

## Briefings

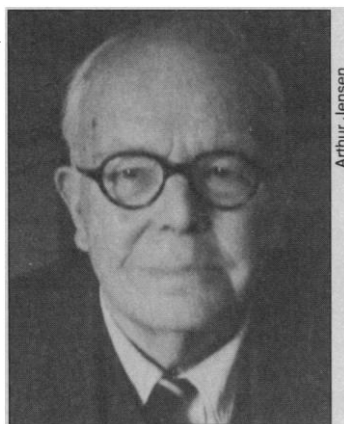
edited by CONSTANCE HOLDEN

### Rehabilitation for Burt?

Two British scholars—apparently unbeknownst to each other—have reassessed the famous “Burt scandal” and come up with a surprising conclusion: British psychologist Sir Cyril Burt, whose work on the genetics of IQ stirred fierce antagonism and, ultimately, allegations of fraud, may have gotten a bum rap.

Burt, who died in 1971 at the age of 88, was a pioneer in the use of twins to explore the heritability of IQ. In the mid-1970s, however, scholars began to question the authenticity of his data, and an exhaustive 1979 biography by Leslie Hearnshaw seemed to clinch the case that Burt had fabricated much of his work.

Now, however, two new books have entered the fray: *The Burt Affair*, by psychologist Robert B. Joynson of the University of Nottingham, and *Science, Ideology, and the Media: The Cyril Burt Scandal*, by sociologist Ronald Fletcher of Reading University. According to psychologist Arthur Jensen of the University of California at Berkeley, who has reviewed both works in a chapter for an upcoming book on research fraud, both scholars conclude that the



Arthur Jensen

### Unjustly condemned? Sir Cyril Burt.

evidence against Burt does not fully substantiate accusations of fraud.

Many of Hearnshaw's charges against Burt were based on second-hand information, the authors write, much of it from people opposed to Burt and his ideas. Furthermore, while Hearnshaw said all data reported by Burt after 1955 were fraudulent, the authors believe that the data had been collected earlier and mislaid during wartime moves. Much of Hearnshaw's credibility is based on his access to Burt's diaries, but Joynson and Fletcher found that the diaries add little to the picture.

Jensen, a Burt admirer who was among the first to raise questions about the psychologist's data (see *Science*, 26 November 1976, p. 916), says that although some people have always felt Burt was unjustly condemned, “I myself was quite convinced by Hearnshaw's biography.” Now he says he thinks Hearnshaw's

conclusions are open to “reasonable doubt.” Psychologist Robert Plomin of Pennsylvania State University also finds Joynson's argument “convincing.”

Not so, says Northeastern University psychology chairman Leon Kamin, a vocal critic not only of Burt, but of IQ heritability studies in general. Kamin admits that much of Joynson's work is sound, but says the author has postulated so many “plausible explanations” for anomalies in Burt's data that he “seems to stretch credulity beyond the point where a sensible person would want to go.”

Whatever the final verdict, Plomin notes, it will not matter for science since Burt's conclusions are in line with subsequent research. “The point,” he says, “is that a distinguished scientist may well have been unjustly condemned.”

### Science Money Woes in the U.S.S.R.

Academician Roald Sagdeev feels like a U.S. citizen these days. The former Soviet space program guru—turned Gorbachev arms control adviser, then elected member of the Congress of People's Deputies—now spends 80% of his time teaching at the University of Maryland. But he still worries about his homeland and, in particular, the sorry state of its science.

At a seminar at George Wash-

ington University last month, Sagdeev noted that top scientists are leaving the Soviet Union in droves, and predicted that those who stay “will become beggars.” The danger, he says, is that the central government will have no funds for anything besides national defense and essential bureaucratic functions once the restive republics get done stripping it of its powers. And the republics, faced with critical shortages, will be less than eager to divert funds from, say, food supplies to research.

Sagdeev believes the government will be forced to create a national research funding pool and to give each republic a vote in the allocation of science rubles. But he predicts that the result will be like Europe's space program, limited in size and fragmented by parochial interests. He illustrated the point with a parable about the European Space Agency. One day, he said, delegates were debating the funding of an advanced meteorological capability when “the Spanish delegate got up and said, ‘We won't vote for it: the weather in Spain is always fine.’ Then the Dutch delegate rose: ‘We won't either, because the weather in Holland is always terrible.’” The result of this “democracy,” according to Sagdeev, is a European space budget that is an order of magnitude smaller than the U.S. budget. That's exactly what he fears for the U.S.S.R.

### NASA's Wish List

Having successfully launched three shuttles in a row since October, NASA's confidence is running high. Just how high can be seen in the agency's new shuttle manifest, released last month. The agency plans to launch 7 flights this year, 8 flights in 1992, and 12 in 1993. The fleet will be bolstered by the addition of the new orbiter Endeavor, scheduled to fly in May 1992. Is this schedule realistic? Thanks to persistent hydrogen leaks that grounded the fleet last summer, NASA launched only six shuttles last year.

#### 1991 FLIGHT SCHEDULE FOR NASA SHUTTLES

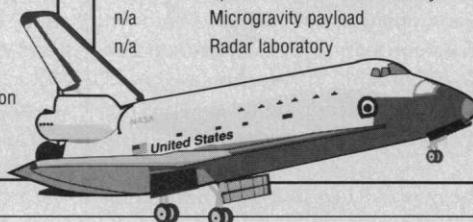
March	SDI experiments, cloud studies
April	Gamma Ray Observatory
May	Space Life Sciences Laboratory
July	Tracking and Data Relay satellite
August	Classified defense mission
November	Upper Atmosphere Research Satellite
December	International Microgravity Laboratory

#### 1992 FLIGHT SCHEDULE

March	Tethered satellite, retrievable carrier
April	Atmospheric laboratory
May	Intelsat
June	Microgravity laboratory
August	Communications satellite
September	NASA/Japanese Spacelab mission
October	Geodynamics satellite
November	Classified defense mission

#### 1993 FLIGHT SCHEDULE

January	Spacehab
February	German Spacelab mission
March	Materials processing facility
May	Atmospheric laboratory
May	Tracking and Data Relay satellite
June	Second flight of Spacehab
July	Hubble Space Telescope visit
September	Space Station thermal tests
September	Laser-sensor atmospheric experiments
n/a	Space Life Sciences laboratory
n/a	Microgravity payload
n/a	Radar laboratory



\* n/a = not available