will warn you now that this is yet another the-times-are-turbulentbut-filled-with-opportunity-forthe-bold essay. Such is also the message of Alvin Toffler's Third Wave, of John Naisbitt's impressively titled Megatrends, and of countless articles in Newsweek and the Sunday paper. Now your alumni magazine must take up the subject, and our excuse is this: You can strike some wonderful sparks in Louisiana with this topic.

For Louisiana is a state dominated by a few large institutions, chiefly government and the petrochemical industry. The opportunities, on the other hand, are outside institutionsopportunity is a result of innovation, and innovation is happening so quickly right now that it is outstripping the ability of large institutions to adapt to it. The jobs that are currently being created in the United States are being created by small, start-up businesses, not the Exxons and General Motors of

the world.

LSU graduates who took the traditional path to success thus find themselves part of a faltering establishment. As I write these words, engineers at Exxon are wondering who among them will be let go as part of that company's 26 percent cutback in capital spending; attorneys in south Louisiana are contemplating the dwindling number of offshore accident claims; and physicians in Baton Rouge are involved in an unseemly and unprecedented turf battle with their colleagues from New Orleans. Cruel to say, these professionals are in a situation not unlike that of the embattled labor unionists.

Meanwhile, as the third millenium approaches, we have available to us opportunities which were the stuff of

dreams for de Vinci, Pascal, Liebniz. Item: For \$10,000 you can buy all the hardware and software necessary to develop a complete "expert system, that is, an artificially-intelligent computer that incorporates the knowledge of a human expert. Are you an expert in some field, or do you know an expert? Now you have the means to package that expertise and multiply it a thousand-fold.

Item: A single five-inch laser disc, when used to store data rather than sound, can hold all the text and illustrations in the Encyclopedia Britannica three times over. Inexpensive playback devices are available as personal computer add-ons, and mastering services—companies who will take your data and create the master from which inexpensive laser disc copies can be

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Let a **Chousand Flowers** ossom

By Glenn Smith

COMMENTARY is presented in LSU Magazine as an open forum for free-expression. Manuscripts must address a contemporary issue of wide appeal and must be typed, double spaced and limited to 1000 words. Selection of manuscripts for publication is competitive. Return of unused manuscripts SASE only. Send to Commentary Selection Committee, LSU Magazine, Alumni Center, 54 University Lakeshore Drive, LSU, Baton Rouge, LA 70803. Opinions in Commentary do not necessarily represent those of the Louisiana State University System or its various branches, administrators or

mass produced—are beginning to spring up. Think of the possibilities! A single disc containing an entire college curriculum; a set of discs which constitutes a complete library for third-world villages; a disc of antique automobile service manuals for collectors; and so

Item: Because cellular telephone technology does not use cable, it will revolutionize telecommunications in developing countries. What an opportunity for Louisiana and LSU with our many ties to Latin America!

You do not have to have heavy technical credentials to take advantage of these marvels. The person who invented the 1-2-3 spreadsheet, Mitch Kapor, is a psychology major.

What is required is a willingness to forego the security of traditional paths. An excellent case in point is Bill Gates, who dropped out of Harvard in 1976 to answer the call of the microcomputer revolution. Last year the company of which he is chairman, Microsoft, grossed \$160 million.

Perhaps the hardest mental adjustment is to understand how profoundly our economy is being changed by the new technology. Most of the jobs being lost to automation on the farm and in the factory will not be replaced by jobs manufacturing robots. And it is not only blue-collar jobs that are being lost. For example, there is research currently underway at LSU on the semi-automatic generation of legal briefs. By the end of this century, artificial intelligence systems linked to huge data bases and teamed with human para-professionals will be able to provide most of the routine services of a physician, attorney, insurance agent, accountant or computer programmer.

Many of the new opportunities will therefore involve the creation of enterprises having some uniquely human component, that is, a component beyond the reach of automation. The coming years will be a golden age for the arts, the humanities and the social sciences—now elevated to the status of primary economic activities. If this sounds far-fetched, consider that one of the hottest American exports right now is the Disney Corporation—they have just finished building one of their theme parks in Japan and are starting another in France. Or consider the current popularity of the media stocks. As an extreme but instructive example, what about the Florida company that builds sand

castles?

"An economy built on flim-flam rather than solid manufacturing—no thanks" will be the reaction of some. But it is not so much our productive capacity that is the problem-American factories are running at far below capacity; rather, it is the failure of our economy to create meaningful new jobs. LSU

Glenn Smith is a computer programmer living in Baton Rouge. An LSU alum with a degree in English, Glenn' off-hours are spent working on a kinetic sculpture (picture here) whose movement will be set to music and controlled through the use of an array of mini-computers built into th sculpture itself.

