Now the drama took a turn toward the dull side. What might have been a scene of climactic confrontation between authors and critics was in fact quite a genteel affair, well out of the Huxley-Wilberforce league.

Perhaps it was the immense respectability of the setting—the Great Hall of the Smithsonian Institution's Victorian gothic castle, a room of baronial proportions decorated with tall Romanesque columns and glowering busts of Joseph Henry, Samuel Pierpont Langley, and the like. Perhaps the television cameras and klieg lights strung about the place had a moderating effect on some of the stronger feeling evident in private conversations among the audience of 250 or so. Or it may just have been the fact that nobody knew any more about the Meadows study than what *The Limits to Growth* told them, which wasn't much. And a good many apparently hadn't had a chance to read even that.

In any event, talk during the morning half of the symposium stuck to the study's implications for social policy, with hardly a question of its veracity.

For the benefit of those who hadn't yet seen the book Dennis Meadows summarized it, patiently explaining what exponential growth was, as opposed to the linear kind. He showed himself to be pleasant and reserved, even a little uncomfortable with the commotion that had been engineered around him. He insisted that he was not "antitechnology"—"but as long as we rely solely on technology for alleviating short-term problems we are heading for trouble"—nor do he and his group think of themselves as prophets of doom. He said this is because they are optimistic that society can make the necessary adjustments toward a steady-state economy.

Questions and answers followed: Senator Claiborne Pell, Democrat from Rhode Island, noted that, "You presume man is rational, but in our work he is emotional. How do you convert this into an action program?" Meadows replied that legislators were better equipped to answer that, but he presumed that science "can have rational inputs to man's behavior." Senator Pell then left for other business.

Indian ambassador L. K. Jha said he was concerned that, unless income were equalized between wealthy and poor nations, "poor nations would slide down to starvation" while the wealthy continued to sap their resources. Meadows said that he didn't think this would necessarily happen.

Philippe de Seynes, the United Nations undersecretary general for economic and social affairs, offered his "heartfelt congratulations" to Meadows and Peccei for their work. But, with a sidelong glance at the TV cameras, he said he was concerned about "the campaign we are facing from the mass media" and about the prospect that the study "might be put to the service of ideology." In an interview, de Seynes went on to say that important caveats in the study "do not clearly come across in the book . . . I already see these views affecting people at the UN. Some people fear that it may work to hinder their immediate goals of development."

HEW Secretary Elliot Richardson capped the morning session with some carefully hedged praise: The study was "too thoughtful, too thorough, too significant to ignore," even if it were not entirely correct; but there was a risk that regulation of growth might lead to "destruction of our liberty and freedom."

Noontime, and the scene dissolves to stage left where an impromptu news conference surrounds Meadows and Peccei like a rugby scrum. Meadows is asked, among other things, why his group hustled out a popular book before publishing any of the study in critical journals. He doesn't seem to like the question but he answers it anyway. "Journals take so long. You're talking about delays in publication, a lead time, of 12 months on up." A reporter suggests this is an exaggeration. Meadows replies that his group has been distributing between 300 and 500 copies of mimeographed technical papers each week recently, that about 20 individual papers will be published in journals, and that a 500-page technical report, detailing the study "equation by equation" will also be published.

Later, Meadows told *Science* that the idea of bringing out a popular book with a blast of publicity was mostly Peccei's idea, not his. "This isn't our mode of doing things. We want to sink back out of sight—we're not letting TV cameras in our laboratory." Also later, in a brief conversation, M.I.T.'s Carroll Wilson defended the book's early publication, saying that "so few will read the technical report and so many will read the book that it doesn't really matter."

The afternoon session was livelier, if darker. The TV crews had packed up their cameras and lights, leaving the Great Hall in a kind of monastic gloom.

NEWS & NOTES

● **NAL ACHIEVES 200 GEV**: Great rejoicing erupted at the National Accelerator Laboratory at 2:08 p.m. on 1 March, when the Atomic Energy Commission's mammoth new particle accelerator boosted a stream of protons to 200 Gev—the highest energy ever achieved by a man-made machine. Robert R. Wilson, director of the laboratory at Batavia, Illinois, has expressed confidence that energy levels of 400 to 500 Gev will be attained within a matter of weeks. Officials expect to achieve a sustained 200-Gev beam by July, the date scheduled for completion of construction.

● **AAAS-ZNANIYE EXCHANGE**: The AAAS has reached agreement with its Russian counterpart, Znaniye, to exchange four scientist lecturers each annually for the next 3 years. The scientists will talk both to their colleagues and to the public during their 10-day visits, giving emphasis to ways of improving public understanding of science.

● **FULBRIGHT-HAYS PROGRAM OPEN**: The National Academy of Sciences will accept applications this spring for senior Fulbright-Hays awards for lecturing and research during 1973–74. Positions are available in over 75 countries for scientists who are U.S. citizens and who have either a doctorate or college teaching experience. Awards cover travel and family maintenance allowance. Application deadline is 1 July. Requests for applications may be made to Senior Fulbright-Hays Program, 2101 Constitution Ave., Washington, D.C. 20418.

● **ARMENIANS TO STUDY IN PEACH STATE**: The University of Georgia, which has an advanced program in applied mathematics, has made an unusual arrangement with Soviet Armenia to host Soviet graduate students in the fields of mathematics, statistics, physics, engineering, and computer science. The agreement grew out of a meeting between Georgia mathematics professor George Adomian and scientists he met at a meeting in Armenia last fall. Eventually, Adomian hopes there will be half a dozen Soviet graduate students continually at the university and Georgia graduate students will be able to study in Armenia and at the U.S.S.R. Academy of Sciences.