



Where Is Industrialism Going?

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THE indispensable conditions for the existence of industrialism in a community may be said to be: large organizations of workers engaged upon a common task; willingness in the directors of industry to forego present goods for future profit, an orderly and stable government, skilled workers, and scientific knowledge. Assuming that the conditions for the growth of industrialism exist, I want, in this paper to inquire what effects its growth is likely to have if it is not counterbalanced by other tendencies.

Industrialism does not consist merely in large undertakings requiring a great number of workmen. The building of the pyramids was a vast undertaking, but was not industrial. The essence of industrialism is the employment of elaborate machinery and other means, such as railways, of diminishing the total labor of production. All the characteristics of industrialism are exemplified by the substitution of a bridge for a ferry, in spite of the fact that bridges existed before the industrial era. If a small number of men wish to cross a river, less labor is involved in taking them across in a boat than in building a bridge. But when very many wish to cross, the bridge involves an economy of labor, in spite of the fact that it is a much more serious matter to make a bridge than to make a boat. It is obvious, also, that the building of a

bridge, except for military purposes, depends upon the expected preservation of some degree of law and order, both because a bridge is easily destroyed and because, in very unsettled times, no one can spare energy or thought for objects of which the advantage is in a more or less distant future.

The essence of industrialism is the expenditure of much joint labor upon things that are not themselves consumable commodities, but merely means to the production of other things that are consumable. From this fundamental quality all the other characteristics of industrialism follow.

§ 2

The first thing to notice is that industrialism makes a society more organic, in the same sense in which the human body, which is a collection of cells, is more organic than a crowd of protozoa each consisting of a single cell. Each of the protozoa is capable of all the functions required for keeping alive; it does not need help from the others, and it does not die because they die. The cells composing the human body have no such independence; they have different functions, all necessary or at least useful for the life of the whole, and when any of the organs that perform vital functions are destroyed, the rest perish. The eyes can only see, the ears can only hear, and so on; an eye or an ear

severed from the rest of the body cannot do what is necessary to keep alive, as the protozoa can. In this sacrifice of independence to coöperation there is both loss and gain. There is loss in the fact that the whole assemblage of cells can be killed by one vital wound, and that, therefore, a human body has a more precarious life than a crowd of protozoa. But there is gain in the fact that by specializing the several organs become capable of doing work that no number of protozoa could do, and that the life of a human body is thus enriched and its responsiveness to its environment enormously enhanced. Exactly parallel differences exist between an industrial and an unindustrial society.

In a primitive pastoral or agricultural community, each family produces all that is needed for its own subsistence. The happiness of such a family has been depicted by Pope in the poem beginning:

“Happy the man whose wish and care
A few paternal acres bound.”

But it may be doubted whether Pope would really have liked this state of affairs, since it would not have enabled a man to live by the sale of his verses. A society that allows such specialization is already on the road to industrialism.

In an industrial community no man is self-subsistent; each man takes part in a process that produces a great deal of some commodity or of some machine for making commodities, but no man produces the whole variety of commodities necessary for preserving life. Hence, trading or, at any rate, some form of exchange of products is absolutely necessary to survival wherever industry exists. The man engaged

in a factory has to be fed and clothed by the labor of others and cannot even produce what is made in the factory without the machinery and the coöperation of the other workers. He has ceased altogether to be an economically independent unit. The capitalist is at least equally dependent: if men would not work for him, he would starve. Agriculture, as it becomes more scientific, shares, though to a lesser degree, in the tendencies of industry, as in the large-scale farming of the United States: it requires manures and machines that cannot be produced on the spot, but are often brought from great distances. Thus the whole community becomes knit together, so that the life of each depends upon the life of all.

Like the human body, an industrial society has its vital organs, the destruction of which paralyzes the whole organism. This becomes increasingly true as industry becomes more advanced and scientific. The destruction of a power-station may cause all the factories, trams, lights, and electric trains of a district to cease working. This is merely an example of the universal law that what is more highly organized is more sensitive. It follows that lawlessness and destructiveness can do far more harm in an industrial community than they can where the methods of production are more primitive.

§ 3

As society grows more organic, it is inevitable that government acquires more importance. The acts of individuals have more and more far-reaching effects upon others, and therefore require to be more and more controlled in the interests of the

community. Hence a diminution of individual liberty and of what may be called the anarchic side of life, that is, the side in which a man merely follows his own whims. If this side of life is to be in any degree preserved under industrialism, special measures will have to be taken to that end.

Against the loss of liberty due to increase of government and organization, there is to be set a gain of liberty owing to the fact that the necessaries of life can be produced with less labor than in a pre-industrial society. The desires of an individual are subject to two kinds of restraint, namely, those due to the community and those due to material conditions. Industrialism, while it tends to increase the former, greatly diminishes the latter. The restraints imposed by material conditions are primarily those involved in warding off death. Most animals, owing to lack of foresight, die by starvation. Most human beings, owing to their possession of some slight degree of foresight, succeed in avoiding this form of death. But in a pre-industrial society they only succeed, unless they belong to the rich minority, by working hard almost all their lives in the production of food and other necessaries. This work is in itself often irksome from its excessive amount, and is a complete obstacle to the realization of all desires for knowledge, beauty, or enjoyment. Such desires, where industry is undeveloped, can only be indulged by the fortunate few, kings, priests, and nobles. But under industrialism the production of necessaries requires only a small part of the energies of the community, all the rest being set free for the production of either leisure or luxuries, including among luxuries education,

science, literature, art, and warfare. Thus man is rendered freer by industrialism, since his bondage to nature is diminished; but each separate man may not be freer, since there is an increase in the pressure of the community upon the individual.

By diminishing man's bondage to nature, industrialism has rendered physically possible many things of great value which were only very partially possible in earlier stages. The mere business of keeping alive is shared by man with the lower animals, and does not raise him above their level in any important respect. What raises him above the level of the animals is his mental capacity, which has brought with it desires that are not merely material. When men are liberated from the pressure of the struggle to obtain food, they do not all sink into sloth and idleness; some remain active, but in the pursuit of knowledge or art or some other purely mental object. It is the work of these men that sheds luster on mankind as a whole. To have lived a certain number of years, consumed a certain amount of food, begotten a certain number of children similar to oneself, and then died, is not the utmost of which men are capable; yet, owing to the scant productivity of labor, it was, until lately, all that most men could hope to achieve. Now, so far as physical conditions are concerned, better possibilities exist; education and sufficient leisure could, if we chose, exist throughout the whole community, and the business of keeping alive could become an easy and unimportant part of our daily occupation.

What is called civilization may be defined as the pursuit of objects not biologically necessary for survival.

It first arose through the introduction of agriculture in the fertile deltas of great rivers, more particularly in Egypt and Babylonia. Everywhere else primitive agriculture exhausts the soil and compels frequent migrations, but this was not the case in the deltas. Here the surplus food produced by one man's labor above one man's needs was sufficient to make possible the creation of a small leisure class, and it was this small leisure class that invented writing, architecture, mathematics, astronomy, and other arts essential to all subsequent civilization. Although the class that could share in civilized pursuits increased with the improvement of agriculture and the growth of commerce, it remained unavoidably small, because labor was still not sufficiently productive to create the necessaries of life except by the whole work of most of the community. Now, though the arts and sciences remain a prerogative of the few, there is no good reason why this should be the case; it would be possible for every man and woman to have as great a share of them as he or she might desire. If every man and woman worked for four hours a day at necessary work, we could all have enough; and the leisure remaining after four hours' work is amply sufficient for even the most intensive cultivation of science or art. This fact has destroyed the only strong argument that ever existed for an oligarchic organization of society, whether economic or political, and has made it almost inevitable that, if industrialism continues without disaster, its ultimate form must be socialism, which alone avoids inequalities for which the former reason no longer exists.

The desire to diffuse civilization has, it is true, played only a very small part hitherto in the development of industrialism, and it is perhaps hardly to be hoped that it will play a great part until after the establishment of socialism. There has, however, been a very considerable diffusion of civilization in industrial countries, owing to the operation of motives that were mainly economic. A man who has some education is a more efficient worker than one who can neither read nor write; hence all industrial countries have adopted universal compulsory education. This would scarcely have been possible without industrialism, since the time of teachers and pupils could not easily have been spared from more immediately necessary work. With the coming of industrialism and the complicated processes that it introduces, universal education becomes both more possible and more obviously necessary; increase of education may therefore be taken as one of the inherent tendencies of industrialism.

§ 4

With universal education come other things of great importance. The first of these is political democracy, which is scarcely possible where the working-class is uneducated, and scarcely avoidable where it is educated. By democracy I do not necessarily mean a parliamentary régime; the soviet system, as originally conceived, would have been quite compatible with democracy. What I mean by democracy is a system under which all ordinary men and women participate equally in fundamental political power, though exceptional people may be excluded for special reasons, such as

endeavoring to upset by force the government desired by the majority. Interpreted in this wide sense, political democracy seems to be the system of government natural to an advanced industrial community, except in times of special stress, such as revolution or war.

Industrialism, as we have seen, diminishes the freedom of the individual in relation to the community, but increases the freedom of the community in relation to nature. That is to say, the actions of the individual, at any rate in the economic part of his life, become increasingly controlled by the actions of the community, or by some large organization such as a trust; but the actions of the community become less and less controlled by the primitive necessity of keeping alive. Hence individual passions, such as those which produce art and romance, tend to die out, while collective passions, such as those which produce war, sanitation, and elementary education, are liberated and strengthened. Each of these deserves separate consideration.

The decay of individual passions brings with it, first of all, a diminution of individuality. In a thoroughly industrialized community, such as the United States, there is little appreciable difference between one person and another; eccentricity is hated, and every man and woman endeavors to be as like his or her neighbors as possible. Their clothes, their houses, their household utensils, are all produced to standard pattern by the million, without any of those individual differences that characterize the products of handicrafts. And it seems that the men and women wish to assimilate themselves to the articles they use

by forcing upon themselves the sameness of manufactured articles, as though the Creator himself had adopted industrial methods and were producing men and women wholesale with the very latest machinery warranted to make each specimen up to sample.

In such an atmosphere, art and romance and individual affection cannot flourish, since they involve preservation of individuality in oneself and recognition of it in others. There are other reasons, also, why such things decay under industrialism as it has been practised hitherto, but there is one point connected with the decay of romance that belongs to our present topic. The instinct for romance, when it is denied an outlet in one's own life, seeks, as instincts will, a vicarious satisfaction in imagination. Hence the passion for sensational stories, melodramas, and murder cases. A lunatic who kills his wife with every circumstance of horror is a public benefactor: into a thousand tame and listless lives he introduces the imaginative satisfaction of fierce passion. Every detail in the newspapers is eagerly devoured by men who dare not, in their own conduct, depart a hair's-breadth from respectable rectitude, for fear of losing their jobs. At the outbreak of war the delight of many of those who expect to be non-combatants has the same source: the gladiatorial show relieves the deadly monotony of the office or the factory even better than a foot-ball match or a horse-race. And in spite of all knowledge to the contrary, non-combatants persist in imagining modern war on the Homeric pattern, as an affair of individual bravery and initiative; for the dreary mechanistic mass-action

that constitutes the actual operations affords no outlet to the starved instinct for individual romance. This same boredom and desire for excitement does much to increase the fierceness of revolutionary movements and to produce the preference for revolution as against more gradual and less sensational methods.

§ 5

One of the most important effects of industrialism is the break-up of the family resulting from the employment of women. The employment of women has two effects: on the one hand it makes them economically independent of men, so that they cease to be subject to husbands; on the other hand it makes it difficult for them to bring up their children themselves. The tradition of the monogamic family is so strong in all the chief industrial countries that the effect of industrialism on the family has taken a long time to show itself. Even now it has hardly begun in America, where Christianity is still not uncommon; but throughout Europe the process of disintegration, which had already begun, has been enormously accelerated by the war, owing to the ease with which women found employment in government offices, in munition works, or on the land. Experience has shown that the average woman will not submit to the restraints of the old-fashioned marriage or remain faithful to one man when she can be economically independent. For the moment the restraints and concealments imposed by the upholders of traditional morality have somewhat obscured the extent of the change thus brought about. But the change will grow

greater with time, since it belongs to the inherent tendencies of industrialism. In a pre-industrial community, rich men held their wives as property, while poor men made them coöperators in their work. Peasant women do much of the hard work of agriculture, and working-class women have hitherto had their time fully taken up with household work and the rearing of children. In this way, whether in town or country, the family formed an economic unit.

But when the woman goes out to industrial work like her husband, and the children spend most of their day at school, the economic tie between husband and wife is enormously weakened. It is probable that with the growth of industrialism the practice of eating in public eating-houses will increase and housework will be reduced to a minimum. The children will have first their midday meal, and then all meals, at school; thus the peculiar work that has hitherto been done by wives will grow less and less. Under these circumstances, marriage, as it has existed since men took to agriculture, is likely to come to an end. Women will prefer to preserve their independence and will not rely upon the precarious bounty of an individual man. They will share their children with the state rather than with a husband, not invariably, but in a continually increasing proportion of instances. I am not concerned to argue whether this change is desirable or undesirable; I say only that it belongs to the inherent tendencies of industrialism, and must be brought about by the continuance of industrialism unless counteracted by some very potent force. It has, of course, the effect, always characteristic of large-

scale industry, of increasing the pressure of the community upon the individual. The family has been hitherto a refuge of privacy, where it was possible to escape from the state, and even, to a certain extent, from public opinion. A man with unusual tastes or opinions could bring up his children with a view to their sharing his peculiarities; but this must cease when the state takes over the education of children and, as it must ultimately do, the whole economic burden of their maintenance. Thus the break-up of the family must increase the tendency of uniformity throughout the population, and weaken all those individual traits which cannot grow or flourish in a life lived wholly in public.

§ 6

Religion, in its traditional form, appears to be difficult to combine with industrialism, although it is by no means obvious why this should be the case. Of course the successful capitalists remain religious, partly because they have every reason to thank God for their blessings, and partly because religion is a conservative force, tending to repress the rebelliousness of wage-earners. But industrial wage-earners everywhere tend to lose their religious beliefs. I think this is partly for the merely accidental reason that the teachers of religion derive their incomes either from endowments or from the bounty of the rich, and therefore often take the side of the rich and represent religion itself as being on this side. But this cannot be the sole reason, since, if it were, wage-earners would invent democratic variants of the traditional religion, as was done by the English independents in the seventeenth century and by the peas-

ants who revolted against agrarian oppression in the Middle Ages and in the time of Luther. It is singularly easy to adapt Christianity to the needs of the poor, since it is only necessary to revert to the teachings of Christ. Yet that is not the course that industrial populations take; on the contrary, they tend everywhere to atheism and materialism. Their rebellion against traditional religion must, therefore, have some deeper cause than the mere accidents of present-day politics.

The chief reason is, I believe, that the welfare of industrial wage-earners is more dependent upon human agency and less upon natural causes than is the case with people whose manner of life is more primitive. People who depend upon the weather are always apt to be religious, because the weather is capricious and non-human and is therefore regarded as of divine origin. On the rock-bound coast of Brittany, where Atlantic storms make seafaring a constant and imminent peril, the fishermen are more religious than any other population of Europe: churches crowd the coast, particularly its most dangerous portions, while every headland has its Calvary, with the lofty crucifix so placed as to be visible many miles out to sea. While the fisherman is at sea, he and his wife pray for his safe return; as soon as he lands, his relief finds expression in drunkenness. A life of this kind, exposed constantly to non-human dangers, is the most favorable to traditional religion. Indeed, the whole of traditional religion may be regarded as an attempt to mitigate the terror inspired by destructive natural forces. Sir J. G. Frazer, in his "Golden Bough," has shown that most of the elements in

Christianity are derived from worship of the spirit of vegetation, the religion invented in the infancy of agriculture to insure the fertility of the soil. Harvest Thanksgiving, prayers for rain or fair weather, and so on illustrate what has been really vital in religion. To the peasant fertility and famine are sent by God, and religious rites exist to secure the one and avert the other.

The industrial worker is not dependent upon the weather or the seasons, except in a very minor degree. The causes which make his prosperity or misfortune seem to him, in the main, to be purely human and easily ascertainable. It is true that natural causes affect him, but they are not such as we are accustomed to attribute to supernatural agency. God may send rain in answer to prayer, because the need of rain was felt while religion was still young and creative. But although a population may be ruined by the exhaustion of its coal-fields, no one supposes that God would create new seams however earnestly the miners were to pray. Petroleum may bring prosperity, but if Moses had brought petroleum out of the rock instead of water, we should have regarded the occurrence as a fact of geology, not as a miracle. The fact is that religion is no longer sufficiently vital to take hold of anything new; it was formed long ago to suit certain ancient needs, and has subsisted by the force of tradition, but is no longer able to assimilate anything that cannot be viewed traditionally. Hence the alteration of daily habits and interests resulting from industrialism has proved fatal to the religious outlook, which has grown dim even among those who have not explicitly

rejected it. This is, I believe, the fundamental reason for the decay of religion in modern communities. The lessened vitality of religion, which has made it unable to survive new conditions, is in the main attributable to science.

§ 7

There is one other tendency which has hitherto been very strong in industrialism, but which, I believe, might cease to characterize industry under socialism; I mean the tendency to value things for their uses rather than for their intrinsic worth. The essence of industrialism, as we saw, is an extension of the practice of making tools. In an industrial community the great majority of the population are not making consumable commodities, but only machines and appliances by means of which others can make consumable commodities. This leads men to become utilitarian rather than artistic, since their product has not in itself any direct human value. The man who makes a railway is regarded as more important than the man who visits his friends by traveling on it, although the purpose of the railway is to be traveled on. The man who reads a book is thought to be wasting his time, whereas the man who makes the paper, the man who sets the type, the man who does the binding, and the librarian who catalogues it are all regarded as performing valuable functions. The journey from means to end is so long, and the distinctive merits of industrialism are so exclusively concerned with means, that people lose sight of the end altogether and come to think more production the only thing that is of importance. Quantity is valued more

than quality, and mechanism more than its uses.

This reason, as well as the one previously mentioned, accounts for the decay of art and romance under industrialism. But the utilitarian tendency of industrialized thought goes deeper than the decay of art and romance; it upsets men's dreams of a better world, and their whole conception of the springs of action. It has come to be thought that the important part of a man's life is the economic part, because this is the part concerned with production and utilities. It is true that, at present, the economic part needs our thought, because it is diseased; just as, when a man's leg is broken, it is temporarily the most important part of his body. But when it is healed and he can walk on it, he forgets about it. So it ought to be with the economic part of life; we ought to be able to use it without having to think of it all day long. The bodily needs of all could be supplied as a matter of course by means of a few hours of daily labor on the part of every man and woman in the community. But it should be the remaining hours that would be regarded as important—hours that could be devoted to enjoyment or art or study, to affection and woodlands and sunshine in green fields. The mech-

anistic utopian is unable to value these things: he sees in his dreams a world where goods are produced more and more easily and are distributed with impartial justice to workers too tired and bored to know how to enjoy them. What men are to do with leisure he neither knows nor cares; presumably they are to sleep till the time for work comes round again.

This utilitarianizing of men's outlook is, I believe, not inseparable from industrialism, but due to the fact that its growth has been dominated by commercialism and competition. A socialistic industry could be the servant, not the master, of the community; this is one fundamental reason for preferring socialism to capitalism. I wish to warn the advocates of economic reconstruction against the danger of adopting the vices of their opponents by regarding man as a tool for producing goods rather than goods as a subordinate necessity for liberating the non-material side of human life. Man's true life does not consist in the business of filling his belly and clothing his body, but in art and thought and love, in the creation and contemplation of beauty, and in the scientific understanding of the world. If the world is to be regenerated, it is in these things, not only in material goods, that all must be enabled to participate.





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