



Abba Hillel Silver Collection Digitization Project

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MS-4787: Abba Hillel Silver Papers, 1902-1989.

Series IV: Sermons, 1914-1963, undated.

Reel
152

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54

Folder
352

Machine-made men, 1929.

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"MACHINE MADE MEN."

RABBI ABBA HILLEL SILVER.

THE TEMPLE, SUNDAY MORNING,

DECEMBER 8, 1929, CLEVELAND.

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Back of the very intriguing play of Karel Capek's called "R.U.R." are two basic ideas,--one is the fear of the machine, and the other is the eternal mystery of creating life. This mystery, how to create life, has intrigued the mind of man since the beginning of time. The medieval alchemist tried to find the answer in his retorts and vials, his alembics; the modern chemist tries to find it in his test tubes.

In the olden days men employed magic, kabbala and mystic numbers and numerals to create this elusive thing called life, and today scientists are attempting to do the self-same thing through experimentation in the combination of chemicals. In all liklihood the modern scientist, as well as the ancient alchemist, are bent upon a futile task. And yet man is constantly tantalized by the problem. He carries within himself life; he is able to transmit life; he can destroy life in any particular living being, but he cannot create it.

Somehow this secret was denied him. The ancients, in their quaint way, expressed this thought in a legend,--the legend of the lost Paradise. You will recall that the first man and the first woman were driven from the Garden of Eden not because they ate of the tree of knowledge, but because, having eaten of the tree of knowledge, they may then presume to eat of the tree of life.

"We will eat and live forever." And lest that should happen, Adam and Eve were expelled from Paradise.

But man's curiosity, man's intellectual curiosity is indefeasible; in every age by every device and means accessible to man he sought to penetrate this mystery: how to create life. And of course before very long the legend arose that this wise man or that wise man actually succeeded in discovering the formula in creating life, and actually created life; but, unfortunately, for one reason or another, because of some accident or some oversight, the formula was lost again,-- and there we are.

Around many of the great men of antiquity the legends revolve that they were enchanter and could create life, could vitalize dead matter. The great poet Virgil was far famed through the Middle Ages as the one who succeeded by some occult power to introduce life into statues, to make those statues, those images do his bidding. Our Jewish legendary literature is particularly rich in that sort of thing. The great Hebrew poet Solomon ibn Gabirol, of Spain, was credited with having created a maid servant, a house-keeper for himself to do his work,--a clay image into which he introduced the spark of life. A rabbi of the sixteenth century by the name of Elijah . . . through the mystery of the combination of letters, was able to create a monstrous clay image,

and by introducing into its forehead the ineffable name
" ", was able to bring this clay image to life; and
that image did everything which Rabbi Elijah commanded it
to do. The grandson of this Rabbi Elijah, a very famous
rabbinic scholar,-- . . . was so convinced that such
images could be produced and brought to life, that in one
of his responsi, in one of his legalistic discussions,
he discourses at great length whether such images could
be counted in to make up a minion..

The most famous of these mechanical men
created, known in Hebrew as the Golem,--Golem meaning a
clay image brought to life through some kabbalistic
device,--the most famous of these is that created by
. . . . who lived towards the close of the sixteenth
century in Prague. He was a great student of Kabbala,
and hit upon this tremendous secret of how to vitalize
matter. He created this image which worked six days in
the week, and the Rabbi painted out on the forehead the
ineffable name written on his forehead and the image would
collapse again and rest over the Sabbath. And Rabbi . . .
is said to have employed this Golem to defend the Jew during
a threatened massacre.

Another rabbi, who lived in Russia towards
the close of the eighteenth century, that of the Rabbi
. . . , had a Golem that wasn't put to the best use.
Instead of resting on the Sabbath, this rabbi wanted a

" " , so he created this image to which he gave instructions on Friday, and this Golem, being a Golem, carried out the instructions on Saturday,--kindled the fire, heated the house, but, unfortunately, the instructions one Friday were not specific enough, and, the legend says, the Golem burned the whole town down.

Well, there you have a bit of the story of these Franksteins. In literature R.U.R. is only the latest of a whole series of books and plays and poems which use this rather fascinating and intriguing subject of a creative being as the theme. Strange to say, in this scientific era of ours, scientists actually succeeded in creating a Golem. A certain Mr. Wenzley, of the Westinghouse Electric Company, recently exhibited his Golem. He called it the televox, an instrument which looks like a human being, fashioned like a human being, which is controlled by sound waves. The image reacts differently to differently pitched sounds, and through a combination of these sounds you get quite a variety of responses from this mechanical man; and you can control the man, this televox, through the telephone, even if you are a thousand miles away from the image. He will rise and sit down, lift and carry and speak, and do many other things that we humans are supposed to have an exclusive monopoly on.

A certain Captain Richards of London

created another Golem called the "Eric." This Golem is controlled through electromagnetic devices. Electric flashes are sent to the image and the image does what the sender directs him to do. A certain Mr. Sperry not long ago created an automatic pilot. He called it "Metal Mike," and this pilot guides ships so accurately that men have come to prefer it to a human pilot.

And so the modern scientist is emulating the example of the mechanical work of robots of the Middle Ages, and while televox and Eric and Metal Mike will never never be counted in with a minion, they are still indications of what marvelous things man can produce by his ingenuity and by his will power. And I see in all this a real grandeur. I am not one of those who is terrified by machinery, and who believes that the machine will ultimately destroy the human race. I think one gets a real exaltation of spirit from contemplating the past and seeing how man steadily and progressively won mastery over matter and harnessed the forces of nature to do his bidding.

Not long ago I read where a New York electric company was building for a California power company a turbine generator which would develop twice the muscle power possessed by all the slaves who lived in the United States before the Civil War. Now think what that means in terms of human values: Think what that means in

terms of removing the curse of drudgery from the shoulders of labor,--one machine developing twice the muscle power possessed by all the slaves who lived in this country before the Civil War!

Man has learned how to overcome the limitation of his body and of his senses. Beyond a certain range he could not see, and he was hemmed in; and so he developed his telescope. He developed machinery to enhance his capacity for seeing. Beyond a certain radius man could not hear. Nature endowed him with a very limited hearing apparatus, and so man devised machinery which now brings him sound from the furthestmost ends of the earth. Man could speak and his voice would be heard only a short distance; beyond that it was lost; and so man developed machinery which now carries his voice to the stars, if you will. Man could move only a certain distance, and if he ran he would tire after a while, exhausted; and so man developed machinery,--swift methods of locomotion which now hurtle in space. He can now fly where heretofore he walked slowly and laborously.

Man has extended himself, increased himself, magnified himself in a thousand ways through his machinery. He now has machines to plow for him and sow for him and reap for him and bake for him; machinery to heat, light, clean, wash, cook; machinery to mine, dig, build, haul and hoist; machinery to write and calculate, to weigh, to

measure. It is amazing to contemplate how many tasks, which for a million years and more man had to perform himself by the sweat of his brow. He has now made some dull piece of matter do it for him and do it as well, if not better than he did it.

The machine has given us, has given to the workingman a standard of living unknown to the workingman in any period of human history up to this time,--shorter hours of labor, better conditions of employment, higher wages. In the early days the machine was an unmitigated curse, and it was no wonder that the workingman in the early days tried to sabotage, to destroy the machine. In the early days the machine meant an ugly factory system which drained the workingman and exploited him. The machine in the early days of the industrial revolution ground the workingman down and sapped his vitality. It was an unmitigated evil then. But the machine soon taught men wisdom; the machine soon taught men to realize that prosperity, and greater and greater prosperity depends upon giving the workingman a greater and greater share in the good things which are produced. So that by being enabled to buy more there is a greater demand for the product of the machine and a greater profit for the owner of the machine. And so through the logic of the machine itself the condition of the workingman was steadily improved.

We still have plague spots in this country and in other countries; we still have hundreds of thousands of children broken on the wheel of industry in this and in other countries; we still have women exploited in our industry, the burdens of industry weighing very heavily on her. But anyone who has followed the industrial progress of the last two or three generations cannot but be hopeful that progressively the conditions of the workingman and workingwoman have improved more and more,--not because of the generosity of man but because of the compelling and irresistible logic of the machine itself.

And the machine has given to all of us a sense of greater security and stability, and it is also drawing mankind closer and closer together. Every new cable stretched across the Atlantic, every wireless and radio placed in operation, every new device which facilitates contact and movement between peoples and races, which internationalizes industry and commerce is just another band of steel drawn around, thrown around the peoples and the races of the earth, and drawing them more closely and closely together.

And so with all this blessing that the machine has brought to mankind, mankind should today be singing a hymn of praise, a paean of triumph to the machine. And yet if you are alert you will hear persistently, here,

there and everywhere, voices of thoughtful men and women expressing fear of the machine. People are coming to ask themselves if they have not built more than they wanted to build, whether this machine or the machine world which they constructed will not ultimately, like these imaginary Frankensteins, overwhelm and crush them. Should they let loose in their social life forces which they can no longer control? Will the machine destroy them? That is the theme of this intriguing and fantastic melodrama R.U.R. That is the theme of many a book which has been written today.

The Rosum family succeed in creating machines which are very much like human beings. They call them robots, a name which, by the way, has been permanently added to our vocabulary. These robots are in all things like human beings; they possess the intellect of human beings; they lack only will power and the capacity for suffering pain; and they are produced in this factory of Rosum in huge quantities, by the hundreds of thousands and the millions, and they are produced cheap, like Fords, --\$150 a robot. And they do all of man's work and do it more efficiently than man ever did it, --so much so that the creators of these robots are really expecting the millennium.

The robots will produce things so cheaply, corn and clothing and all a man needs, that all those

things will soon be practically had for nothing. Poverty will be eradicated; man will be emancipated from the curse of labor. He will have these mechanical men do his work for him. He will be free to perfect himself, to develop himself; he will no longer be an instrument for production; he will be master, lord of creation.

What actually happens? What actually happens, according to the author of this fantasy, is, first of all, that the workingmen of the world rise up and rebel against these robots; they begin to smash, to destroy them. They are thrown out of employment, the human workingmen, by these machines, these mechanical workingmen. In the second place, nations begin to train these robots to be soldiers; they begin to train them to use arms. As a result of this cheap method of getting soldiers, a series of devastating wars break out all over the world. Because mechanical men can be manufactured so cheaply human children become superfluous, and no children are born. And by attempting to perfect this mechanical man more and more, soon these robots come to have some of the vices and the emotions that their human counterparts have. They too become ambitious and they too become resentful of man's domination, and so they organize universally. Not having national barriers between themselves, no differences of language, color or race, they organize universally, these robots, and issue a

manifesto calling upon the robots to destroy every human being, for every human being is their enemy, their exploiter.

And so the play draws to the tragic conclusion. Mankind is destroyed. Only one man, a builder, he who works with his hands, is left living. But the robots haven't the secret of creating life. That formula had been destroyed. The robots themselves face extinction, because no robot can live more than twenty years, and they cannot procreate themselves; and they summon this last surviving human being to rediscover for them the secret of creating life. But he cannot, and the whole of mankind, and even the whole of robotkind is doomed to extinction, but for the miraculous intervention of one humanlike robot and one womanlike robotess, who become the progenitors of a new race,--Adam and Eve all over again. And the world begins again.

Now that is a fantasy, and yet it is a fantasy which has caught the imagination of people, because many people have been thinking about the problems hinted at or indicated in this play. The danger, of course, which we face, is not that the machine will displace man, or that the machine will kill off the human race. That is not the danger. The danger is - and it is a very real danger - that the machine will absorb man in the process; that the machine will mechanize the

human being. The machine standardizes production. That is its great blessing. It can produce things more cheaply through standardization. But the selfsame machine which standardizes production is in the danger of standardizing the producer. For don't you see in order for this machine,--and by that of course I mean this entire machine age in which we live; we are all servants of the machine,--for this machine to work smoothly and profitably it must have a machine like organization of human servitors around it, who must submit to a discipline, to a uniform way of doing things, so as not to interfere with the operation of the machine.

Now that is very well and desirable in the machine world. Men will have to come to work with the precision and alignment of pistons in the machine work, for the more they learn how to do that, the more smoothly does the machine produce, the more profitably. But the danger is that man will carry over from his machine work, from his workaday world into his leisure world and into his social, intellectual, cultural, political, religious world, that same rigid discipline, that same obedience to uniformity, which are helpful there but baneful here. For the very uniqueness of human life, the very beauty of human life, is the free unfoldment of human personality, each according to his own natural bent and inclination.

We in America, where the machine has made

most progress, are most disgustful of the man who dares to be different, of the individualist, of the nonconformist, of the rebel. We have come to take on the attitude of uniformity which the machine creates,--mass judgment, mass action, mass opinion are coming to be the result of mass advertisement, mass production; and for culture and civilization that is very bad.

Now there is a way of saving ourselves from this tyranny of the machine, from the inevitable mechanizing process of the machine, and that is through and intelligent exploitation of our leisure time. You see, perhaps the greatest blessing which the machine has brought to us is that it has increased our leisure. Most of us today work only five and a half days a week. Before long I suppose most people will work only five days a week. We now work eight hours a day. Not so very long ago men worked ten and twelve and fourteen and sixteen hours a day. Before very long we will work seven hours, and perhaps six, and perhaps five hours a day. The machine will not require any more time of us. We will have, as we have today, an abundance of leisure.

Now leisure can destroy us and leisure can make us. If we just use that free time which the machine has given us to dawdle, to waste, the tyranny of the machine will grow more and more over us. If, on the other hand, we learn how to use that leisure time creatively,

how to exploit it for our mental and our spiritual development, how to live in the leisure time quite as actively and forcibly and dynamically as we live in our machine time, then we will be able to be ourselves, we will be able to assert our personality and our individuality; we will be able to live as human beings and not as mere adjuncts of the machine, not as mere robots.

So that I think one of the most challenging problems confronting our people immediately is the problem of adult education for everyone who works. The close of the working day should not mark the end of a man's active daily life; it should mark the beginning of another type of activity,--intellectual, spiritual. In his leisure hours a man ought to set about doing the things he likes most to do. We can't always do the things we want to do in our working day; we are tied down to our job; and very frequently the jobs are not to our liking, but we have to do them because we have got to earn a living. But in our free time,--that is when we can live our own life, that is when we can be creative amateurs, lovers of things, and pursue them for the mere love of the thing, not for any gain or profit.

There is another very challenging thought suggested in this play, and that has to do with work. When the time comes that the machine will do all of man's work, that time will mark the end of the race of men, for

man cannot live without work. The builder, those who have read or seen the play, you will recall, offers a prayer, and this is the prayer: "O Lord, I thank thee for having given me toil, and like to my friends; and of those who are astray, destroy their work and aid mankind to return to their labors. Let them not suffer harm of soul or body. Deliver us from the robots." It is the same altruist, you will recall, who has made the same prayer in the play: "There is some kind of virtue in toil and weariness. When you eat of the labor of thy hand, blessed art thou." . . .

We already have in our midst a leisure class which live off the labor of the machine, and that class, to my mind, is the festering wound in our body politic. They are the real menace to our civilization. For men who eat without working, who exploit all the good things of life without paying for them in terms of work of mind or body, these men are the easiest prey to all the devastating vices of the human race. The curse for that, of course, is the simple cure--"He who does not work shall not eat."

There is another danger in the machine which is very real already. The machine exploits human beings. Its speed and drive and tension are so great that many an industry today will no longer employ men who are forty years of age. There are even some industries who frown

upon employing men, unless they absolutely have to, at thirty-five years of age. Think of it! The man before he has even reached the zenith of his life is to be scrapped and thrown on the human waste heap, because the drive of the machine is seemingly too great for him!

Now if the machine does that, if the machine makes our lives valueless at thirty-five and forty, the machine will prove a curse to the human race,--unless our economic life becomes so organized that a man at thirty-five or forty can be retired. Surely the challenge of the machine must be met. Society will have to conquer the danger of the machine by devising ways and means of protecting the workingman against the disabilities of old age, of accident, of sickness and of unemployment. For during the early processes of adjustment when a new invention is introduced thousands of people are actually thrown out of work. In the long run the machine creates more jobs, but during the early processes of adjustment men are disemployed, and when a man is unemployed and hasn't anything to eat, you can't console him by the thought that twenty years later everything will be straightened out.

And there is another danger from the machine, and that is that it might mechanize our whole system of education. There is a danger that we will begin to train our young people, our children, to fit

in this machine world perfectly, train them technically so that they will become perfect cogs in this monstrous machine which is our industrial civilization. So that we will begin to prepare our children psychologically for the machine, for jobs, for careers, for success, for everything tied up with the machine, instead of preparing them through a very liberal type of education for that magnificent adventure which we call human life.

We may forget, as in many instances we have forgotten, that man is more than a machine, and that man is worth more than his job, whether that job pay him two dollars or two hundred dollars a day. Man was meant to enjoy the fulness of life, to live in such a way as to stimulate his mind, to seek truth, to sensitize his soul for greater and greater beauty, to adventure into the undiscovered continents of the spirit.

The wealth of a nation, my friends, is more than its material wealth. The wealth of a nation is to be found in the high cultural and moral quality of its life. The treasures of a people are those things which serve as nutriment to the human soul. Someone, some great American statesman once said that it is not so important that we should become a great nation; it is much more important that we should become a great people. Our education, the education of our children, must be the education not for the machine solely but for the good

life, for the full, rich, abundant life of human beings made in the image of God. Over and over again you will find here and there industrialists clamoring, "Train the children technically. Why bother with classics?" - and all that sort of thing. "A waste of time! That won't add anything to their pay.envelopes." Maybe not. But it is those things which will add beauty, poetry, romance, glory to their souls.

And lastly, there are two other dangers which the machine presents to us. One is the danger of the exploiting of these marvelous inventions, to destroy ourselves in war time. We had the example during the last war. Our subtlest invention, our keenest discovery, the noblest fruitage of the human mind were employed in the last war just as robots employed the intelligence which was given them to destroy the human race. And now in the next war, if there is to be a next war,--and everyone who works for the increase of armies and navies is working for the next war,--in the next war we shall have even more brilliance and ingenious inventions and discoveries by which we can kill not thousands, as in the last war, but hundreds of thousands and millions by poison gases and chemicals,--to wipe out whole populations. If you think that is fantastic, I tell you it is not fantastic. When war breaks out the worst is the most possible and the most feasible.

We can guard ourselves against that, too. We have to. And there is only one way of guarding ourselves against that, and that is to stamp out war, to outlaw it; and the earnest of our intention to outlaw it is to scrap our armies and our navies. Some very real progress has been made in the last four or five years in the direction of outlawing war and limiting armaments. Only the beginning has been made.

And then there is the danger my friends - and with that I shall close - that the prosperity and the wealth which the machine brings to us will make us forget God and set us to seek other gods to revere and worship. In this connection a very challenging play was written by the greatest of American dramatists,--Eugene O'Neill, called "Dynamo,"-- a very significant name. The play is built around this thought: that men are losing their faith, and the old God of mankind, and that science and materialism have not given and cannot give to the human family a satisfying substitute for that faith which they lost,--something which will satisfy the inner craving of the human soul, something which will give a meaning to human life. And these young men deny that ancient faith, and yet feeling the need to revere something, worship someone, turn to the god electricity and its revealed manifestation, the dynamo, and worship them; and in a dramatic scene Eugene O'Neill makes his hero, this

young lost, groping soul, prostrate himself before the dynamo and praying to it, and finally immolating himself, going to his death, by embracing one of the huge generators in the hydroelectric power plant.

There too you have this fear of the machine, that the machine may have a god--Moloch, that will destroy life, because by giving us wealth and prosperity and ease, it is bringing with them indifference and skepticism and cynicism and materialism, sending us into the ways of Godlessness, preparing us for spiritual dissolution.

This menace, too, my friends, can be met by a revival of spirituality in our midst, by stressing anew in our lives, in our homes, in the education of our children the thought that man doth not live by bread alone but by that which proceedeth out of the mouth of God; that at the heart of all reality is not machinery but spirit, intellect, will,--God! And that with God man, fashioned in God's image, can advance from one stage of perfection to another as co-worker and co-creator, to a marvelous destiny awaiting him.

The machine can be a blessing; it can be a curse. Our age and the generation which will follow us will give answer to that question.

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There are dangers — But man can
surmount them.

- ① Creation of, hunger — antidote to Reg. of
modern industrial life, liberalizing Educ.
- ② A measure, work for all. No work —
no food.
- ③ Protection of men against disabilities
of old age, sickness, accidents +
unemployment.
- ④ A liberal + not an ech. technical
education. Tasks for art, for music,
for life. — for philosophy — for the rare
Empire-building, for the —
- ⑤ Outlawry of war —
- ⑥ Emphasis on the sp. values, life —
esp. nature / all reality —

Then man will go from strength to
strength — Man the Co-worker, prod.
— not a machine! but a vibrant, first-
like, soaring, spirit — ~~where~~ Man the
Companion —

a clay image infused with life
they mechanically, list of letters written on
slip, paper inserted in mouth as forehead

① Solomon the Galilean - maid-servant. 12c

② Elizah & Chelam - Maister. 16c

His grandson - hakam zebi whether golem
could be counted in a mingan

③ Judah Lion b. Bezalel - of Prague End
16c.

servant on week-days - extracted them - so
that he rested on Sabbath

④ Grabbi in Russia - replace 12c - 18c

18c heating ovens, Order given -
Friday - executed on Saturday -
burnt town.

Vigil ~~statue to do his will~~

Went. Chap. 8

Job

The J. mind in the Modern world.

Miracles.

In Judaism Adequate for
~~the~~ modern Age?
war

The Twilight of Christianity

Our literature & Protest
& Persecution

"O, Lord, I thank thee for having given
me toil. Euly, like my friends and
all thou who are astray; destroy
their work, & aid mankind to return
to their labors: let them not suffer
harm in soul or body; deliver us
from the Robots." — Alquist —
the builder — "There is no kind
of virtue in toil and weariness"



1. Back of the intriguing play - Karel Capek - R.U.R. ^{sermon 311}
① Fear of Machine ② Eternal mystery of G. life

2. The Father has challenged - Med. Alchemist - Employed -
① Man carries life within himself - Ancestral Tree
② But man's curiosity is undefeatable - In all ages -
- so that legends arose - Virgil - Jewish Golem.

(3) In literature - R.U.R. latest Frankenstein -

(4) Vitalization of machine-men - extend Sc. field.

① R. J. Wensley - Westinghouse - "Televox" - sound-words.

② Capt. Richards - London - "Eric" - electro-magnetic -
- see, speak etc.

③ Amos A. Sperry - automatic pilot - "Metal Mind"

④ Modern Sc. no Baal Shem - & Blavatsky etc. Mungas

⑤ Far cry - but no location -

⑥ There is swEEP of grandeur in contemplation

① N.Y. Electric Co. - electrocyed drugging

② Ornament limitations - See etc. Machine

③ Better conditions labor - (at first - bad, still stagnant -)

④ New jobs -

⑤ Security -

⑥ Anti Hung -

A peace & glory

3. And get afraid, - Theme 5 R U R.

① Rossum - Robots - is all things human - 150 -
paradox - poverty - labor - and, Creation

② What actually happen - brotherhood vital -

Soldiers - no children - people superfluous

Robots rebel - set abt to destroy - Alquist -
Rule / Robots - "Adam & Eve"

~~3~~ 4) Many challenging ideas - fantastic melodrama

① The danger is not - machine displaces man -
Folly - How to stay - But Mr. Wheel Standardize
Cure - Creative Learning - Adult Education -

② When m. develops to point - no labor at all.

Ind 6121 7:00 6121 - we have
to-day big game -

③ Exploit - Men at 40 -

④ Education - Man is man & job - "a great
nation" - "people" - I. for good life

⑤ War -

⑥ Forget frd. Onail - "Weyman" - goes to
bath in enclave of one's th best generations