

# THE RÔLE OF MONEY

## CHAPTER I .

### THE PHILOSOPHICAL BACKGROUND.— ERGOSOPHY

*THE Objective.*—It is now some sixteen years since the close of the great event that displayed, for all to see, man and his would-be rulers and mentors powerless in the grip of the forces that their technologists had safely chained but that war had let loose. There is a distinct understanding in the general consciousness that this generation is witnessing the veritable birth-throes of a new era dictated by the progress of physical science, rather than owing anything to those who have hitherto been most vocal in debate or most prominent in the attempted direction of affairs. There is a growing exasperation that an age so splendid and full of the noblest promise of generous life should be in such ill-informed and incompetent hands.

*The Monetary System Obsolete.*—Everywhere now there is the dawning consciousness among thoughtful minds that this age contains elements not understood or contained within the working rules of the older systems of government, economics, sociology, or even religion, and that it

is due to new principles that have to be introduced into the base and can in no wise be met by a change in the superstructure of society. Even more remarkable, almost incredibly so to those who have been hitherto lost voices crying in the wilderness, is the swiftly growing volume of agreement that it is the obsolete and dangerous monetary system that, primarily, is at fault. It is this entirely empirical and defeatist body of rules and conventions, that has grown up along with the scientific expansion of the means of life, that is responsible not only for the present paralysis but also for the Great War itself. All are agreed that here at least change is inevitable, the only doubt indeed now being whether any part of the system, which through a lack of imagination as to what might have been is still apt to be described as having "worked well in the past", can survive into the future.

The present book as dealing with the rôle of money cannot fail therefore to be of fundamental importance, if it succeeds at all in filling its place in the New World Series, which is nothing less than to be a guide and a lamp to those whom fate shall select to be the new leaders of the great, though not of necessity violent, changes that are close upon us. When the War forced upon everybody's attention the grave dangers surrounding a scientific civilization through the very immensity of the destructive powers that science has put into the hands of nations

still thinking only in terms of brute strength, the writer undertook an original examination into the real physical foundations of the conventions and half-truths that pass for economics, and particularly into those underlying the mechanism of distribution, which is, in a monetary civilization, the money system. His most significant conclusion, from which subsequent events have given him no reason to recede,—indeed it is now a truism—was that nothing useful can be done unless and until a scientific money system takes the place of the one now always breaking down.

The corollary, however, is never likely to be popular with our professional politicians at least. It was that, if such a thing were done, little else in the way of arbitrary interference with and government control over the essential activities of men in the pursuit of their livelihood would be required. Indeed, just as now not one in a thousand understands why the existing money system has such power to hurt him, so, if it were corrected as here outlined, not one in a thousand would need to know or, indeed, would know, except by the consequences, either that it had been rectified or how it had been rectified. For the aim of the present book is to show how the money system may be reduced to one of exactly the same character as that of our standard weights and measures.

*The Community Standpoint.*—It will be

necessary to go more fully into the combination of circumstances which make these matters at once so vital to the social and economic health of the community and so completely outside the ways of thought that appertain to the individual and guide him in his own private affairs. Much of the difficulty is of course the deliberate use hitherto of common terms in senses entirely novel and often the opposite of those normally meant, as for example *cash* and *credit*. Much also is due to misconception as to what undoubtedly constitutes wealth to an individual, when not the individual but the community is in question. Because of this, the technical study of money calls in a peculiar way for powers of generalization, and often, indeed, the complete inversion of ideas as they appertain to the individual. These factors have unfortunately been completely absent not only from so-called monetary science but to an equal and even more important extent from the fundamental systems of orthodox economics to which monetary science belongs.

Now, born of the troubled times in which we live, there has been growing up from a number of independent and at first sight quite unconnected roots a group of doctrines which may be broadly described as the application of the principles of the sciences of the material world, physics and chemistry, to economics and sociology. They have a common feature in that they are all due to the original thought of scientific men—

mainly engineers and physical scientists—more interested in and accustomed to think in terms of physical realities than in those of social or legal conventions, and concerned hardly at all with the problems and controversies of individual or class economics, but with the significance of broad general and completely inescapable principles, in particular the principles of energetics, in regard to welfare of whole communities as affected by the production and distribution of wealth.

*Social Importance of Energetics.*—In the author's opinion, at least, this new development promises to be of far more ultimate and permanent importance to the science of human welfare than the earlier incursion of biology in the last century which led to the doctrine of evolution. This is because it imposes a rigid framework of the fundamental physical laws, applying equally to men as to machines, in which there is really nothing controversial at all. The stock criticism of such a mode of approach into sociological questions would have been that men are not machines, and that in economics, as in its subdivision, money, psychological factors and considerations are at least of equal importance to, if indeed they are not of greater importance than, the purely physical factors.

But that argument, unless it frankly postulates a belief in physical miracles—in the power of the human mind to make, if it so will,  $2 + 2 = 5$

—whatever it may once have been, is now largely out of date through the extension of the exact sciences into these fields. There is not, never has been, and perhaps never will be any sort of equality at all in importance between the physical and psychological. In the sphere of distribution, for example, or of money as the distributory mechanism, all that psychology can do—and the same is equally true of “banking” as it has become—is to rob Peter to pay Paul.

*Energy Theory of Wealth.*—One of the main contributions of these doctrines is a consistent energy theory of wealth and the sharp distinction that results between wealth and the ownership of a debt. This reveals much that is incontrovertible regarding the threatened collapse of the modern scientific civilization, to give it its proper name, though it is usually miscalled the capitalistic civilization. True, “Capital,” in its proper physical sense, is its most distinctive superficial feature. But in that sense Capital is the unconsumable product of the irrevocable consumption or expenditure of wealth necessary to prepare for and make possible the new methods of production. Owing to modern methods of power production, much more of it is necessary than with the old methods. Moreover, it may be exchangeable for fresh wealth, but it is not changeable into it. From the community’s standpoint capital appears as debt rather than wealth.

Orthodox economics has never yet been anything but the class economics of the owners of debts. If its writers ever attempted any wider social applications, they made themselves simply ridiculous, as when one solemnly looked forward to the millennium arriving through the accumulation of so much capital that everyone would be well off and comfortable, presumably by living on the interest of their mutual indebtednesses. Whilst in the sphere of international trade, till long after the War, the dictum that a continued favourable balance of trade was essential for the existence of the strong nations implied the continuation of unfavourable balances for the weak. It was stated that this country was threatened with disaster unless it contrived to maintain the previous rate of foreign investments—returning abroad all that it received in the way of interest and sinking funds in respect of past investments, and if possible more than this. These are good illustrations of the debt-view of wealth and the substitution of social and legal conventions for physical reality.

*Ergosophy.*—It is convenient to give a name to the group of interconnected but more or less independent doctrines comprised under such terms as Cartesian, Physical or New Economics, Social Energetics, the Age of Plenty, and Technocracy, including the implications of these doctrines, in regard to the problems of distribution and the new philosophy of money, with which this book

is more particularly concerned. A new word *Ergosophy* will be employed for this purpose. It means the wisdom of work, energy, or power, in the purely physical sense. Mental or intellectual activities, to which these three terms are often loosely applied, are better referred to, rather, as effort, diligence, or attention.

There are many reasons that render such a new word or term desirable. So far there has been no real social philosophy arising wholly out of the universally obeyed laws of the physical world. On the other hand, from the remotest times, technology has been too apt to be considered merely a sort of slave or menial servant to verbose, pretentious, and impressionistic humane philosophies and religions. Indeed it would hardly be a caricature of civilization, as it has evolved up to now, to describe it as having been attempting to compound for the injustice of ascribing unto God the things that are of Science by rendering unto Cæsar the things that are of God. Technocracy, in one at least of its sources of inspiration, the suggestion of Thorstein Veblen for the establishment of a Soviet of technicians to take over the control of the world, is probably one of the first collective dawnings of this malversation. So long as we have simple folk displaying a pathetic acquiescence in the piety that renders thanks for all the good things of life and ascribes them to the bounty of Providence, along with anything but simple folk who



totally disbelieve anything of the kind but nevertheless do still believe implicitly in practising much more forceful methods of obtaining them, so long will civilization be a happy hunting ground for the predatory and acquisitive and a wilderness for the original and creative. The new philosophy, by claiming for mechanical science its rightful position as an equal in the trinity of wisdom, should make it easier to render unto Cæsar the things that are of Cæsar and to God the things that are of God.

*Wealth and Calories.*—In the first place ergosophy rehabilitates with a precise meaning that old-fashioned and indispensable word *Wealth*, which the orthodox economist, knowing even less of the alleged subject-matter of his studies than the original founders of the subject, the French Physiocrats, took too much for granted. Originating, to him, ultimately somehow through divine agency, he came to regard the acquisition of wealth as tantamount to its creation. He became obsessed with commerce and mercantile exchange to the neglect of the technical principles underlying all new production of wealth. To this day we are in the grip of a mercantile system that fritters away in distribution most of the advantage gained in lightening the labour of producing wealth. Involved in a mass of obvious inconsistencies, he seemed to resent the use of the term wealth at all by those unlearned in his sophistications. Even the orthodox are to-day

exceedingly sparing in the use of the word. The discussion that has lately been greatly in evidence in the papers as to the income necessary to purchase, among other things, sufficient food to support a family in health and work possesses a significance that may perhaps have been missed. The whole question centred round the number of calories of energy contained in the food itself, this to be proved, if necessary, by burning it in a calorimeter. This *is* economics, even if it is not yet recognized as such.

*Marxism Obsolete.*—It ought never to be forgotten that Victorian economics was essentially class economics, in which only gradually and tardily the actual producers of wealth as distinct from employers and property owners were considered at all. But we find things worse and not better among the accepted doctrines of left-wing and revolutionary movements. With a clearer recognition of the social implications of energy our political controversies appear mainly as due to economic confusions. In an age when men are more and more being displaced from their function as physical labourers by purely inanimate sources of power, and are in danger of being largely by-passed out of the cycle of production and distribution by automatic mechanisms, it would be incredible, if it were not true, that so large a part of the world should be misrepresented as dominated by the doctrines of Karl Marx as to wealth originating in *human*

labour. Every artisan must know that this is not now true. The views of Marx on money were even more out of date, relatively to his age, than his views on wealth, and it was significant in the evidence before the Macmillan Committee that Marxists seem to have been the last to abandon their primitive belief in gold as a currency medium and in the gold standard.

*Relations between Peoples and Governments.*—If, as appears to be happening, these obsolete ideas and the doctrinaires who exploit them are rapidly losing their hold on the public, and if an increasing body of people of all shades of political opinion are wakening to the more fundamental revolutions rendered inescapable by the progress of science, it is possible to anticipate for this and other countries not yet overtaken by revolution a very different and more reasonable, if more prosaic, course of events. For it is no progress, having absolved the Deity from the function of universal provider, to set up the Government in His place. Veblen was much nearer the reality in substituting the technologist. In the economic affairs of the nation, at least, it would seem no bad thing if the ordinary practical rules of business were followed, success and honesty being encouraged by promotion, and incompetence and corruption entailing dismissal much as with any other paid officials.

*Physical Interpretation of History.*—Nor does history seem able to escape from much the same

charge as economics. If, in other revolutions, we study not the actions and loudly proclaimed motives of the contending parties but rather the permanent and abiding fruits of the struggle, there appears little if any resemblance. Historians seem open to the charge of recording rather what ought to have been happening according to their one-sided philosophic preconceptions, than what really happened. Actually, the successive political factions appear to have gone on effectually cancelling each other out until, by a process of elimination, the new factors in the world which permitted and, indeed, enforced a more satisfying and intelligent mode of living were given freer play. Then, and then only, the ferment subsided.

This, at least, is the interpretation of history by Sydney A. Reeve, an American engineer who has for thirty years been devoting himself to the study of the great historic wars and revolutions of the past, from the standpoint of Social Energetics. His conclusion that these terrible and devastating explosions could have been avoided, and can in the future be prevented, is, obviously, of prime importance in the present state of the world. Human aspirations towards progress may be taken for granted. Even in total eclipse they are not dead, but only latent. But whether they can achieve realization rather than mere passive or active revolt, doomed in advance to futility, is in the end a question of the physical resources rather than the psychical

attitudes of men. Without an abundance, all the more essential because of the destruction these outbursts entail, the most valiant and heroic strivings are vain.

*The Truth about "Materialism"*.—This may sound like sordid and unrelieved materialism, and may have an ominous ring in the ears of many. Yet nothing but ignorance or worse could make it appear so. It is better to listen to those who have made the desert blossom as the rose rather than to those who have made fair fields a slime of mud and blood; to those who have fetched from the stars the cornucopia that suckled Jupiter instead of those who empty it in the rivers and the fire for fear of glut; to those who would let light and air into warrens and fight social disease with food and warmth rather than drugs and doles; who wait to loose into life the mounting tide of wealth rather than watch it burst its dams and leap again to the work of destruction and death. Rather is it not terrible that men who can do all these things are reckoned the mere hirelings of miscalled humanists and idealists, and are not supposed to be concerned whether they are hired to create or destroy! Even the mules of the United States, we read, when the boll-weevils, specially imported for the purpose, failed to destroy the cotton crop to prevent "overproduction", refused to tread back into the earth the growing plants. Whereas men, with resources at their disposal ample to build

up a civilization of a magnificence and liberality the world has never known, are now at their wit's end to invent new forms of destruction and waste lest this new civilization should displace the old.

*The Physical Origin of "Progress"*.—Some may see in ergosophy nothing but economic determinism pushed to extremes. True, calories are king all right in the sense that nothing whatever can happen without sufficient expenditure of them, a condition upon which humanists usually find it convenient not to dwell. But this sort of determinism the new doctrine deduces to laws which do not arise from life at all, though all life obeys them. That this is not—or at least was not—merely trite and self-evident is clear from the views of Marx, to whom the doctrine of economic determinism is so largely ascribed, as to the origin of wealth. If he had left out from his definition of wealth the word "human", and had said that wealth had originated in labour, in the sense the physicist uses the word for work or energy, he would have anticipated modern views. Instead, he referred to the original founder of this, perhaps the greatest of all scientific generalizations, as "an American humbug, the baronized Yankee, Benjamin Thompson, *alias* Count Rumford".

But though now this be little more than a truism, there is something much more positive in these doctrines than the mere barring out or subordination of human and religious factors

from the ultimate arbitrament of the fate of communities. So far as the individual goes there appears perfect free-will to utilize or not the opportunities afforded by invention and discovery in order to lighten the labour and multiply the rewards of livelihood. But this free-will by no means extends to his ability permanently to prevent others from so doing. Reeve's theory of wars and revolutions is that they arise from just this attempt, which is always ultimately unsuccessful and disastrous. Whatever you may choose to label the new view, it implies clearly that human progress is predestined from below, even if not initiated from above. At the best men may be led on to higher modes of life, but at the worst they are impelled from the rear. But it leaves, as outside its province, the actual form and nature of human progress to the other members of the trinity, the biological and psychical content of the age that may be in existence at the time.

*The Doctrine of Struggle.*—Unpleasant and shattering to many cherished illusions as this may seem, it is, nevertheless, the key that best fits our age, and none know it better than those who have tried to spread the new evangel. As an Australian writer recently well put it—there are many who cling to (for others not themselves) poverty, insecurity, hard work, scanty living, wars, starvation, and disease, as blessings in disguise, necessary to goad and subdue this lazy

and unruly animal, man, and to protect him from softness and decadence. This is the doctrine of existence for struggle, rather than of struggle for existence, and it is probably the oldest doctrine in the world. It stinks of the East not the West. If it is regarded as "biological necessity", the physical imperative is even more categorical. For in struggle man can not now exist—he can only destroy himself and be destroyed. Surely it is rather crude biology, seeing that from its earliest inception life has been doing little else than dodge physical imperatives, to suppose that man should at this epoch of his evolution suddenly reverse his instincts and, of necessity, knock out his brains against them. In truth, these ideas have, as the Australian writer was careful to point out, only a vicarious application, and the biological necessity of death for the individual is still the greatest insurance for the survival of the species. The problem is, rather, educational—for the race to learn effectively to protect itself against those who, learned mainly in the history of the bygone bow and arrow ages, would use the titanic weapons of science for race annihilation.

Men, it is true, in those ages may have been goaded on by starvation to successful robbery and theft of their neighbours, but, in this power-age, progress has been due to the conquest of nature and the by-passing of men. Whatever may be the ultimate genic effect of the Great War, it is generally admitted that the French



Revolution and the Napoleonic Wars have perceptibly reduced the average physique of the French nation, and that now wars, since superior courage and valour are much more likely to lead to swift personal annihilation than ultimate survival, are definitely and necessarily dysgenic. While on the positive side, where courage and stamina are essential to survival, in exploration of land, sea, and sky, and in trying out and taming still imperfectly understood new processes and appliances to the use of men, science has provided and is providing both opportunities and unavoidable necessities for facing and overcoming dangers that would have blenched the cheek of the legendary heroes of olden time. The fault, if any, is rather with our poets for not suitably immortalizing such achievements, but in that field no one doubts the immense superiority of the ancients over us, who in so many other respects have very little to learn from them.

*Modern Wars and National Debts.*—In point of fact, again, are wars now merely for sustenance? Are they not waged to secure markets wherein to dispose of the surplus wealth arising from scientific production operating along with the old practical law of wages? (By "practical law of wages" is meant the system that ensures to the worker just sufficient to maintain him in a mental and physical condition to allow of his efficient conduct of his trade, craft, or avocation. This is, of course, a *direct* inheritance of the age

of scarcity.) To put it quite bluntly, the purpose of wars is to compel weaker nations to take this surplus off the hands of the stronger, running up debts, if need be, in order to pay for it. Then, the threat of further war is necessary to ensure that the debts and the interest on them shall not be repudiated.

*The Real Struggles.*—The struggle for existence is now revealed as fundamentally a struggle for physical energy, and the conquest of nature has made available supplies vastly exceeding what can be extracted from the unwilling bodies of draught cattle and slaves. It is not the struggle but the energy that is essential to human life. The doctrine of existence for struggle, on the other hand, is the oldest religion in the world.

It has never been anything but a religion of the ambitious, dominating, and unscrupulous, with either a race or a caste arrogation of superiority over the races without or the herd within, an assumption of licence to act treacherously and injuriously towards aliens and those it deems of inferior breed and to confine its standards of honour and decency to those of its own blood or order. It is a code that Christianity has actively and passively resisted for two thousand years. That fact is not unimportant. For between the progress that has culminated in ergosophy and the Christian religion there is an intimate connection. Indeed the former is in origin wholly the product of the Christian nations of the West.

*The Taboo on Scientific Economics.*—After the War, a cry went up for scientific men to cooperate with the financial, industrial, and political authorities in solving the social evils that brought on the War and which have since made Peace nothing but a misnomer. But the strange and unconventional conclusions of the few who had brought to social problems the same searching and original thought that they were accustomed to apply in their own inquiries, frightened, not the public, but those whose interest in such problems is to keep them reconciled with things as they are. Those who persisted in shedding light on social evils and anomalies were deemed impious, and the conclusions tabooed. But it is the merest folly to suppose that in these days any sweeping generalization that clarifies existing great issues can be suppressed. Now that there are signs that the Age of Plenty school of monetary reformers is winning, and that the conspiracy of silence on the part of the “respectable” Press has failed, we may assess the cost. Fifteen years of golden opportunity have been wasted, the time having been devoted instead to the exacerbation of the disease. Policies, which now everyone knows were the exact opposite of those required by the facts, such as economizing, or producing more and consuming less, have worked themselves out to their inevitable results. The public is expected to believe that the misfortunes that beset us are acts of God and that, though

we have the science and the necessary equipment and organization to produce wealth in abundance, it is beyond the wit of man to learn how to distribute it. The problem, it is true, is new, and the approach to it obscured, often intentionally, by a mass of half-truths and once-truths. But its solution has not been rendered any nearer or clearer by the puerile effort of the post-War era to suppress free public discussion of the new doctrines, an issue that was fought out and won in physical science in the time of Galileo.

*Wars and Revolutions Result from Wealth.*—The reader will no doubt be able to supply for himself many striking confirmations of the theory that wars and revolution result not from poverty and misery but from the growth of wealth and the futile attempt to resist its distribution. But two striking ones that occur to the author may be here cited. The first is as to the immediate and incidental causes that precipitated the first Kerensky Revolution in Russia. We were told by intelligent and unbiassed Russians at the time that it was neither starvation and poverty nor the horrors of defeat in war but two exhibitions of official incompetence so gross as to outrage the deepest feelings of Russia. The one was the mass conscription of the peasants long before there were arms or barracks for a small fraction of them, whereby a large proportion died from the pestilential conditions engendered. Even from a purely military standpoint they would have been far

better left at work on their fields. The other was the loss of practically the whole of one season's crop of one of the chief grain districts of South Russia during transference from barges to the rail-head through its being dumped at a spot universally known as being liable to sudden autumn floods.

The second illustration is of more than incidental purport. Olive Schreiner in the introduction to her book *Woman and Labour* tells how she came to regard it as almost axiomatic that "the women of no race or class will ever revolt or attempt to bring about a revolutionary adjustment of their relation to their society, however intense their suffering and however clear their perception of it, while the welfare and persistence of their society requires their submission". They do so, in brief, when the changed conditions make acquiescence no longer necessary or desirable.

It is not suffering but *unnecessary* suffering and misery that is the goad of human progress. Precedent to the latter is the material progress in the inventions and arts that give men power over their environment, and happy indeed is the age in which precedent also, and keeping pace with the expansion of wealth, is progress in the moral and spiritual sphere. For then we get not revolution but renaissance. So in our day it is not the agitator fomenting class-hatred who can start, nor the airmen raining down bombs that

can stop, a revolution. But empty milk into the Potomac ; import pests to destroy the cotton crop ; burn wheat and coffee as fuel ; restrict the production of rubber ; set up tariff-barriers ; permit trusts, federations, cartels, and lock-outs ; allow trade unions to develop ca'canny methods to reduce output ; maintain in misery, insecurity, and idleness masses of unemployed who are not allowed to better their lot by making the very things of which they stand in need ; and revolution in some form is not probable, but certain. The ideas that govern men are outraged. Instead of a few striking illustrations of incompetence or worse they begin to see universal chaos instead of order. Their institutions, so far from protecting them in their peaceful avocations on which they rely for their livelihood, appear leagued together to keep them in traditional and unnecessary servitude and dependence. The army begins to realize that it is officered by the enemy.

*The Monetary System Impedes the Flow.*—Nor will any means avail to terminate or defeat such a revolution, whether it is sudden or long-drawn-out, violent or chronic, unless and until the barriers that oppose the free and full distribution of wealth from the producer to the ultimate user and consumer are broken down and the flow of wealth again fulfils the purpose for which men have striven to create it. Since, in all monetary civilizations, it is money that alone

can effect the exchange of wealth and the continuous flow of goods and services throughout the nation, money has become the life-blood of the community, and for each individual a veritable licence to live at all. The monetary system is the distributory mechanism, and this reading of history therefore supports up to the hilt the conclusions of those who have made a special study of what our monetary system has become. It is the primary and infinitely most important source of all our present social and international unrest and for the failure, hitherto, of democracy.

A very slight knowledge of our actual existing monetary system makes it abundantly clear that, without democracy knowing or allowing it, and without the matter ever being before the electorate even as a secondary or minor political issue, the power of uttering money has been taken out of national hands and usurped as a perquisite by the moneylender. Practically every genuine monetary reformer is unanimous that the only hope of safety and peace lies in the nation instantly resuming its prerogative over the issue of all forms of money, which, legally, it has never surrendered at all.