

THE FUTURE OF MAN'S WORLD

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The new outlook in psychiatry was perhaps most dramatically heralded in the single opening sentence of my best known opus: "A truly therapeutic procedure cannot have less an objective than the whole of mankind"—and as if to indicate that the fate of mankind may be imminently at stake, I gave the book the title, "Who Shall Survive."

As my idea of group psychotherapy has meanwhile taken historical proportions, it may be of more than human interest to report here the anecdotal background of this title. The first title was "Sociometry," but the late Dr. William A. White, who had written the Foreword to it in the summer of 1933, thought "Sociometry" a bit too technical and suggested "Human Interrelations." On second thought I felt that neither "Sociometry" nor "Human Interrelations" expressed the core of the book, gave in to a brainwave and called it "Who Shall Survive" with the undertitle "A New Approach to the Problem of Human Interrelations." There has hardly been a review of the book which has not contained a derogatory remark about this title. Sociologists thought it funny for a sociological treatise. Psychiatrists found it strange for a contribution to psychiatry. Biologists said the title was biological, but it was not a biological book. Twelve years have gone by but the discussion concerning the title is not yet closed. In a university seminar a student made the remark that after careful reading, the title made sense: "It means that *everyone* shall survive, there is a place and an opportunity for all." A few weeks ago I received a letter from a distinguished psychiatrist saying: "The more time goes by the more the title 'Who Shall Survive' seems to reflect the basic situation of our age."

Broadly viewed, "Who Shall Survive" deals with two social issues, the relation of man to man and the relation of man to certain peculiar products of his mind, which when separated from him, can function independently. It boils down to an appraisal of the positive forces which man has at his command to meet two threats, the aggression coming from man and the aggression coming from "robots."* The answer to the first was sociometry. The answer to the second was creative revolution, based on a theory of

*Robot derives from a Polish word *robota*, to work. My idea of the zootechnical animal (1918) was popularized a few years later by Karl Czapek in a play "Rossom's Universal Robots", 1921; he coined the term robot. But the term is not adequate as in

spontaneity. However, both have to work hand in hand in order that either should be effective.

The surface connotations in the title—"the survival of the fittest," with the added implications of racial arrogance have been over-stressed. The deeper connotations, *the survival of human existence itself* (not only of the fit,¹ fit and unfit are now in the same boat), of human creativity, of man's universe, have been overlooked. These enemies are common to all men, not only to one or another group; they are threats to the survival of the total universe of men. These odd enemies are *technical animals* which can be divided into two classes, cultural conserves and machines. The more popular word for them is "robots."* One of my earliest writings² was an exposé to their systematic study; I proposed a new science, "Die Zootechnik, Wissenschaft von den technischen Tieren," i.e., Zootechnique, Science of the Technical Animals. I put the analysis of the book into the foreground as a robot par excellence, referring to other types of robots which man has invented, such as the plow, cannon, money, and airplane. It discussed the two functions and relations of the robot towards man, as his friend and helper and as his enemy and destroyer. I gave particular emphasis to the apocalyptic character of the enemy robot, and painted a sinister picture of what the fate of man's world would be if no controls are developed against some of their vicious forms. "The parthogenetically procreated offspring exterminates the parent." "It is the threat of a world to come, completely mechanized, from which all cosmic remnants have perished."

The racial revolution and World War Number 2 have divided mankind into several camps, one fighting the other. But the invention of the atomic bomb has given us an excellent didactic lesson of how foolish inter-human wars are and how unstable and unsafe is the basis of all human

the zootechnical animal not only work but also destruction is implied. Thus in my definition the working robot can become ferocious and vice versa. A better term than robot might have been genie. According to the Arabic use there were good and bad spirits among them who assumed the form of animals, giants and so forth. The robot is really a "zoomaton," zoo, from Greek zoon, animal (zoo, live), automaton, a Greek word, neut. Of automatos, autos, self plus maō, strive after.

¹Fit and unfit, Darwin's survival of the fittest, have become increasingly "psychagogic" terms.

²Quotations are translated from Die Gottheit als Autor (The Godhead as Author, in Daimon, February, 1918, p. 7). See also Der Koenigsroman, 1923.

existence. We need one another but continue to fight each other. An enemy has appeared on the horizon which is an enemy to *all men*, which may make an end to all races, superior and inferior, fit or unfit, old and new. It is as if mankind has been awakened from a dream in which it indulged in the chronic and comparatively innocent war plays of its pre-bomb era. Shaken, it finds itself face to face with a *reality of the present and of the future*, the atomic bomb and its kins to come, unhuman but not unreal, unliving but not uncatholic. The answer to this great emergency (which has been anticipated in smaller doses in the course of human evolution and of which the invention of the fire, of the tool and of the book are outstanding examples) does not lie in palliative measures like counter-robots, an international police or a world society (which are, of course, fine things to aim at). The countermeasure lies in a cold appraisal of the situation, a systematic study of the causations underlying the invention of mechanical devices, the origin of the robot in human nature and beyond it, a careful calculation of the "socio-atomic organization of mankind." In other words, we should bring the problem into full scientific consciousness and develop parallel with sociometry a zootechnique, a science of the technical animals.

The invention of robots is largely a skill of *homo sapiens*. The reason for their origination is mysterious; perhaps "when man found himself failing in his struggle for maximum creativity he divided from his will to create his will to power"³—and now his will to *have* power turns against his will to create. Why should man want robots? It is perhaps the same reason, in reverse, as the one which at an earlier period made us want a God to whom *we* were robots. Therefore, if we could understand what we mean to God, we could understand what robots mean to us. Our relationship to God may be simply this—he needs a lot of helpers in order to put his creation over. Man too, has a program of living, of creation on a minor scale, he needs helpers and weapons to defend himself against enemies. But all animals do that without robots, they just multiply themselves. The biological robots of animal reproduction do not satisfy us men "entirely." There must be a deeper and additional reason why we wanted and created the technological kind. An analysis of spontaneous-creative processes broadened my understanding of the problem. Infants, immediately after birth demonstrate that the less spontaneity a being has the more it requires some-

³See J. L. Moreno's Commentary to *The Words of the Father*, Beacon House, New York, 1942, p. 181.

one who has it, in order to survive. The infant lives on borrowed spontaneity. The humans who are at the beck and call of the crying infant, who come and carry, feed and comfort it, I call auxiliary egos. By auxiliary ego I do not mean the total person of the mother or father, for instance, but the "role" it has for the infant. Everything, however, which is outside of that role, frightens the child. An excess of spontaneity which that person turns upon the infant beyond or outside of the role appears to be an irritating factor. The infant seems to want its auxiliary egos perfect, that is, to have all their ready spontaneity available for him, the infant, and none for themselves, the egos. This offers a clue for understanding the relationship between the idea of the auxiliary ego and the idea of the robot. If the auxiliary ego could concentrate and conserve all its spontaneity for one function, the role which satisfies the needs of the infant would not permit any diversion of spontaneity for himself. He would be less real and human, but a more perfect auxiliary ego. These observations were confirmed by the attitude which children show towards dolls. The doll does not have the often unpleasant counter-spontaneity which real human beings have, but it has still some physical and tangible reality which pure fantasy companions do not have. In the half real, half mechanical doll world the child can act as an unhibited ruler. Here he gets the first taste of the robot which he can destroy at will and which may one day go out and act as decreed by him. Dolls seem to make the child free—free from other children and from adults. One can divide the *doll robots* as fulfilling two functions: the doll which represents a companion and friend, a mechanical role-player, a *domesticated* automaton; and then the doll as the object of unlimited aggression, the mechanical role-player who is fought and killed without having a defense, an *enemy* automaton. I have described elsewhere⁴ how playing and long preoccupation with dolls encourages the child to treat animals and human beings like robots. In psychodramatic procedure we are using the auxiliary ego to do this consciously and systematically. The auxiliary ego sacrifices his own ego and produces roles in accord with the requirements of the patient. He extends the universe of the patient so that the patient can find new situations and new associates. The robot, like the auxiliary

⁴See Towards the Curriculum of an Impromptu Play School, *Impromptu Magazine*, No. 2, 1931, Beacon House, New York. Also Sociometry and the Cultural Order, *Sociometry Monograph* No. 2, Beacon House, New York, 1943, and Das Stegreiftheater, 1923.

ego, makes man free from man and gives him an artificial sense of wellbeing and power. It too, extends the range of megalomaniac experience to a new climax. But that is the limit of the similarities between the two. Behind the role-giving auxiliary ego is a warm, spontaneous being. The robot is lifeless. It is the same at every instant, it does not grow, it does not change. Once upon a time we envisioned our God as the one who could destroy us any time he wanted to. Robots, too, can give a single man the power to rule and perhaps to destroy the universe instantly. But they cannot produce an ounce of spontaneity.

A human infant results from the conjugation of a man and a woman. A robot results from the conjugation of man with nature itself. In both cases the offspring takes over some feature from both parents. In the robot, for instance, there is some feature of the man-producer and some feature of natural energy modified by him.

A descriptive classification of the various types of robots man has invented should precede their dynamic analysis. One type can be defined as the domesticated robot, the plow, the pen, the book, the type-writer; another type can be defined as the enemy robot, the gun, the rocket, the atomic bomb. Then there is the mixed form of robot, as a knife, a fire, steam engine, the automobile and the airplane, which can be used for and against himself. But because of the non-human character of the robot it can easily be turned from one function into another, the automobile can be turned into a wartank, a working knife can be turned into a weapon, the warming fire turned into a means for destruction. Many of the domesticated robots are blessed with the attribute of becoming labor-saving devices, which has, however, the unpleasant consequence that they at times reduce the need for creating, promoting with leisure also inertia. Robots are more precise and reliable than animals and human beings. Many of the robots have also the attribute in common of being able to affect human beings or other targets "at a distance," a book, a radio or a television sender can entertain or teach at a distance, like a gun, a rocket and an atomic bomb can kill people and destroy objects at a distance. The book is a robot par excellence. Once off the press, the parent, the producer, the author is immaterial, the book goes to all places and to all people, it does not care where it is read and by whom. Many robots have further in common the attribute of comparative immortality. A book, a film, an atomic bomb, they do not perish in the human sense, the same capacity is

always there, they can be reproduced *ad infinitum*. A book may have to be reprinted, a film copied on and off, but if anything perishes it is not their essence but some material entourage. Our human world is increasingly filled with robots and there seems to be no end to new forms and new developments. Since man came out of the jungle, its master, he did not have a similar maze of threats to face—the jungle of robots.

The control of the robot is complicated for two reasons, the one reason is that the robot is man's own creation. He does not meet it face to face, like he did the beasts of the jungle, measuring his strength, intelligence and spontaneity with theirs. The robot comes from within his mind, he gives birth to it. He is confounded like every parent is towards his own child. Rational and irrational factors are mixed therefore in his relationship to robots. In the excitement of creating them he is unaware of the poison which they carry, threatening to kill his own parent. The second reason is that in using robots and zoomatons man unleashes forms of energy and perhaps touches on properties which far surpass his own little world and which belong to the larger, unexplored and perhaps uncontrollable universe. His task of becoming a master on such a scale becomes a dubious one as he may well find himself more and more in the position of Goethe's Sorcerer's Apprentice who could unleash the robots but who could not stop them. The apprentice had forgotten the master's formula, we never had it. We have to learn this formula and I believe it can be learned.

The fate of man threatens to become that of the dinosaur in reverse. The dinosaur perished because he extended the power of his organism in excess of its usefulness. Man may perish because of reducing the power of his organism by fabricating robots in excess of his control.

The conclusion is that as parents and creative agents we produce more perfect robots than we produce babies. As our perfectionism has failed us again and again in its application to us as biological and social beings, as individuals and as a society of individuals, we give up hope and invest it in automatons. The pathological consequences are enormous. Man turns more and more into a function of cultural and technological conserves, puts a premium on power and efficiency and loses credence in spontaneity and creativity. The two countermeasures suggested are the sociometric approach to group relations and spontaneity training.

The use of physical atom energy can be directed and controlled by

"social atom energy."⁵ Man has never recognized and used in full the power pent up in the millions of social atoms continuously formed by him and his fellowmen. If he would, robots like the atomic bomb would be to a "sociometrically integrated mankind" what a doll is in the hands of a child. "If a fraction of one-thousandth of the energy which mankind has exerted in the conception and development of mechanical devices were to be used for the improvement of our cultural capacity during the moment of creation itself, mankind would enter into a new age of culture, a type of culture which would not have to dread any possible increase of machinery nor robot races of the future. The escape would be made without giving up anything that machine civilization has produced."⁶

EPILOGUE

A system of society must be realized, to which all individuals belong spontaneously, not only "by consent" but as "initiators"; without exception, not 99.9 per cent, but literally and numerically *all individuals alive*. The "one" individual left out may turn out to become the singular *scientist-criminal* using means of lethal destruction, not towards one or another fellow man (Cain vs. Abel) but towards the total race of man, his total world.

Man must take his own fate and the fate of the universe in hand, on the level of creativity, as a creator. It is not sufficient if he tries to meet the situation by technical control—defense weapons—nor by political controls—world government—he should face himself and his society in *statu nascendi* and learn how to control the robot not after it is delivered, but before it is conceived (creatocracy).

I have often described the revolutionary period during the last hundred and fifty years in terms of three phases: the economic, the psychological and the creative revolution. In economic ideology the robot was greeted as a benevolent, labor saving and comfort bringing agent. It made the poor and the rich the owners of technical slaves. To some it seemed to hold promise of solving the class conflict. In the ideology of the psychological revolution—at least in its most recent demoniac form, using racial and political phraseology to cover up psychological causations—the robot became an agent of destruction. The number of men could be reduced without loss, now that the kind and number of robots could be multiplied without

⁵Who Shall Survive, pp. 141-157.

⁶Who Shall Survive, pp. 364-65; also "Creative Revolution," p. — in Impromptu, (1931).

limit. In the ideology of creative revolution the robot is finally seen in relation to the creative act itself.

Could we imagine a congress appropriating two billion dollars for "social atom" research? Maybe it is not and will not be appropriated because what matters is not money. Mankind may need still more serious setbacks before it comes to its "creative revolution." Perhaps it is unavoidable that the present human civilization be destroyed, that mankind be reduced to a handful of individuals and human society to a few scattered social atoms before a new rooting can begin. Christianity too, has not been helped by mass baptism of babies; fewer but self-realized Christians might have meant more true Christianity.

The battle between zoon (living animal) and zoomaton approaches a new peripetie. The future of man depends upon counterweapons developed by sociometry and group psychotherapy.

The Future of Man's World

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