responsibility and efforts of the university community, is to make the same mistake that has been made in other Latin American universities and which can only contribute to their further degradation.

The challenge is to develop a university in which democracy, the needs of the majority, academic excellence and rigor in every-day tasks are all combined. The best legacy the Mexican university received from 1968 (the year of large-scale student protests) was the practice of criticism and of questioning a social process which was actually ushering in today's crisis. This was done not only on the basis of a youthful passion for freedom, but also through the imaginative and creative use of intelligence and the search for knowledge useful to society as a whole.

In order for the university to contribute to the nation's scientific and technological capacity (as part of a richer national culture and to further Mexico's possibilities to determine the path of its own development), these principles must be transmitted as part of a scientific practice aimed at improving people's welfare. This determines the democratic character of such a process. The great challenge of transforming the university must be linked to a scientific and cultural practice that permits us to develop our own capacity for generating knowledge and making it available to the population as a whole, both as a means for producing and appropriating wealth, as well as for assuring the constant critique of the use of science and culture.

As an additional factor in this challenge, I'd like to recall the words of Alfonso Reyes, relavant to the Univerisity's situation today: "I want leftists to take Latin because I see no sense in loosing previous conquests."... "Refrain from entering if you don't know geometry: Plato used to say of the Academy."[4]

Geometry and Latin are but two examples. Mathematics and the roots of our language, basic science and the humanities, transforming nature and philosophical speculation —along with our ties to the nation's problems— will all continue to be the tasks that nobody studying in our classrooms, involved in the University's daily life, should ever forget.

Arturo Azuela
Director of the School of Philosophy and Letters

[1] Ezequiel A. Chávez, *Obras IV*, UNAM, p. 8.

[2] Enrique Leff. "*Dependencia científico-tecnológica y desarrollo económico*". En González Casanova, P., y Florescano, E. *México hoy*. México, Siglo XXI, 1979, p. 276.

[3] Paul Ricoeur. "*Perspectivas de la Universidad contemporánea para 1980*". *Deslinde, cuadernos de cultura universitaria*. México, UNAM, Núm. 7, 1972, p. 7.

[4] Alfonso Reyes. *Universidad, política y pueblo*. México, UNAM/IPN, Textos de Humanidades, Colección Educadores Mexicanos, 1985, p. 43.

The challenge is to develop a University in which democracy, the needs of the majority, academic excellence and rigor in every-day tasks are all combined

students' parents.
February 10: University Council meets off-campus. Rector Carpizo proposes holding forums in all UNAM schools: holding a University Congress whose resolutions would be adopted by the University Council: and forming an organizing committee for said Congress, to be composed of staff, student, worker, University Council, and Rector's Office representatives. Council members propose suspension of Sept. 11-12 amendments. Both motions are passed.
February 12: In CEU campus-by-campus votes, 29 are against ending the strike, and 11 in favor.
February 15: CEU Plenary session decides to end strike. The CEU invites Rector's Office representatives to meet February 16 to discuss conditions for handing back campuses to University

University Research To Serve Society

For many years, I have been following closely the development of scientific research in the UNAM. Since the end of the fifties, when the first computer was installed at the University, till now, when any researcher who so desires has his or her own personal computer, I have been observing the vicissitudes of University science. During the sixties, there were only a few dozen scientists at the UNAM interested in doing serious work. Their discussions, carried on with praiseworthy conviction, took place in the context of an uncomprehending society, and even of an uncomprehending University. Then came the years of abundance, of suitable salaries,of major equipment purchases, floods of scientific visitors. Institutes and schools sprang up, the number of researchers increased; and by 1980 the UNAM had become, together with the Sao Paulo University in Brazil, the chief scientific center in Latin America.

During this quarter century, and in spite of the obvious progress made in university research, there is one question that has never ceased to trouble me: Whom does my scientific work serve? And if I obtain results from it, whom do they serve? I believe that this terrible question affects all who are doing, or trying to do, scientific work in the Third World. It is a problem that has nothing to do with the lack of funds or financial support, or with economic or technical problems. It is, rather, a deeply-felt emotion affecting all scientists working anywhere outside the great centers which dictate scientific fashions. It is, to a certain extent, a sense of guilt stimulated by government and academic authorities, by some of our students, by colleagues who lay claim to a social conscience, and even by our own family and friends: Who are you working for? Our researchers cannot produce a pat answer to this question, and end up becoming inefficient, losing interest in their work; in many cases, this feeling forces them to shift to other activities, and even to other countries.

In what follows, I would like to propose a

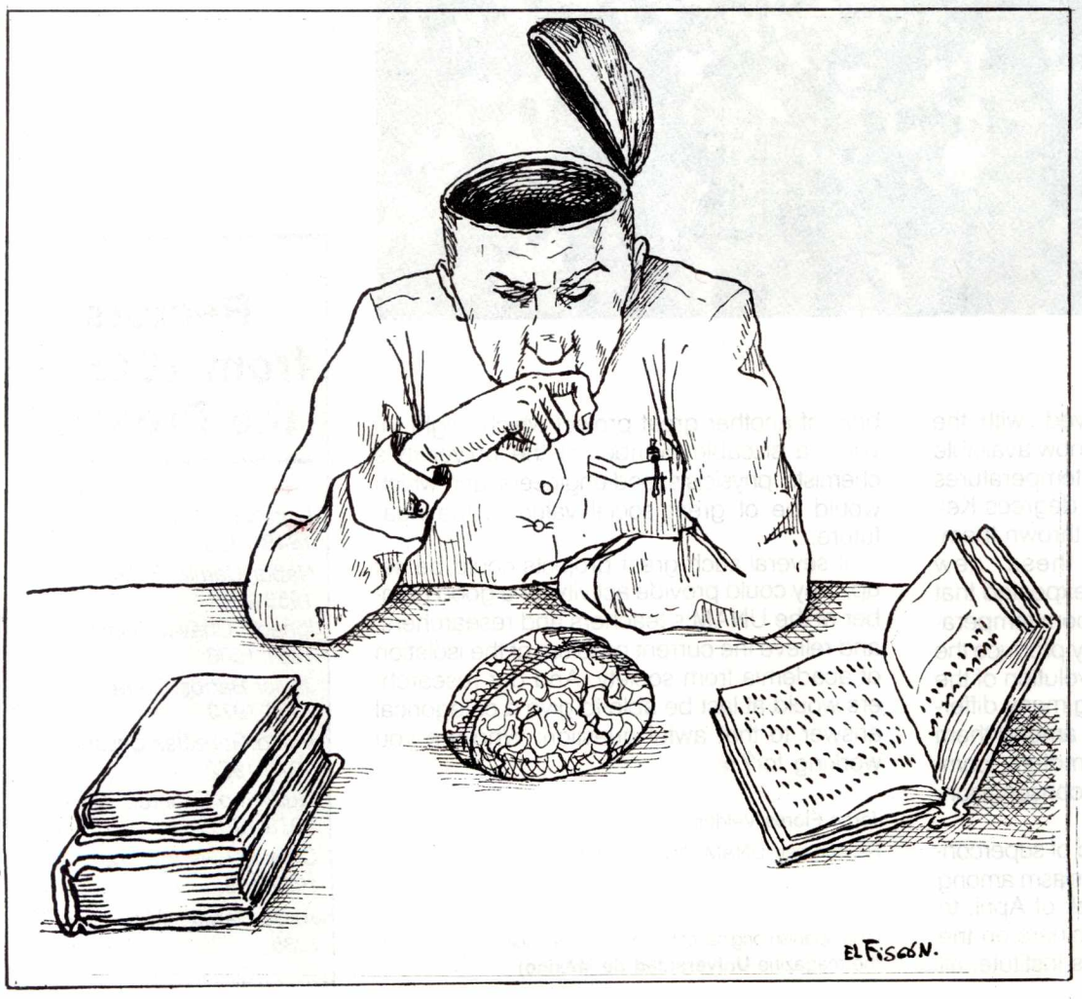
possible line of action which could, perhaps, offer an answer to these problems. My proposal is based on my own observations of how a good deal of scientific work is carried out in the industrialized countries. There, researchers are aware of the importance of their work and do not underestimate it. Nor, by the same token, do they make too much of it. They know themselves to be a part, a cog — usually a small one — in a big machine operating with more or less clearly defined objectives. They know of the existence of industry, eager for new technology, always willing to stimulate scientific research, even research in the most basic fields,apparently the farthest removed from applications which might yield prompt economic benefits. Therefore, even if only intuitively, scientists in the industrialized countries know who they work for.

How might UNAM researchers achieve a similar consciousness? What's needed is to define a complete research project, with clearly stated ends and means, and an evident potential beneficiary. Thus, a first step in the project would be to define and analyze a problem of particular —or perhaps unique — importance to Mexico, Mexico City, or Mexican society. The problem, of course, would have to be expressed in scientific terms, covering the whole research range from basic to applied, involving the development of new technologies, and the training of new researchers and professional people. As a spin-off, the project would serve to bring research and teaching closer together.

Given this precondition,the project referred to could not be a small one. It would have to be a GREAT PROJECT, requiring the participation of specialists from many different disciplines, the involvement of a large number of students, and, naturally, generous economic and administrative backing. Nevertheless, if the great project could be defined, none of this would prove a hindrance. If the project were to take on a problem concerning the whole of society, then it would have no trouble in attracting researchers, the best and most ambitious students, or public and private funding agencies to back it.

Examples of great projects abound. Mexico City, home to the UNAM, is located in a lake basin prone to earthquakes. A great university project on earthquake effects in the Valley of Mexico would involve engineers, physicists, mathematicians, geologists, sociologists and economists. The investigation could include a diversity of aspects: wave transmission in Mexico City's complicated subsoil; most suitable architectural designs; economic and social consequences of earthquakes; a historical study of effects of earthquakes in previous centuries. It would also be necessary to design new experimental equipment and formulate new mathematical models for the Valley of Mexico. Several different kinds of field work, especially in geology, would have to be carried out. The results and possible applications of the study would be of enormous interest to federal and local government, construction and

The new discoveries in the field of superconductivity have caused great enthusiasm among UNAM scientists



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authorities.

February 16: The Rector's Office agrees to four of the guarantees demanded by the CEU: no reprisals, extension of the academic year, formal handing-over of the campuses, and the assumption of responsibility by University authorities for material removed from campuses on the eve of the strike. Rector's Office rejects two other demands,refusing to accept permanent CEU occupation of premises taken over during the strike, or to declare null and void the off-campus classes given. A CEU Assembly votes, by 200 to 16, to accept the Rector's Office proposal.

February 17: At 12:30, the CEU returns campuses to University authorities. The ball is set in motion for holding the University Congress.

insurance companies, as well as to Mexico City dwellers in general.

Great projects in research and teaching might also be undertaken, when a favorable breakthrough in scientific or technological research occurs. One such current breakthrough is the discovery of high-temperature superconductors. Superconductors are materials which carry electrical current without resistance and can be used to generate intense magnetic fields. Until a few months ago, the transition to the superconductor phase had only been observed at very low temperatures. But just a few weeks ago, a marked rise in this critical temperature was achieved, with the result that ceramic materials are now available which are superconductors at temperatures above that of liquid nitrogen,77 degrees Kelvin. Many research teams have thrown themselves into the study of these new superconductors,and it is to be expected that before too long we might have room temperature ones. This would undoubtedly produce the most important technological revolution of the end of the 20th century, affecting many different aspects of our everyday life, among them telecommunications, transport, motors, computers, energy transmission and conservation, and the petroleum industry.

The new discoveries in the field of superconductivity have caused great enthusiasm among UNAM scientists. In the first week of April, to give just one indication, four seminars on the subject were given at the Physics Institute, all packed with a highly attentive public. And at present there are five or six teams working on superconductors, not only at the UNAM but also at the Autonomous University of Puebla and at the Advanced Research and Studies Center. The UNAM Materials Research Institute has already succeeded in producing superconductor ceramics. The reason for such intense activity here in Mexico is that there has never before been a scientific and technological development of such importance that could be taken advantage of by a country with an intermediate standard scientific infrastructre, such as Mexico's. Here we have, then, the embryo of another great project which might involve a sizeable number of the university's chemists, physicists, and engineers, and which would be of great social value in the near future.

If several such great projects could be set up, they could provide activity for a good number of the UNAM's teachers and researchers, and relieve the current problem of the isolation of academia from society. And our researchers would at last be able to give a categorical answer to that awful question: Who are you working for?★

Jorge Flores Valdés
Researcher, UNAM Physics Institute

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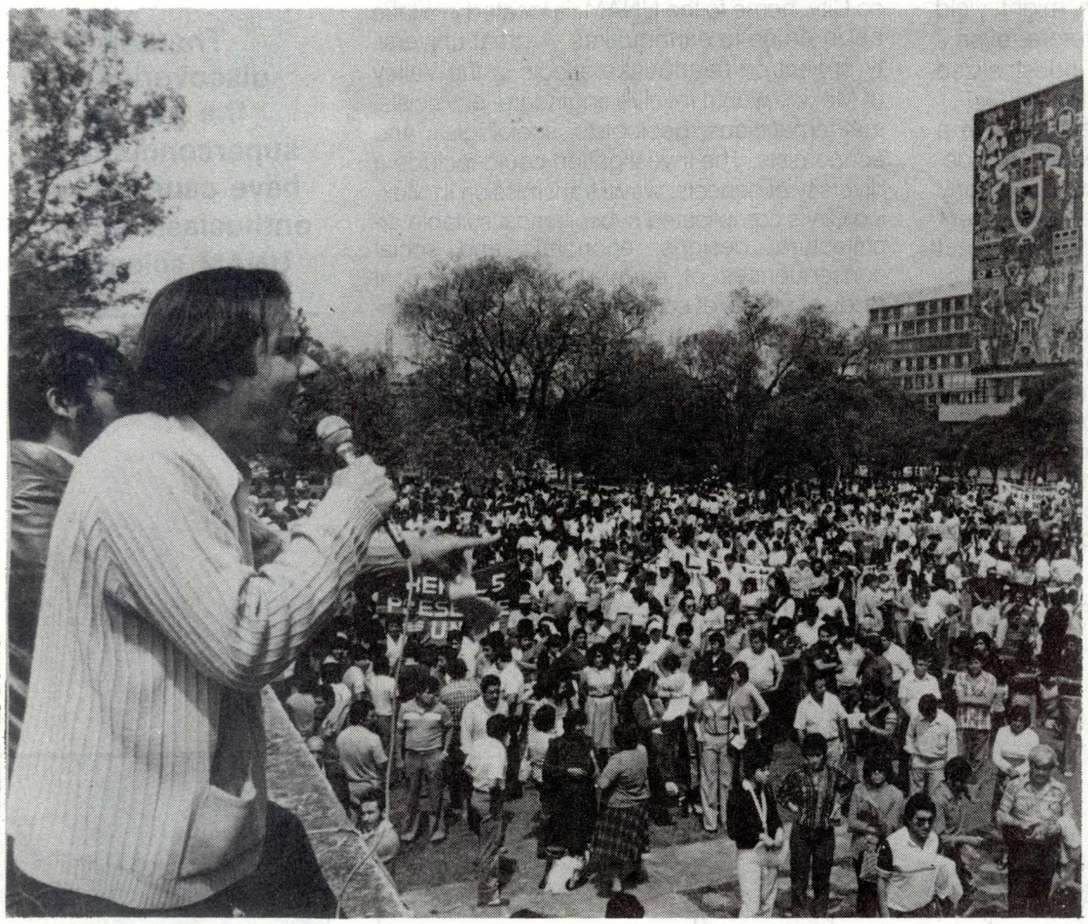

Photo from **unomásuno** archive.

STUNAM rally, University City.

Rectors from 1948 to the Present

Luis Garrido Díaz
1948-1953
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Pablo González Casanova
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Guillermo Soberón Acevedo
1973-1981
Octavio Rivero Serrano
1981-1985
Jorge Carpizo Mac Gregor
1985