home phone 518-869-6720, fax 518-442-4936, E-mail MR274@ALBNYVMS.BITNET. And, please think about, and try to respond to, the item which follows immediately below. Do not assume that "someone else" will nominate the people you think are worthy of being nominated: "someone else" is probably expecting you to do it.

CANDIDATES SOUGHT FOR AWARDS:

The Hacker-Mullins Student Award is given to a graduate student for either an article from a dissertation or a dissertation completed within the past twelve months. The winner receives \$100, membership in the ASA section on Science, Knowledge and Technology, and a place on the meeting program.

The Robert K. Merton Professional Award is given for a piece of scholarship published within the past five years. The award will be allocated on the basis of scholarship, not professional service. The awardee should be a member of SKAT in the year in which the award is given.

Awards will be presented at the SKAT business meeting at the ASA convention. Nominations or applications accompanied by supporting documents should be sent to Prof. Chandra Mukerji, Chair, Department of Communication, University of California - San Diego, 9500 Gilman Drive, La Jolla, California 92093-0503, and should be received by June 15. Professor Mukerji can also be reached by phone at 619-534-2843 or by fax at 619-534-7315.

STS CURRICULUM PLANNING GUIDE AVAILABLE:

This document, Teaching STS, edited by Steve Fuller and Sujatha Raman, is designed to hasten the growth of STS by demonstrating two of its important features to educators and administrators. The first is the adaptability of STS-related topics, methods, and ideas to various curricular needs. The second is the centrality of STS to the education of an informed citizenry. Teaching STS is the product of a Summer Institute sponsored by the National Endowment for the Humanities in summer 1991 (however NEH is not responsible for the document nor does it represent the views of NEH). It was prepared by the 25 members of the Institute. It is divided according to the curricular settings in which STS may appear: General Education, Policy Studies, Gender Studies, the Special Disciplines (Rhetoric, Literary Studies, Psychology, Philosophy), and STS itself as a discipline. For a copy of Teaching STS, please detach the request form below and send to Steve Fuller, Science Studies, VPI & SU, Blacksburg, VA 24061-0247.

REQUEST FOR TEACHING SCIENCE AND TECHNOLOGY STUDIES

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CHINA, USSR AND HUNGARY: Observations 1990-91

Carlos Kruytbosch 12/26/91

[The observations and opinions presented here are those of Carlos Kruytbosch, and do not represent policy positions or official views of the National Science Foundation]

Over the past year I was fortunate enough to spend time in three communist or formerly communist countries in connection with my business of science and technology (S&T) policy and S&T statistical indicators. In Oct. '91 I spent over a week in Hungary, and nearly three weeks in the USSR in May/June '91 as a member of U.S. visiting teams in the framework of national joint agreements. In Nov./Dec. '90 I spent nearly three weeks in the southern Chinese city of Guilin giving a course of lectures on S&T indicators to a "class" of about 60 middle-level S&T administrators from research institutes from every corner of China. The training course was sponsored by the State Science and Technology Commission of the People's Republic of China, and funded by the United Nations Development Program.

While China was physically and culturally completely foreign to me, I had lived in Moscow as a boy, and I speak some Russian. The apartment just off the Arbat where I had lived 45 years before was still the same! I also had some familiarity with Hungarian culture and social structure deriving from my Master's thesis work at the University of British Columbia (UBC) in Vancouver BC. Between 1956-58 I studied the over 200 students and about 30 faculty members of the Sopron Forestry and Forest Engineering University who fled their native land as a complete group in the aftermath of the 1956 Hungarian revolution. From a refugee camp in Austria they sent a letter to over 80 countries offering their collective skills and expertise in exchange for a new homeland. Canada took them in and located them at UBC.

In Hungary, the team stayed in Budapest for a few days before and after the joint workshop which was held at the Academy of Sciences Institute of Limnology on the shore of Lake Balaton. In Moscow we spent a week conducting our workshop and visiting various scientific and statistical institutions. We then traveled to Leningrad and spent a few days in meetings and visiting scientific institutions attempting to understand the momentous changes that were occurring and to gauge their impact upon the quantity and nature of S&T data. We followed this with a trip to Tallinn, Estonia, where there was another round of visits and discussions. In early June 1991 impending freedom and independence was strongly in the air in Estonia. The signs were many. Huge boulders were piled at the entrance to a narrow city street leading up to the Parliament building -- tank traps if the Soviet army were to make a move. Our Intourist city tour guide gave lengthy dissertations upon Estonian freedom and the burdens of Soviet rule. I also discovered that new Estonian postal regulations forbade sending parcels of foodstuffs out of Estonia to other Soviet republics.

In some respects visiting Russia was like being transported in a time-machine back to the 1940's and 50's in England, where I lived at that time. The buildings were drab and crumbling. Everywhere there were long lines at shops which were largely empty of merchandise. In food

stores bescarfed matrons with shopping bags leafed through their ration coupon books. The analogue breaks down in two important respects -- in the 50's there were no blue jeans in Europe, nor was there the heavy auto traffic dominated by the ubiquitous boxy Moskovitches. Like the buildings, most cars on the road were dilapidated, dented with bald tires, broken headlamps, etc. Windshield wipers are routinely removed when not in use; otherwise they would be stolen.

There seemed to be at least four different levels of monetary transactions. Traditional subsidized goods and services were absurdly cheap for the foreigner -- foodstuff, transportation, telephone, books, souvenirs in state kiosks, cost only pennies -- if available - a big IF in every case except transportation. Secondly, the state also runs shops which stock the usual range of goods available in western stores, but which can only be purchased with hard currencies. The prices are at or above western levels. Third, there is a booming private sector of small retail entrepreneurs operating in sidewalk stalls, kiosks, private markets and out of the back of trucks. The prices are in rubles and are higher than in the state stores. Availability is unpredictable -- it is boom or bust. In the fourth type of monetary transaction, private Russians offer goods and services directly for foreign currency. I believe this was still illegal in June '91, but it was obviously being winked at.

In China, a two level monetary system is formalized in the existence of two separate paper currencies -- "Renminbi", (people's money) for regular use, and "Foreign Exchange Certificates" (FEC) which can only be purchased with foreign currency, and are supposed to be the only currency used by foreigners. In certain stores and establishments dealing in imported goods, only FEC was accepted. I observed several instances of complex multi-stage transactions designed to leave the FEC in certain hands.

The city of Guilin (Kweilin) in Guangxi province is about an hour's flight west of Hong Kong, and it shares in the rapid economic growth and prosperity of neighboring Guangzhou (Canton). The unprepossessing buildings of Guilin fade into insignificance beside the stunning natural beauty of the surroundings. The city has no architectural interest whatsoever, and there are virtually no historical monuments at all, having been destroyed many times by fire, war and natural disaster in its over 2,000 year existence. From before dawn to late at night the streets bustle with activity and commerce. Before dawn some streets and park areas have large crowds busily performing Tai Chi and other exercises to music from raucous boom boxes. In parks, old men gather to share a smoke and admire each other's caged laughing thrushes. They hang the bell-shaped cages in trees and the birds reward them with enchanting song. During the rush hours the streets are moving forests of bicycles. (Note, virtually no bicycles in Russia or Hungary). The streets are endlessly lined with small open-front stores -- mostly private I was told -- displaying abundances of fruits, vegetables and meats, clothing, household goods, radios, TV's, bicycles, tape recorders, etc.

In some respects Guilin was quite unbelievable. It is a tropical Asian city of one million inhabitants, yet certain things common to large tropical Asian cities were absent. To wit, birds: -- no sparrows, starlings, crows, kites, vultures or other scavengers. I am an experienced and enthusiastic birdwatcher and I can say that the only free-flying birds I saw within Guilin was one flock of 15-20 pigeons, and one falcon -- very interested in the pigeons. These extraordinary facts must be connected with the virtual absence of garbage in the streets, and the absence of free-running dogs and cats, or their corpses. And this in turn connects to the

observed average of 1.7 flies per food establishment -- according to my rigorous scientific survey. I confronted my "students" and Chinese colleagues with these facts, but they were at a loss to explain them, although several recalled the Maoist campaign against the "four evils" -- I believe mosquitoes, rats and mice, flies, and city birds. Apparently the latter were eventually taken off the list, but perhaps too late. Another hypothesis advanced by my students from the north is that local people ate them.

It certainly seemed true that they ate anything! The street-side eateries displayed their entrees alive in cages, buckets and aquaria on the sidewalk. The customers pointed at the desired items and they were taken back to the kitchen for preparation. The creatures displayed included several varieties of snakes, eels, river snails, rabbits, ducks, chickens, pigeons, "bamboo rats" (a cat-sized furry rodent), fluffy white kittens, a bittern and a few hawks. I saw no dogs in cages (or in the street for that matter), but most street restaurants offered a dish in a small earthenware pot with a lid containing hot rice and a dogmeat sausage. (The original hot dog?) Street vendors carried baskets 2 feet square by 9 inches thick, crammed with live brown, sparrow-sized birds.

The two foreign faculty members and the 60+ students were treated to a fabulous day-excursion including a four hour boat trip up the Li river, past the endlessly varying, phantasmagoric configurations of the karst formations. I spent much of the time on the observation deck with binoculars alternating between the formations and looking for birds. I was able to observe 9 species in nearly four hours. An average winter 2-hour birdwalk along the Potomac river in the Great Falls National Park near Washington D.C., we observe an average of about 30 species. Even in my back yard in McLean, VA. I see 15 species a day in the winter. In the USSR and Hungary, on early morning walks I was able to observe bird life in the mostly urban environment, and saw pretty much the same kinds of species encountered in western countries. One wonders about the coexistence of birds and 1.3 billion people in China.

For me as a westerner, the most striking difference between the situation in China and that in the USSR and Hungary is the persistence of a thorough-going surveillance of citizens, and the invisible wall between citizens and foreigners. In Guilin, a special black-uniformed police patrolled and "protected" the foreign hotels. Once, during a city walk, I was latched onto by a young medical student (traditional Chinese medicine) who wanted to practice his (excellent) English on me. As we passed by the Guilin Holiday Inn, I said I had to go in to check something out. He said nervously that the police would not let him in, and he stayed well away from the gates. Also it was clear from discussions with Chinese professional colleagues that normal social intercourse with Westerners was a risky business. Nevertheless, most of them pursued it to some degree because of the potential personal rewards. Some of the Chinese colleagues were terribly keen to improve their conversational English, but complained about lack of opportunity. I suggested that they contact an English speaking Embassy and offer to exchange Chinese conversation for English conversation. They looked aghast and said that would be impossible and they would never be allowed to do it.

The Russians and Hungarians I talked with, without exception, expressed confidence in the long-term movement in their countries toward democracy and market economies. However, they also expressed doubts and concerns about the short-term ability of their leaders to surmount economic and political problems. The scientists in both countries were very concerned to protect scientific research in a time of radically shrinking budgets. Several Chinese officials, however, viewed the Gorbachev and East European strategies as fundamentally flawed. In their view, one must take care of people's stomachs first, i.e., provide for solid economic growth, and only after this is well established can one begin to loosen up on social and political freedoms. They thought it foolish to permit "glasnost" before implementing "perestroika". In Hungary, perhaps a version of economic perestroika had taken place already 10 years before the fall of the Berlin Wall. There, the concerns of senior science officials were a) to build, solidify and maximise their relationships with the emerging political/budgetary establishment, and b) to create in lightning-quick tempo a set of relationships with the international science community which would help to plug the budgetary gaps, as well as to legitimate Hungarian science within the country. While retaining high prestige, the Hungarian science establishment suffered in its public image by 40 years of identification with "scientific socialism". In fact, a major theme in the discussions between the Hungarian and U.S. delegations was the nature of the connections between science and society, and how they should/could be structured. My particular contribution was to illustrate and advocate the use of public opinion surveys as a tool to educate both and public and the scientific community about their mutual perceptions and expectations. The Hungarian academician were eager to accept this conceptually, but remained emotionally tied to the notion that the Hungarian people should trust the scientists to do right. Informally, they felt that compared to the U.S., the public in Hungary would have more negative perceptions of science.

In the USSR, facing rapidly disappearing budgets, science policy attention seemed fixated upon "protecting science", and little attention was paid to the ways in which science could contribute to society in the newly emerging structure. Of course, as it turned out in Fall 1991, the USSR had another step of socio-political evolution to go.

In China, my impression (quite possibly mistaken) was that while S&T had been a priority for some time, the current (late 1990) forefront of concern in educational priorities focussed upon foreign language acquisition and business education. This contrasted sharply with U.S. government priorities.

It is important to reiterate that all these countries had recently come to recognize at the policy level, the importance of public financing and institutional commitment to the support of basic research. In 1986 China set up the National Natural Science Foundation -- a competitive process modeled in good part upon NSF. This continues to prosper after several years of functioning. In 1990 the USSR planned a similar arrangement, but was unfortunately overtaken by events in 1991. The current status of the plan is unclear. The Hungarians, following their internationalist approach, were able to interest the World Bank in a proposal for a competitive, basic research support program which has apparently been successful in reaching the end of its second year of operation. I should add, that during this same period, many other countries and regions had recognized the importance of promoting basic research as a small but critical portion of their science and technology policy and their R&D allocations. I can personally document these efforts in places as diverse as Bulgaria, Malaysia, Texas, Mexico and Brazil.

EDITOR'S COMMENT: I know a little about the situation in China, that I can add to what Carlos has said above. I think his comment about the Chinese NSF is especially interesting. An NSF-style peer review system would actually be quite inconsistent with well-established Chinese ways of doing things, which involve heavy emphasis on seniority and on personal ties. I find it hard to imagine that arrangements permitting junior scientists at a research institute or university to by-pass their superiors in applying directly to the Chinese NSF for funds, would find easy acceptance in China. Nor would it be consistent with established ways of doing things, for a Chinese scientist acting as a peer reviewer to recommend funding for a research proposal from an institution competing with his own. It would be interesting to know how the Chinese NSF actually works. I can corroborate what Carlos says about birds: I am also a bird-watcher and saw almost no birds in a summer in Tianjin, a city larger than New York.

PAPERS INVITED:

Papers in the area of "Environmental Politics" are being solicited for a special issue of the Journal of Political and Military Sociology, co-edited by Penelope Canan and Marvin E. Olsen. Papers dealing with any aspect of the politics of the environment (or the role of the military in such issues) are welcome. Please send two copies to Penelope Canan, Department of Sociology, University of Denver, Denver, Colorado, 80208-0209, by September 1, 1992, with a \$10 processing fee payable to JPMS. If enough high-quality papers are received, the collection may subsequently be published as a book.

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Please provide information below for possible publication in a future issue of the newsletter. Attach an extra sheet if you need more space. Thank you.

NAME:

TITLE:

ADDRESS:

RECENT PUBLICATIONS AND PRESENTED PAPERS (Include all details. No "forthcoming" publications or papers please.)

RECENT AWARDS, HONORS, ACHIEVEMENTS, PROFESSIONAL ACTIVITIES, NEW POSITIONS:

The following is not for publication but is sought for use by the editors.

SUGGESTIONS FOR IMPROVING THE NEWSLETTER. (Mention here, among other things, any new features you would like to see.)

CONTRIBUTIONS (including "op-ed" pieces and reviews) THAT YOU MIGHT LIKE TO WRITE FOR THE NEWSLETTER:

YOUR PHONE NUMBER(S) AND E-MAIL NUMBER:

Mail to Maurice Richter, SKAT Editor, Department of Sociology, University at Albany, State University of New York, 1400 Washington Avenue, Albany, New York 12222.