

Academics Give New Government a Jolt

AMSTERDAM—Last week, the Netherlands' political parties finally formed a ruling coalition, 3 months after the general elections in May. Any hopes the new government may have had for a political honeymoon were, however, quickly dashed by Dutch academics: One of the government's first proposals—a reform of the Dutch university degree system—was met with howls of protest.

The plan would result in a system based on "bachelor's" and "master's" degrees similar to that used in Britain and the United States. The new government argues that this should make it easier for academics to move to jobs in the United States and Britain, and vice versa. But educationalists in the Netherlands view the changes as a cover for hefty cuts in government funding of higher education. The reason: Under the new system, students would reach master's level 18 months sooner than at present, thereby saving the government a considerable amount in student scholarships. "This is a very serious blow for higher education," says Pieter de Meijer, rector of the University of Amsterdam, about the proposed cuts.

The current system of degrees was introduced in 1982. In principle, Dutch students work for 4 years to obtain the "doctorandus" degree, roughly equivalent to the Anglo-Saxon master's. But in reality, they typically take five-and-a-half years to obtain a doctorandus, and they are eligible for scholarships for the first 5 years. (If the student's academic results fall below a certain level in any particular year, however, this grant is converted into a loan.)

The new coalition government now wants to replace the doctorandus with a 3-year bachelor's degree, after which only the best students would be allowed to go on to a 1- or 2-year master's degree. The proposed reforms would also change the student grants system by starting all students out with a loan, which could be converted into a grant if their academic results were above a certain level. No grants would be available for master's-degree students—they would either have to find their own funds or rely on loans. The government estimates that these changes would save 1 billion guilders (\$580 million) by 1998, and it is planning further cuts of 500 million guilders in the direct funding of universities.

Dutch universities, most of which have barely recovered from the structural reforms of 1982, have reacted angrily to the plans, maintaining that Anglo-Saxon degrees are not suited to the Dutch university system. "Undergraduate studies are much more intensive in England compared to what is usual

here, and then, of course, universities in Great Britain are so selective in accepting students at the onset," says de Meijer. (In the Netherlands, any student who graduates from high school has a right to attend a university.) Jan Veldhuis, president of Utrecht University, believes the government is looking in the wrong direction. "We should look to Scandinavia, France, and Germany; we represent a continental tradition where government plays an entirely different role in education."

Veldhuis, who contends that the main purpose of the proposal is to obscure the government's "disgraceful economizing" on education, doubts that the plan could be implemented before the year 2000. And the smoke screen, he adds, seems to be working: "The press has given quite a bit of attention to the proposed degree reforms but

much less to the financial onslaught on higher education," says Veldhuis. "Research will suffer, and that has not been mentioned in the proposals from the coalition," says de Meijer.

The educational reforms are mostly the brain child of Aad Nuis, the newly appointed deputy minister of education, culture, and science. He says that the plans have been under discussion for some time, but admits that their publication has come as a shock to educationalists. "We are bringing the discussion out into the open...now we are going to talk with the institutions of higher education." His boss, the minister for education, culture, and science, Jo Ritzen, may have a tough job on his hands, however. Dutch students' unions are already planning a wave of protests when the term starts in September.

—Alexander Hellemans

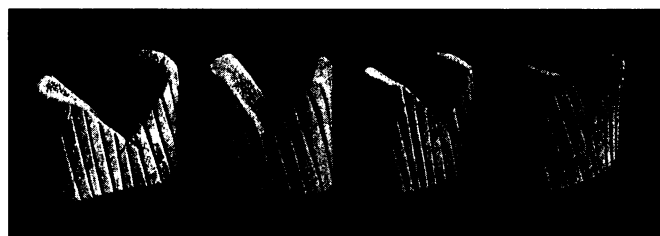
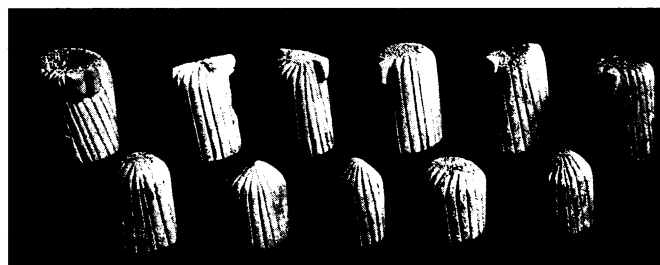
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ARCHAEOLOGY

Checkmate for Chess Historians

For the past 40 years, historians of chess have been troubled by a lingering controversy that threatened to overturn the accepted explanation for the origins of the game. Chess is widely believed to have been invented in the Orient in the sixth century and brought to Europe a few centuries later. But that established wisdom was thrown into doubt by a set of chess pieces that turned up in a third-century Roman grave at Venafrò in southern Italy. Now, to the relief of chess historians, the doubts have been put to rest: At the International Radiocarbon Conference in Glasgow, Scotland, last week, physicist Claudio Tuniz of the Australian Nuclear Science and Technology Organization announced that the controversial Venafrò chess pieces have been given a radiocarbon date-stamp of about the tenth century. How they came to be in a Roman grave remains a mystery, however.

The 18 carved pieces of animal bone were discovered in 1932 at Venafrò in a box with human remains and other items during excavations for a well. "Because enough [pieces] were found together, it was obvious that they were chess pieces," explains histo-



Pieces of the puzzle. Venafrò chess pieces, now dated to the tenth century. The pictures show what are believed to be three bishops, three knights, and five pawns (top), and four rooks (bottom).

rian Richard Eales of the University of Kent in the United Kingdom. Their importance was not recognized until 1939, however, when Italian archaeologist Olga Elia used them to support her conjecture that the game had first-century origins. She was backed by archaeologist Heinrich Fuhrmann, who believed that the Roman game "latrunculi" was in fact chess.

The chess community became aware of the issue in 1953, when chess historian Adriano Chicco pointed out in an academic paper that the pieces were similar to other seventh- and ninth-century pieces that were