Automation: BLESSING OR CURSE?

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A "SECOND INDUSTRIAL REVOLUTION" is transforming America. Automation, the harnessing of electronic brains to mechanical muscles, is completely altering the pattern of U. S. mass production. So fantastic are the possibilities for automatic-robot-factories that many people now visualize acres and acres of factory and office space filled with huge clattering machines but without a single worker, with the exception of maintenance personnel.

Already, automation — machines regulating machines — is being used to refine oil, make artillery shells, assemble TV sets, bake cakes, process chemicals, generate electric power, mail out insurance bills, put through transatlantic phone calls and build automobile engines.

The essence of the automation technique is the so-called "feedback" principle. The same idea is embodied in the thermostat which automatically regulates the heat in your house. As soon as it receives an indication that the temperature in your home is reaching say 70 degrees, the thermostat may turn the furnace off; or it turns it on when the temperature falls below a critical point. This same self-correcting technique occurs in automation, except that instead of just one factor — temperature — dozens or hundreds of factors are controlled by the complex electronic brain. Once you give the brain its instructions through a punch-card or a recording tape, it will carry them out — regulating all sorts of small or great machines — with super-human precision.

Now, what does this Second Industrial Revolution actually signify? Already the air is filled with strong claims and counterclaims concerning the advantages and disadvantages of automation. Here is a summary of the principal arguments being used on both sides of the case, as compiled from leading protagonists.

Pro

AUTOMATION WILL BE A BLESSING FOR AMERICA

1. There is no justification for fear of further mechanization. Past similar fears have been both futile and absurd. Nearly three centuries ago, an inventor in Danzig built a loom that could weave six webs at once. Frightened workers seized the hapless inventor and drowned him in a nearby creek. Later, in the Industrial Revolution in England, mobs of angry workers broke up mills and tried to destroy the machinery which they thought would make them jobless. In modern times, however, we have learned that these fears are foolish and that far from being afraid of new machinery, workers should welcome it as a boon to higher productivity and higher wages.

2. Labor leaders themselves have, in their franker moments, pointed out that new machinery is not to be feared. Not long before his death, Phillip Murray, President of the CIO, addressing its convention, said: "I do not know of a single, solitary instance where a great technological gain has taken place in the United States of America that it has actually thrown people out of work. I do not know of it — I am not aware of it — because the industrial revolution that has taken place in the United States in the past 25 years has brought into the employment field an additional 20 million people."

3. The whole inspiring history of America proves that it is in our most highly mechanized industries that there has come the greatest increase in new jobs. Thus, few industries are more highly mechanized than the automobile industry. And yet between the last pre-war year and the latest post-war year, there has been almost a doubling in auto jobs — now a little under a million in all. Moreover, as jobs have increased, the availability of low-priced autos themselves has increased. There are now more than 55 million cars, trucks and buses. And the annual replacement market alone is five million vehicles a year. Why? Because mass production has permitted high quality and low cost. Yet if we tried to build an auto today by 1908 hand methods, it would cost not $3,000 but $100,000. Why? Hand operations are infinitely more expensive than assembly-line operations.

4. Automation basically means greater productivity and larger volume of American goods.

This requires more advertising, better public relations and more effective salesmanship in order to

create mass public demand. Thus, with mass production, new jobs develop in mass distribution and sales, and industry is in an ever stronger position to sell more and more inexpensive TV sets, radios, refrigerators, air-conditioners, washing machines, nylons and just about everything else capable of mass consumption.

5. Automation will relieve the drudgery of menial chores. It will enable men to use their God-given brains to develop machines which will save man for skilled intelligent tasks rather than for mere animal-like muscle power. It will mean that there will be fewer and fewer menial workers — wheelbarrow pushers and the like. This trend toward higher skills is completely in line with the long-term trend in America. Back in 1910, 36 percent of our labor force was unskilled. But three decades later, only 20 percent of our workers were unskilled.

Dr. W. R. G. Baker, a General Electric vice-president, estimates that, in 1880, mechanical power supplied 17 percent of the work energy in this country. And there were only 17 million jobs. In 1954, mechanical power supplied 95 percent of the work energy, and there were 62 million jobs. In other words, the more mechanical power, the more jobs.

In any event, we are going to need a more and more educated working force. College degrees will become absolute necessities in order to manage the complicated machinery of industry. For example, electricians are going to have to learn electronics, and pipe-fitters will have to learn hydraulics — if they want to keep in step with science.

6. Automation may be the difference between life and death for our country. The technological superiority of America is one of the crucial superiorities that we enjoy over International Communism. If the effort to mechanize industry were to be slowed down in the slightest, the result could be a weakening of our defense system and the inability to produce the advanced weapons which we urgently need to survive.

7. The charge by some labor leaders that industry does not share the fruits of labor's increased productivity is false. A study over a 33-year period by Allen W. Rucker showed that the output of workers and machines in U. S. manufacturing increased by 161 percent. The real wages of the men, measured in terms of purchasing power, increased by practically as much — 157 percent. Yet, the relative prices of manufactured products, measured in terms of hourly wages, declined 61 percent. Thus, workers have been treated completely fairly by management, as productivity has increased. And more and more new enterprises have appeared, small businesses playing an indispensable role in our economy.

8. Automation is coming; it is here, whether anybody likes it or not. Congress couldn't stop it by legislation even if it wanted to. And labor can't stop it by strikes even if it wants to. The question is not, therefore, "Shall we permit automation," but "Shall we work together in order to achieve the best possible results under it?"

9. Fear of automation is being engendered by some quarters in America which are fundamentally hostile to our free enterprise system. These quarters want to stir up wild, irrational fears of a depression, thus wittingly or unwittingly risking depression. They want to use automation as an excuse for new government controls, for socialist-like "planning," for more government intervention into our free economy. We should not allow such sources to interfere with our free enterprise system on the basis of this or any other lame excuse. Let the natural laws of supply and demand continue to operate in the public interest, as they have in the past.

Con

AUTOMATION MAY BE A CURSE

1. The old-time fears about mechanization may have been unjustified, but realistic new fears are sound. Americans should not forget the mass unemployment of the 1930's when there wasn't a sufficient market for our huge production.

So the questions now are: Will there be sufficient market for the massive output under automation? And how can workers buy the new products if they, themselves, have been displaced from jobs by machines?

2. Labor states that it has been misrepresented as regards its alleged opposition to automation. Walter P. Reuther, President of the International UAW-CIO, says: "We welcome automation, technological progress and the promise of peacetime use of the atom."

He points out, however, that "automation must be met sanely and constructively so that the miracles of mass production and the ever greater economic abundance made possible by automation can find expression in the lives of people through improved economic security and a fuller share of happiness and human dignity."

3. Labor states that it is unwise to believe that the industries which are eliminating jobs through automation will require the same workers for other purposes. Albert J. Hayes, President of the International Asso-

ciation of Machinists, comments: "It is sheer folly to think that plants and industries that turn to automation are going to absorb the workers that are displaced. They're not. We must begin now to plan for the coming adjustment to keep the economy in balance, for if unemployment, which stands at 4 million in 1955, is upped to 12 or 15 million by 1965, then it defeats the whole purpose and the wonderful advantages that can be gained through automation."

4. Labor states that we have only begun to see the massive unemployment which it fears may result from automation. Right now, the steel industry is turning out a third more steel than it did a year ago. But the number of its workers is the same. This is also true of the automobile industry. On an over-all basis, for every man-hour of human labor, the average factory is now turning out seven percent more than it did a year ago. Greater output with fewer workers is the trend almost everywhere. This increases job insecurity and tends, labor feels, to cast a cloud over collective bargaining.

5. Labor leaders stress that automation makes essential comprehensive national plans to prevent loss of breadwinners' purchasing power when they are displaced from jobs. They deny that our economy will adjust itself.

Labor, in effect, doubts that there will be any self-balancing mechanism under which the same number of workers who are displaced from old industries will be hired by new industries. On the contrary, labor feels that there will be a tendency for only a small fraction of the workers to be rehired in new industries, with considerable numbers left to walk the streets with no job opportunities available.

6. Labor leaders have expressed the fear that automation itself is not the danger; but, rather, an alleged resulting concentration of economic power in a few industrial hands.

James B. Carey, President of the CIO Electrical Workers (whose 400,000 members produced the very automatic machinery that is making automation possible) says that automation "could be a boon and a blessing of the first magnitude." Conversely, he makes this criticism: "Automation, in the hands of narrow, greedy individuals could create such a terrible dislocation with widespread unemployment on the one hand and a tremendous piling up of profits on the other that our institutions could be thrown into serious danger."

Other CIO spokesmen also charge there is a tendency for more and more profits to concentrate in the hands of a few big corporations, with less and less purchasing power for the American people as a whole.

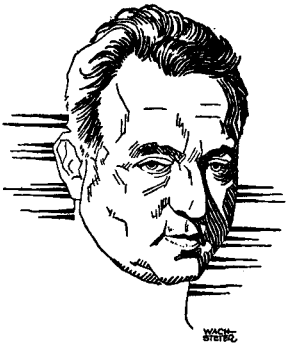
A *CIO News* editorial recently said: "Our concern is for the whole free society — for the communities which could become ghost towns, for the merchants who depend on employed workers to buy their products, for industry which must not only produce but sell, if it is to be prosperous."

Labor heatedly denies that its gloomy predictions represent "scaremongering" or "professional pessimism." It says it is simply looking ahead, "realistically." It says that the "economic handwriting is already on the wall" and that it should be read carefully rather than be ignored.

7. Many experts estimate that while long-range results may prove good, short-range results of automation will be harmful. Thus, Dr. Walter S. Buckingham, Associate Professor of Industrial Management at the Georgia Institute of Technology, says: "The short-run specific problems of expensive geographical movement, loss of seniority, obsolescence of skills, and so on, may be acute. Therefore, there may arise a more urgent need to reduce fractional unemployment (temporary idleness where a worker is between jobs, rather than general unemployment) and provide guarantees against general unemployment."

8. Even automation's defenders have voiced some concern. President Eisenhower has stated that he sees nothing but good stemming from automation. But he has instructed his economic advisers to keep an eye on the situation. If they decide that there are things to worry about, he has committed himself to the establishment of a Presidential commission to advise on means of smoothing out the rough spots.

9. Labor is offering a program to counteract the alleged disadvantages of automation. Albert Hayes says: "Our first goal is the shorter work week, preferably the 35-hour week to start with. In this way some of the workers who would normally be displaced would be able to continue working. We also favor longer vacations, penalty time, and for many industries the guaranteed annual wage." Meanwhile, Senator Joseph C. O'Mahoney, Democrat of Wyoming, told a Washington conference on automation, sponsored by the CIO, that the push-button revolution "could easily become stronger than government itself." He said that the Senate-House Joint Committee on the Economic Report plans a study to find what the government should do "to make certain that automation will be a stabilizing and not a disturbing element in the national economy."



OUR EUROPEAN CRITICS

By Eugene Lyons

THE ORDINARY American is amused or angered, depending on his disposition, by the now familiar spectacle of Europeans shaking their heads sadly over the supposed horrors of America's harshness toward Communists.

That continent has been so tragically rotted by Communism that it scarcely rates a license to instruct this country on how best to deal with Communist spies, agents and sympathizers. It's rather like a chronic bankrupt presuming to lecture his solvent neighbors on how to run their business.

The spectacle is especially ironical or outrageous when the lecturer, however well intentioned, happens to be a Frenchman. For, with the possible exception of Italy, France is the European nation most deeply penetrated and corroded by Red **rust.**

The French Communist Party is vast, holding a balance-of-power whip over government. It rules a whole empire of organizations and institutions under its control, and enjoys the noisy backing of an influential portion of the intellectual community. Know-nothing tolerance of Communists is so widespread that an avowed member of the Party could remain for years at the head of French atomic research.

But the Kremlin, not content with this immense open power in France, supplements it with the usual conspiratorial setup on an unusually large scale. Last year, there were disclosures that military plans discussed in confidence only at the highest level were known to the Communists — and therefore to Moscow — within hours. Even complacent France was shocked by the scandal, but it was quickly hushed up and the known culprits have not been molested. The case was far from exceptional. It is common knowledge that all branches of government, including the military and police, are crawling with Red agents.

A French writer must therefore be singularly lacking in a sense of