

so common that we forget about the good old days of manual information processing as we sat interminably in a drafty airport lounge trying to find out whether a seat on a desired flight was open. Paradoxically, these words were written before the strike and today's weather.

R. GALLAGHER. I don't think this will be needed any more.

R. BARAN. Right. This paragraph is inappropriate.

RECORDKEEPING

Simple recordkeeping, a mark of a highly developed economy, has been a prime area of development of these large computer file/communications systems. Much routine clerical work has been transferred to computers interrogated by humans. More people will have access to these systems at even greater distances from the computers.

SOME INDIVIDUALLY USEFUL SYSTEMS

Today we see time-shared file systems used to store insurance records. In a fraction of a minute it is possible for a clerk in another part of the country to check to see if one insurance renewal check has arrived.

To date such systems seem to pose no overt social problem. The information handled is not highly sensitive, and access is generally limited. But as new uses are being found for time-shared computers, a subtle change is beginning to take place.

In New York State, experiments are underway with a new criminal information record system. A police car uses radio to transmit automobile license tags into a central computer. If there is an outstanding warrant, the information comes back so quickly that a second police car located slightly ahead is able to stop the suspect. Preliminary tests have shown the system to be highly effective. We are all familiar with credit-check systems which use our driver's license numbers when cashing checks. This system is so fast that bad-check artists have been caught redhanded.

Seemingly such systems make a socially useful contribution. But let us look into the future and consider what their uncontrolled proliferation could mean.

THE TRAIL OF RECORDS IN A CIVILIZED LIFE

As we pass through life we leave a trail of records, widely dispersed and generally inaccessible—except with a great deal of effort and diligence.

Beginning with a birth certificate, we continue to accumulate hospital and medical records. We become deductions on our parents' income tax. In school we generate records of our grades, attendance, IQ tests, personality profiles, et cetera. Automated teaching will add to this recordkeeping. The volume of data recorded per child may be expected to increase even more markedly. After school we start accumulating employment, social security, and selective service records. We may get a driver's license. Most of us will apply for marriage licenses, and some will collect divorce decrees which will end in voluminous court records. If we are lucky, we will be