Although Göttingen—with its university—has played a key role in the evolution of the Max Planck Society and its institutes, relationships between the university and the institute on the hill are currently in a state of strain. Max Planck, Otto Hahn, Werner Heisenberg, and other top German scientists came to Göttingen after World War II to recoup some of the momentum German science had lost during those cataclysmic years. The university was founded in 1734 by George II of England when Göttingen was part of the electorate of Hannover. Planck and his colleagues saw it and the town as an excellent backdrop for the formation of what they called the Max-Planck-Gesellschaft für Forderung der Wissenschaften. The new society would replace the old Kaiser-Wilhelm-Gesellschaft, many of its institutes deeply scarred by the physical and psychological wounds of the war.

The current strain between university and institute is illustrated by a "joke" which circulated through Göttingen after Manfred Eigen won the Nobel Prize. It must have been a mistake, the joke went, because Eigen was not a member of the university faculty at the time. He still isn't, except for an honorary appointment in the university's medical school. To become an active member of the faculty he would have to undergo the "habilitation" procedure traditional in German universities. It involves, in effect, preparation of another doctoral thesis, Nobel Prize or not, and for Eigen, who now makes little of the entire matter, it has never been worth the trouble involved.

Part of the tension arises from the fact that the university scientists feel underprivileged. They realize that the researchers on the hill have everything they need to carry out research projects which they are not required to justify. They, on the other hand, must limp along with inferior equipment and support, while teaching students in the process. A small number of graduate students *do* work for their degrees at the institute (which itself does not award degrees), but some of the students remark that the length of time it takes to get a Ph.D. can depend on whether relationships between the two institutions and their respective faculties are blowing hot or cold.

On the other hand, Klaus Weber, a German biochemist who came to the institute by way of Harvard, believes that the MPI's should and do carry out the kind of frontier research that the German university system is not capable of handling. Unlike American universities, where there might be a great center for molecular biology or physical chemistry, research in any given area is spread so thinly through the entire German university system that its quality is diluted. This has left such a dent on graduate education, says Weber, that whereas an American professor can expect to find about 15 excellent performers in a batch of 50, the proportion in German graduate schools is more like one in 50.

Amid the various political streams that sweep—albeit not very violently—around the white towers of the MPI for Biophysical Chemistry in Göttingen, research under way there increasingly reflects Eigen's original notion of melding physical and biological approaches to problems of mutual interest. Eigen himself is chiefly interested in how molecules have organized themselves into living organisms, and believes strongly that nucleotides—and not proteins—have the full potential for doing so.

Currently Eigen is using game theory, computers, and mathematical analysis to set up simple model systems for molecular self-organization that can be tested in the laboratory in cell-free systems. In that way he hopes to select and compress key elements of molecular translation processes—which are the product of millions of years of evolution—into a time span which can be handled in a researcher's life time. As he sees it, the ultimate translation system—the genetic code—is the optimized end product of a universal "hypercycling" system in which some self-reproductive molecules develop, survive, and interact, while others with no useful message to convey become extinct. Eigen believes that RNA viruses under study in his lab which rely on the enzymes of the cells they infect to achieve translation that leads to their own reproduction are analogous to the hypercycling systems, which through eons of trial and error, led to the genetic code.

Just how well the institute's various scientific groups interact and whether or not they are contributing, as originally intended, to the formation of a new discipline called biophysical chemistry, is still a subject of debate among the Göttingen scientists. Weller says the experiment hasn't worked as well as it should have, in that the different laboratories, for scientific and organizational reasons, are becoming highly specialized and growing away from each other. Otto Creutzfeldt, who preceded Weller as acting director, disagrees and says that cooperation among the labs is just about what it should be. Eigen is somewhere in the middle. After all, the institute is only 5 years old, he points out, and institutions, like people, cannot be expected to develop fully in that space of time. He believes that the emphasis on biology, which will grow even stronger when the occupants of the new tower arrive, will almost certainly help broaden and solidify contacts among the individual laboratories. He acknowledges that political pressures both inside and outside the Max Planck Institute for Biophysical Chemistry sometimes cloud the vision he dreamed of 10 years ago on the Sunday morning walk. But if the dream and reality do not yet reflect each other perfectly, he still believes in their ultimate congruence.—JOHN F. HENAHAN

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RECENT DEATHS

John L. Dunkle, Sr., 92; former president, Frostburg State College; 26 July.

Brooks F. Ellis, 78; retired chairman, geology department, New York University; 11 July.

Samuel P. Harbison, 67; former chairman of surgery, Medical School, University of Pittsburgh; 19 July.

Bernard Haverback, 50; professor of medicine, University of Southern California; 28 July.

Henry T. Hutchins, 59; director of environmental health, University of Maryland; 17 July.

Lloyd J. Jewett, 42; president, University of Maine, Augusta; 27 July.

Leonard S. Kogan, 57; professor of psychology, Graduate Center, City University of New York; 28 June.

Robert W. Long, 49; professor of botany, University of South Florida; 21 July.

Hazel B. Weakly, 64; professor of education, Drake University; 6 July.

Lavinia R. Wenger, 83; former chairman of education, Notre Dame College; 10 July.

Seymour Werthamer, 51; professor of pathology, Downstate Medical Center, State University of New York; 3 July.

Erratum: The cover legend of the 24 September 1976 issue should have read "The average length of the figurines is 13 centimeters." The measurement refers to the group and not to a single figurine.

Erratum: In a recent article on psychosurgery (*Science*, 15 October) we inadvertently referred to Senator J. Glenn Beall (R–Md.) as a "former" Senator. Beall is, in fact, a present member of the Senate. We regret the error.—B.J.C.

Erratum: In the Appointments column, 17 September, the listing for Edward C. Heath should read, chairman, biochemistry department, University of Pittsburgh School of Medicine, to chairman, biochemistry department, University of Iowa College of Medicine.