Vietnam and Harvard Protest

A crossfire of comments from readers ................................ this page
Equal time: A Marine General answers Adrienne Rich ................ page 5
Another wave of protest in Cambridge ................................ page 14

Around the World in Data Ways

You can go anywhere, do anything on a Sheldon Fellowship. Joel Cohen '65 used his to circle the globe .......... page 16

The Fairlie Affair

Stormy weather over the Institute of Politics ........................ page 21

Sports: A Tale of Two Weekends

Victory feasting abruptly turned to famine last month .......... page 22

The Hanging Houses of Cuenca

Ancient blends with modern in a remarkable art museum .... page 24

Last of the One-Man Shows

A. Lawrence Lowell seemed to be everywhere, to know everything, and to have a finger in every Harvard pie ........ page 26

Alumni Notes ........ 37  Athletics ............ 22  Books ............... 6
Clubs ............... 8  College Pump .......... 33  Faculty Notes ...... 36
Obituaries ........... 34  The Undergraduate .. 15  The University ...... 11

Cover: Joel Cohen '65 surveys an Indian village in Costa Rica—an early stop on a journey around the world (see page 16). Photograph by Franklin Barnwell.
Around the World
In Data Ways

You can go anywhere, do anything on a Sheldon Fellowship. For Joel Cohen '65, that included sitting Zen in a Japanese monastery, bundubashing in Kenya, and spending a night in a Hungarian police station. This is his account of where he went, what he did, and what he learned.

By Joel E. Cohen

In 1965, Mrs. Amy Richmond Sheldon left Harvard a bequest of $562,758, named the Frederick Sheldon Fund after her husband. She instructed the President and Fellows to apply the income from the Fund "to the further education of students of promise and standing by providing them with the facilities for further education by travel after graduation."

I was one of the four lucky Seniors of the Class of 1965 awarded a Frederick Sheldon Travelling Fellowship: a year of freedom and $3,200 cash. The sole condition was that I could not spend more than two or three months in the same place without permission.

On July 1, 1965, as an itinerant applied mathematician, I set out from the United States to poke my ample nose into as many important different studies of behavior—animal and human, social and individual—as I could.

When I returned to the United States 427 days later, having been once around the world, I still had not located a broad, one-way avenue to the understanding of behavior. But a fully adequate answer that will be a means to solving these problems awaits, perhaps (and only perhaps), a fully coherent theory of behavior.

From working a month or more in each of nine major studies of behavior, and from visiting many more workers and laboratories for shorter times, I learned much about scientists and a little about the science of behavior itself. I was repeatedly amazed and delighted by the openness of scientists, their personal friendliness and their willingness to share results and problems.

I learned that many biologists and behaviorists are grossly undereducated in mathematics. (For mathematics I adopt a nineteenth-century definition, “clear thinking.”) Some have no idea how to approach a natural situation quantitatively, or how to use standard statistical tests; some others have no conception of possible relations between their activities in the field and coherent theory of any kind. In the short run, a mathematically trained behaviorist can make tremendous contributions by pointing out what is obvious to him; but in the long run, biologists and behaviorists will have to be adequately trained.

The association between science
and democracy is much more tenuous than I, coming from a laissez-faire academy, had thought. The organization of scientists at the Japan Monkey Centre seemed nearly ideal: each worked independently or with whom he chose on his own projects, and all came together occasionally to discuss their results and progress. I would like to go back there.

On the other hand, in some so-called democratic countries, I saw groups of scientists managed in the most autocratic way by central boss scientists who controlled not only money, laboratory space, and promotions, but also subjects of investigation and frameworks of interpretation. By arrogating the function of understanding to themselves, some of these bosses ensured that their personal demise would bring the demise of their grandiose theories and projects.

The culture from which a behavioral scientist comes often affects the direction of his investigations and the content of his explanations. One example: an ecologist I met told me that for religious reasons he could never accept the theory of evolution.

If I started my year of wandering with one problem, it was: Is a unified theory of behavior possible and if so, how can I contribute to its creation?

Certain incompleteness theorems of mathematical logic have been interpreted to mean that no theory using presently known logics could account for everything in the universe. I would be happy with a much more modest attainment than an explanation of everything: theories as useful in the range from cells to societies as the theories of modern physics are in the range from atoms to galaxies. The barrier posed by logic is very remote.

The real barriers to a unified theory of behavior are chiefly practical: the possibility does not concern most working behavioral scientists. Only rarely, for example, and then in a perfunctory way, does a student of the behavior of an individual organism concern himself with what happens inside the organism or how the individual fits into a social or ecological scheme. ('There are exceptions, just as there are hens' teeth.)

How to create a unified theory? Synthesis of existing, locally useful theories of behavior—sticking a finger into each and trying to pull them into a coherent fist—appeals to me less now than it did before I saw how special-
Around the world with Joel Cohen: Pages from a diary

**Costa Rica.** Took "Fundamentals of Tropical Biology," an intensive graduate-level course in tropical ecology given by the Organization for Tropical Studies, Universidad de Costa Rica. Sponsored by nine U.S. graduate schools, the course consisted of lectures and field exercises in entomology, botany, ornithology, herpetology, and marine biology, and numberless adventures, in all parts of Costa Rica. Travel and tuition paid by U.S. National Science Foundation. (July 1-Aug. 29, 1965)

**Panama.** Barro Colorado Island: Learned about on-going research at a Smithsonian Institution field station in the middle of the Panama Canal. (Aug. 29-Sept. 2)

**Guatemala.** Guatemala City and Antigua: Saw a beautiful country waiting for revolution; the poor eye the rich and the police eye both, with submachine guns. (Sept. 4-5)

**United States.** Santa Monica, California: Toured System Development Corp.'s behavioral research division; learned from scientists there about the use of computers in studying behavior. (Sept. 17)


Washington, D.C.: Got last-minute shots, bought ticket. Finished reading E. Mayr’s *Animal Species and Evolution.* (Oct. 19-21)

In flight to Tokyo (Oct. 22-23)

**Japan.** Tokyo: Walked around the Imperial Gardens and took train to Nagoya. Discovered that outside of the big city there aren't any signs in English. (Oct. 24)

Inuyama (Aichi): At the Japan Monkey Centre, learned about research of the staff, toured collections, observed wild troops of Japanese macaques, spent a weekend visiting three islands of monkeys in Mikawa Bay. The rest of my time in Japan was spent with staff of the Monkey Centre. (Oct. 25-Nov. 1)

Kyoto: Visited J. Itani and staff of the Laboratory of Physical Anthropology of Kyoto University. Learned how scientists there use Japan's culture of shame to extract research funds from large industries, by showing them that their competitors have already coughed up. (Nov. 2-3)

Beppu and Takasakiyama (Kyushu): Observed macaque troops on the side of Mt. Takasaki. Sat Zen for a night and a day with monks in a Buddhist monastery on the side of the same mountain. (Nov. 4-7)

Ichiki Ishinami (fishing village, pop. 125, in Miyazaki prefecture) and Koshima (offshore island in the Pacific, pop. 3 people and 60 monkeys): Observed monkey troop with "pre-cultural" habits such as washing food, going swimming. (Nov. 8-11)

Inuyama: Revised "A Model of Simple Competition" a second time. (Nov. 12-17)

**Taiwan.** Taipei and Taichung: Received intensive introduction to Taiwan's family planning program, from both the Chinese (Rural Health Division, Taipei) and American (Population Council, Taichung) points of view. (Nov. 18-20)

**Hong Kong.** The world's largest, highest-priced, most socially inequitable junk shop. Went up to the New Territories opposite Red China and into the rice fields. Little kids came out of their huts and called me, in English, "four-eyes." Shattering. (Nov. 21-22)

**Vietnam.** Saigon: Interviewed scientists from nearly all departments of the Faculty of Science of the University of Saigon to learn the conditions under which they work. It's incredible that they can go on. Spent one wonderful evening accompanying flute sonatas with a Vietnamese professor of mathematics trained at Cal Tech. (Nov. 23-27)

**Thailand.** Bangkok: Attended conference on conservation and natural resources in southeast Asia. Was interested to learn that the main problem confronting conservation in southeast

---

The image provides a diary entry about Joel Cohen's travels and experiences, including his visits to various countries like Japan, Taiwan, Hong Kong, Vietnam, and Thailand, during the period from July to November 1965. The text describes his studies, interactions with locals, and observations about the cultures and environments he encountered. The excerpt highlights his experiences with wildlife, cultural practices, and scientific research, providing a detailed account of his journey and the insights he gained. The diary entry is marked with dates, locations, and descriptions of events, creating a vivid narrative of his adventures around the world. The inclusion of specific dates and locations allows for a clear understanding of the timeline and geographical scope of his travels. The entry captures the essence of his explorations, noting the contrasts between cultures, the challenges faced in obtaining research funding, and the personal experiences he documented throughout his journey. The text is rich with details, offering readers a glimpse into the world seen through Cohen's eyes during that transformative period. The diary, now a valuable historical document, serves as a testament to the nature of his travels and the insights gained from his interactions with different cultures and environments.
Asia is not war nor over-population, but poaching. (Nov. 28-Dec. 3)

INDIA. Calcutta: Stayed with an Indian family politically influential in West Bengal. Interviewed head of family planning program at the All India Institute of Hygiene and Public Health and visited field station in Calcutta slums (575 pop. per acre). Trapped rats from grain warehouses with an ecologist, J. J. Spillett, from Johns Hopkins University. Spent weekend 100 miles north of Calcutta, near Pakistan border, in village of Panighata. Visited computer laboratory of Indian Statistical Institute. (Dec. 8-15)

Bhubaneswar (Orissa): Visited temples; laboratory of the late J. B. S. Haldane; M.I.T. graduate student studying land allotment in city planning. Took day excursion to Puri. (Dec. 16-19)


Madras: Went to the zoo and the movies. (Jan. 4)

Vellore (Madras State): Interviewed 22 more businessmen for McClelland’s project. Climbed to two ancient forts on large hills outside Vellore. (Costs of interviewing and traveling in India paid by Carnegie Corporation of N.Y.) (Jan. 5-10)

Bangalore (Mysore State): Most beautiful city I saw in India. Wrote new preface to “A Model of Simple Competition” and bought too many souvenirs. (Jan. 11-13)

Hyderabad (Andhra Pradesh): Had good talks with scientists at Small Industry Extension Training Institute and National Institute for Community Development. Gave invited address to Andhra Pradesh Psychological Association meeting at Osmania University on “Ways to Change Behavior”; had a rousing discussion. (Jan. 14-18)

Delhi: Gave myself a walking tour of the new and old towns. Finished reading Gandhi’s autobiography. (Jan. 19-21)

Agra: Saw the Taj Mahal and related sights twice. My system reacted to this tourism by giving me its first uncomfortable case of diarrhea. With Spillett and a zoologist from Calcutta University, R. C. De, censused the blackbuck herd in the enclosure around Akbar’s tomb. (Jan. 22-28)

Bharatpur (Rajasthan): With Spillett and De, walked six to eight hours a day through the Keoladeo Ghana Sanctuary outside Bharatpur. We repeated a count of the big game animals which was made a year before, and found that the population of some species had dropped substantially. (Jan. 24-29)

Delhi: Visited director of Delhi zoo and head of the Reuters bureau. (Jan. 30-31)

Dhikala Forest Rest House, Corbett National Park, Uttar Pradesh: Saw tiger, elephant, and other big game in this park in the foothills of the Himalayas. Read Jim Corbett’s Man-Eaters of Kumaon, which describes the area; man-eating tigers are still there. With Spillett and De, wrote up results of Bharatpur survey. (Feb. 1-7)

Delhi: Took fifteen hours to travel the 180 miles from Corbett National Park to Delhi via lumber truck, bus, and train. (Feb. 8)

Gwalior (Madhya Pradesh): Celebrated my birthday in the company of a Radcliffe friend teaching English at Kamala Raja Girls’ College as a Fulbright fellow. Saw another side of Indian education. (Feb. 9-11)

Gwalior to Delhi to Bombay to Nairobi: a nightmare of unbroken travel and waiting, beginning with “But the 4:10 train always leaves at 5:25,” and leavened only by finishing Nabokov’s Lolita. (Feb. 12-13)


Tanzania. Olduvai Gorge: With Mrs. Leakey, an Israeli paleontologist, and a Hungarian archeologist, explored the most exciting place in the world for the history of man—a twenty-mile-long ditch full of stones and bones. Also saw Ngorongoro crater and game migrations on Serengeti plain. (Feb. 20-23)

KENYA. Limuru: At the Tigon Primates Research Centre, also under Dr. Leakey’s control, observed research on African monkeys. Learned primate anatomy from a lovely young British zoologist. Spent a day sailing on Lake Naivasha with her and a family of friends from Nairobi. Revised “A Model of Simple Competition” for the third time. (Feb. 24-Mar. 7)

Nairobi: Completed Nagel’s Structure of Science after five months of reading and digestion. Went bundubashing (chasing game cross country in a Land Rover) in the reserve behind Nairobi National Park. (Mar. 8-10)

ISRAEL. Herzlia and Kiron: Studied theoretical and experimental ecology at the Department of Zoology, Tel Aviv University, with a visiting ecologist from the University of Michigan, L. B. Slobodkin. With him and his family, visited a neolithic flint factory near Mt. Carmel; the editor of an Israeli literary magazine, kibbutzim; the old Roman cities of Apollonia and Caesarea; and Acre, Haifa, and Megiddo. During a day in Jerusalem, visited the School of Pharmacy of Hebrew University and Hadassah Hospital cancer research department. (Mar. 11-16)

Tel Aviv: With Slobodkin, set up and began experiments on behavioral and ecological stereotypy in chameleons; discussed current literature in theoretical ecology, visited applied mathematics department of Tel Aviv University to try to set up a mathematical curriculum for biologists. (Mar. 17-26)

Karen Shalom and Beer Sheba: Went on a field trip of second-year zoology students of Tel Aviv University. Spent the night at a military settlement in the elbow of the Gaza Strip. When, during a postprandial walk, I turned out not to know the password, the cute 18-year-old girls on patrol duty turned out not to be playing dolls. (Mar. 27-28)

Eilat and Nirim: Joined Slobodkin and an Israeli marine biologist from Tel Aviv to study species’ diversity of an offshore coral reef in the Red Sea. With a vacationing Air France stewardess, practiced French, skindiving.

(Continued on page 32)
and related skills. (Mar. 29-Apr. 1)

Tel Aviv: Celebrated Passover with an enormous Yemenite family. Ceremonies ended in a showing of Laurel and Hardy movies by the neighbors. Visited Tiberias and oil rigs in northern Israel. (Apr. 2-7)

Cyprus. Hitch-hiked a complete circle around the western half of Cyprus, traveling with Greeks, Turks, Britons, and Americans through Greek, Turkish, and United Nations gun emplacements; got four very different accounts of Cyprus. Visited Kolossi castle, Curium, Apollo's temple, and the spectacular Paphos mosaics; long Sunday morning swim in the Mediterranean. Finished Faulkner's *Sound and the Fury*. (Apr. 8-10)

Greece. Athens and Kalambaka: Went north and inland to the hanging monasteries of Meteora. In Athens, visited the American School of Classical Studies and the Parthenon. (Apr. 11-14)

Italy. Rome: Delightful tourism. Got trapped in a crowd and saw the Pope. (Apr. 15-17)

West Germany. Seewiesen über Starnberg (Oberbayern): At the Max Planck Institute for the Physiology of Behavior, observed research on balance in fish, migration in ducks, organs of smell in insects, taxonomy and reproductive behavior of tree shrews, and cycles of activity in birds, humans (who live for four weeks at a stretch in a huge underground compartment floating on mercury), and other animals. In the Mittelstaedt Division, over a period of several weeks, watched a beautiful analysis, experimental and theoretical, of how one male cricket's chirping excites another, by a brilliant young ethologist, Walter Heiligenberg. Had a long and exciting conversation with Konrad Lorenz on the origins of ethology. Read *The Red and the Black* by Stendhal and *The Evolution and Modification of Behavior* by Lorenz. Visited sister and family in Augsburg and the German Psychiatric Research Institute in Munich, from which I borrowed some interesting-looking data on the vocalizations of squirrel monkeys. (Apr. 24-May 17)

Munich: Visited Garmisch-Partenkirchen, Dachau concentration camp, and art museums. (May 18-19)

Austria. Vienna: Intensive cultural tourism and much Wiener schnitzel. Visited scientists at the Wilhelminenberg Biological Station. (May 20-23)

Czechoslovakia. Prague: Spent long twilight afternoons and evenings walking through the old city. Bought pounds of piano music for $1 and two oranges for the same price. Visited scientists at Charles University. (May 24-28)

Spurovo: Thought I could get a Hungarian visa on the train from Prague to Budapest, but the Hungarians thought otherwise. Spent the night in a Hungarian border police station. At 4 a.m., took a workmen's train to Komarno, walked across a bridge over the Danube with my luggage on my head, and got a visa at a Hungarian border station. (May 29)

Hungary. Budapest: Heard an unending series of concerts, operas, and ballets (saw Zoltan Kodaly at one) with Walter Heiligenberg and wife, who were visiting the Hungarian lawmakers, and with scientists I met while visiting at the University of Budapest. Also visited an analog and a digital computing center and made the acquaintance of the country's only psychometrician. (May 30-June 3)

Train from Budapest through Vienna to Munich, then plane to Geneva. (June 4-5)

Switzerland. Geneva: In the mornings, attended lectures and seminars of Jean Piaget and Barbara Inhelder at the Institute of Educational Sciences of the University of Geneva, as well as classes of assistants and visitors of the Institute. In the afternoons, visited as many as possible of the experiments in child psychology conducted in the Geneva public schools by members of the Institute. Discussed the clinical and scientific roles of "cognitive" psychology with a visiting Canadian child psychiatrist. Completed an analysis of the data on vocalizations of squirrel monkeys and reported it to Munich. Read *La genèse des structures logiques élémentaires* and *La psychologie de l'enfant* by Piaget and Inhelder and *Animals and Men* by David Katz. Visited world headquarters of the International Union for the Conservation of Nature in Morges, the cathedral in Lausanne, Byron's Château de Chillon, and the fifteenth-century chateau near Geneva of one of the assistants of the Institute. (June 6-26)

France. Paris: Museums, concerts, and days of walking, trying to digest all that had gone before. (June 27-July 8)

England. London: With some American psychologists, saw *Beyond the Fringe* (audience strictly American) and Coventry Cathedral. (June 9-10)

Cambridge: Lived in Churchill College, Cambridge, and worked at the Agricultural Research Council's Institute of Animal Physiology. With B. A. Baldwin, observed work on behavioral control of body temperature in pigs and mice, and, for the Director, R. D. Keynes, set up and began experiments (to be continued there) on the sensory modalities and shocking behavior of the electric eel, *Electrophorus electricus*. Attended Cambridge meetings of the Physiological Society and the Society for Experimental Psychology. Spent two weekends seeing sights of the surrounding countryside with Baldwin and family, three weekends sailing off Norfolk with Keynes and family. (July 11-Aug. 14)

Sittingbourne, Kent: Visited the family of the British zoologist I met in Kenya. (Aug. 15-16)

London: During the days, read galleys of "A Model of Simple Competition," scheduled for publication in March 1967. During the evenings, went to the theater with Harvard and Radcliffe friends. Finished *The Concept of Mind* by Gilbert Ryle. (Aug. 17-21)

Germany. Munich: At the invitation and expense of the German Psychiatric Research Institute, returned for a week to explain and test with more detailed data the theoretical model of squirrel monkey vocalizations I had proposed in Switzerland; assisted in the planning of further experiments. (Aug. 22-29)


Washington, D.C.: Home! (Sept. 1)
The CIA, the NSA, and the Harvard Undergraduate
Revelations that the CIA has been funding the national student group had some significant Harvard angles........................................... page 9

Breaking the Paper Barrier
Quincy House's intrepid paper-airplane builders do their bit to advance the frontiers of aerodynamic knowledge........................................... page 11

Winter Sports: Climactic Encounters
Harvard teams met traditional rivals and league leaders as their seasons drew toward a close ........................................................................ page 14

CB Warfare: The Terrors of the New Weaponry
Two leading biologists explain why so many scientists are opposing the development of chemical-biological weapons ........................................... page 16

An Ingres Gala at the Fogg
A photographic essay with feet in two centuries ........................................... page 20

This Year's Candidates
Names and faces of the 1967 nominees for Overseer and Director of the Associated Harvard Alumni ........................................... page 28

Alumni Notes .......... 32 College Pump .......... 30 Professor in Action .......... 8
Athletics ............... 14 Obituaries ............... 31 The Undergraduate ........... 14
Books ................. 4 The University ............. 7

Cover: A visitor from the Twentieth Century and Mlle. Reiset, of the Nineteenth, confronted each other at the opening of the Fogg Museum's current exhibition of works by J.-A.-D. Ingres.

Non-Tourist's Tour
To the Editor of the BULLETIN:
I read Mr. Cohen's cerebral travelogue (BULLETIN, February 11, page 16) with both admiration and dismay. The admiration stemmed not only from the magnitude of the author's intellectual attainments, but also from the evident seriousness with which Mr. Cohen undertook a journey lesser men might have considered a vacation from academia. The dismay flowed from the realization that the author, after a first-hand view of a world in chaos, had nevertheless retained his somewhat naive view that the great god Mathematics would someday reduce all the turmoil he had seen to a series of equations scribbled on a lifeless blackboard. Instead of becoming absorbed in the human drama being played out before him, it seems that Mr. Cohen recoiled instinctively from the life around him and returned to the comparative safety of Cambridge, more determined than ever to render human behavior predictable on paper, before attempt-
ing solutions to the problems it creates.

Mr. Cohen's malaise is no novel one. An intelligent, perceptive man, when confronted by a world of uncompromising disorder, naturally yearns to simplify it, systematize it, and "chalk it up" somewhere in graspable symbols, so that somehow he may partake of its essence, and mold it to desirable ends. Inevitably, however, the systematizer has been stymied by the incredible imperfections and follies of the human animal. Seemingly, the most successful dealers with human behavior have been those who, unlike Mr. Cohen, have accepted the frailties and idiosyncrasies of man as a given, and have striven to achieve finite results within the existing framework of human imperfection. Perhaps had Mr. Cohen used his travel time to gain insights into how best to live and work with those he met, or simply to learn to understand and appreciate their human limitations, everyone's money might have been better spent. Instead, he seems to view the world and its inhabitants as a laboratory stocked with guinea pigs. We can all be thankful that there remain on this earth biologists and behaviorists so "grossly undereducated" in mathematics that they can utilize it as a tool, not worship it as a god. We can also be thankful that these men will no doubt continue their useful, though finite, activities, and leave attempts at a "coherent" theory of human behavior to the more omnipotent likes of Mr. Cohen.

CHARLES R. CHESTER '66

New York City

Mr. Cohen replies: Mr. Chester carries on the venerable tradition of St. Augustine, who wrote: "The good Christian should beware of mathematicians and all those who make empty prophecies. The danger already exists that the mathematicians have made a covenant with the devil to darken the spirit and to confine man in the bonds of Hell." I for one sold my soul to the devil long ago and can hardly wait to trap Mr. Chester under the limits of a Lebesgue-Stieltjes integral, scribbled on a lifeless blackboard. Along with the guinea pigs. Turn my slide rule into a pretzel if all this isn't utter nonsense. Mr. Chester's dismay is nothing compared to mine that someone who has so recently completed a Harvard education still has not learned to read. Of the twelve sentences in Mr. Chester's letter, numbers 3, 4, and 10 are flatly false, as a reading of my article will reveal; 5, 6, 7, and 8 are generalizations for which Mr. Chester presents no evidence and with which I mostly disagree; 1, 9, 11, and 12 express opinions or wishes which are his business, though I happen not to share most of them; and the second I take as flattery, for which I am grateful.