

The Tyranny of the Clock

by George Woodcock

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In no characteristic is existing society in the West so sharply distinguished from the earlier societies, whether of Europe or of the East, as in its conception of time. To the ancient Chinese or Greek, to the Arab herdsman or the Mexican peon of today, time is represented by the cyclic processes of nature, the alternation of day and night, the passage from season to season. The nomads and the farmers measured and still measure their day from sunrise to sunset, and their year in terms of seed-time and harvest, of the falling leaf and ice thawing on the lakes and rivers. The farmer worked according to the elements, the craftsman for as long as he felt it necessary to perfect his product. Time was seen as a process of natural change, and men were not concerned in its exact measurement. For this reason civilizations highly developed in other respects had the most primitive means of measuring time: the hourglass with its trickling sand or dripping water, the sundial, useless on a dull day, and the candle or lamp whose unburnt remnant of oil or wax indicated the hours. All these devices were approximate and inexact, and were often rendered unreliable by the weather or the personal laziness of the tender. Nowhere in the ancient or the mediæval world were more than a tiny minority of men concerned with time in the terms of mathematical exactitude.

Modern, western man, however, lives in a world which runs according to the mechanical and mathematical symbols of clock time. The clock dictates his movements and inhibits his actions. The clock turns time from a process of nature into a commodity that can be measured and bought and sold like soap or sultanas. And because, without some

means of exact timekeeping, industrial capitalism could never have developed and could not continue to exploit the workers, the clock represents an element of mechanical tyranny in the lives of modern men more potent than any individual exploiter or than any other machine. It is therefore valuable to trace the historical process by which the clock influenced the social development of modern European civilization.

3 It is a frequent circumstance of history that a culture or a civilization develops the device that will later be used for its destruction. The ancient Chinese, for example, invented gunpowder, which was developed by the military experts of the West and eventually led to the Chinese civilization itself being destroyed by the high explosives of modern warfare. Similarly, the super achievement of the craftsmen of the mediaeval cities of Europe was the invention of the clock, which, with its revolutionary alteration of the concept of time, materially assisted the growth of the Middle Ages.

4 There is a tradition that the clock appeared in the eleventh century, as a device for ringing bells at regular intervals in the monasteries, which, with the regimented life they imposed on their inmates, were the closest social approximation in the Middle Ages to the factory of today. The first authenticated clock, however, appeared in the thirteenth century, and it was not until the fourteenth century that clocks became common as ornaments of the public building in German cities.

5 These early clocks, operated by weights, were not particularly accurate, and it was not until the sixteenth century that any great reliability was attained. In England, for instance, the clock at Hampton Court, made in 1540, is said to have been the first accurate clock in the country. And even the accuracy of the sixteenth-century clocks is relative, for they were equipped only with hour-hands. The idea of measuring time in minutes and seconds had been thought out by the early mathematicians as far back as the fourteenth century, but it was not until the invention of the pendulum in 1657 that sufficient accuracy was attained to permit the addition of a minute-hand, and the second-hand did not appear until the eighteenth century. These two centuries, it should be observed, were those in which capitalism grew to such an extent that it was able to take advantage of the techniques of the Industrial Revolution to establish its economic domination over society.

6 The clock, as Lewis Mumford has pointed out, is the key machine of the machine age, both for its influence on technics and for its influence on the habits of men. Technically, the clock was the first really automatic machine that attained any importance in the life of man.

Previous to its invention, the common machines were of such nature that their operation depended on some external and unreliable force, such as human or animal muscles, water, or wind. It is true that the Greeks had invented a number of primitive automatic machines, but these were used, like Hero's steam engine, either for obtaining "supernatural" effects in the temples or for amusing the tyrants of Levantine cities. But the clock was the first automatic machine that attained public importance and a social function. Clock-making became the industry from which men learnt the elements of machine-making and gained the technical skill that was to produce the complicated machinery of the Industrial Revolution.

7 Socially the clock had a more radical influence than any other machine, in that it was the means by which the regularization and regimentation of life necessary for an exploiting system of industry could be best assured. The clock provided a means by which time — a category so elusive that no philosophy has yet determined its nature — could be measured concretely in the more tangible terms of space provided by the circumference of a clock dial. Time as duration became disregarded, and men began to talk and think always of "lengths" of time, just as if they were talking of lengths of calico. And time, being now measurable in mathematical symbols, was regarded as a commodity that could be bought and sold in the same way as any other commodity.

8 The new capitalists, in particular, became rabidly time-conscious. Time, here symbolizing the labour of the workers, was regarded by them almost as if it were the chief raw material of industry. "Time is money" was one of the key slogans of capitalist ideology, and the timekeeper was the most significant of the new types of official introduced by the capitalist dispensation.

9 In the early factories the employers went so far as to manipulate their clocks or sound their factory whistles at the wrong times in order to defraud the workers of a little of this valuable new commodity. Later such practices became less frequent, but the influence of the clock imposed a regularity on the lives of the majority of men that had previously been known only in the monasteries. Men actually became like clocks, acting with a repetitive regularity which had no resemblance to the rhythmic life of a natural being. They became, as the Victorian phrase put it, "as regular as clockwork." Only in the country districts where the natural lives of animals and plants and the elements still dominated existence did any large proportion of the population fail to succumb to the deadly tick of monotony.

At first this new attitude to time, this new regularity of life, was imposed by the clock-owning masters on the unwilling poor. The factory slave reacted in his spare time by living with a chaotic irregularity which characterized the gin-sodden slums of early-nineteenth-century industrialism. Men fled to the timeless worlds of drink or Methodist inspiration. But gradually the idea of regularity spread downwards and among the workers. Nineteenth-century religion and morality played their part by proclaiming the sin of "wasting time." The introduction of mass-produced watches and clocks in the 1850s spread time-consciousness among those who had previously merely reacted to the stimulus of the knocker-up or the factory whistle. In the church and the school, in the office and the workshop, punctuality was held up as the greatest of the virtues.

Out of this slavish dependence on mechanical time which spread insidiously into every class in the nineteenth century, there grew up the demoralizing regimentation which today still characterizes factory life. The man who fails to conform faces social disapproval and economic ruin — unless he drops out into a non-conformist way of life in which time ceases to be of prime importance. Hurried meals, the regular morning and evening scramble for trains or buses, the strain of having to work to time schedules, all contribute, by digestive and nervous disturbance, to ruin health and shorten life.

Nor does the financial imposition of regularity tend, in the long run, to greater efficiency. Indeed, the quality of the product is usually much poorer, because the employer, regarding time as a commodity which he has to pay for, forces the operative to maintain such a speed that his work must necessarily be skimmed. Quantity rather than quality becoming the criterion, the enjoyment is taken out of the work itself, and the worker in his turn becomes a "clock-watcher," concerned only with when he will be able to escape to the scanty and monotonous leisure of industrial society, in which he "kills time" by cramming in as much time-scheduled and mechanical enjoyment of cinema, radio, and newspaper as his wage packet and his tiredness will allow. Only if he is willing to accept the hazard of living by his faith or his wits can the man without money avoid living as a slave to the clock.

The problem of the clock is, in general, similar to that of the machine. Mechanized time is valuable as a means of co-ordinating activities in a highly developed society, just as the machine is valuable as a means of reducing unnecessary labour to a minimum. Both are valuable for the contribution they make to the smooth running of society, and should

be used in so far as they assist men to co-operate efficiently and to eliminate monotonous toil and social confusion. But neither should be allowed to dominate men's lives as they do today.

Now the movement of the clock sets the tempo of men's lives — they become the servants of the concept of time which they themselves have made, and are held in fear, like Frankenstein by his own monster. In a sane and free society such an arbitrary domination of man's functions by either clock or machine would obviously be out of the question. The domination of man by man-made machines is even more ridiculous than the domination of man by man. Mechanical time would be relegated to its true function of a means of reference and co-ordination, and men would return again to a balanced view of life no longer dominated by time-regulation and the worship of the clock. Complete liberty implies freedom from the tyranny of abstractions as well as from the rule of men.

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The Writer's Subject

1. How did the concept of time in older societies differ from that of modern Western society? (para. 1)
2. How, according to Woodcock, did the development of the clock make possible the rise of industrial capitalism? (paras. 6-8)
3. What impact has the development of clock time had on the life of the modern worker, in Woodcock's view? (paras. 9-12)
4. At several points Woodcock uses the word "commodity" to describe the modern concept of time. What are the implications of this term, and how does its use further Woodcock's thesis?
5. What comparison does Woodcock make between the clock and the machine? (paras. 13-14)

The Writer's Style and Strategy

1. Discuss the appropriateness of Woodcock's choice of title.
2. Is there a rhetorical as well as an expository purpose behind Woodcock's explanation in paragraph 1 of how time was recorded by older societies?
3. Examine Woodcock's description of modern Western concepts of time in paragraph 2. How does his choice of words convey his attitude here? Does the diction seem "slanted" in any way?