

The Power Theory of Aggression

by
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The Second Chapter
of
The Breakdown of Nations

'Human creatures are observed to be more savage and cruel in proportion to their bulk.'
Gulliver's Travels

Matters Discussed

The spontaneity of social misery at critical magnitudes.
Cruelty of man proportionate to his bulk.
Social size, density, integration, and velocity as crime-breeding elements.
Criminal mentality not the cause but the result of mass perpetration of atrocities.
The law of diminishing sensitivity.
The meaning of critical magnitudes.
Critical power and size as the cause of war.
How Nehru came to be as aggressive as Hitler.
Do not lead us into temptation.
The joys of window smashing.
Why Russia's leaders are beyond the reach of reason.
The power and size theory - a materialistic but not atheistic theory.
Its significance as a new interpretation of history.
The causal role of power philosophies.
Is America the exception to the rule?

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Having accomplished nothing in our search for the primary cause of social misery on the basis of the various prevailing theories, let us see what might be achieved by a reappraisal of the data of the preceding chapter from a new angle. And to simplify matters, let us continue for the time being to concentrate our attention on the most representative internal and external manifestation of the problem we set out to solve—the large-scale perpetration of atrocities within societies and the waging of aggressive wars between societies.

1. The Cause of Social Brutality

As regards the scale of socially committed or condoned atrocities, we have so far discovered one fact. Most nations, irrespective of their racial background, the stage of their civilization, their ideology, or their economic system, have managed to roll up an impressively similar record. Mass executions and related monstrosities were perpetrated in Germany under the nazis, in India under the British, in France under the Catholics, in Russia under some of the most savage, and in Italy under some of the most enlightened, princes.

There could not have been a vaster difference of conditions. Yet, if similar excesses occurred everywhere and in all phases and periods of historic development, there must apparently be a common element transcending these differences. This common denominator, as we shall see, seems to be the simple ability, the power, to commit monstrosities. As a result, we arrive at what we might call a *power theory of social misery*.

In part, the proposition seems self-evident. For no one could perpetrate atrocities without the power to do so. But this is not the point. The point is that the proposition operates also in the reverse. Everyone having the power will in the end commit the appropriate atrocities.

This sounds somewhat extreme. Clearly, not everybody holding power must necessarily make evil use of it. Which is quite true, but it does not alter the proposition. It merely means that we must sharpen the statement. For just as not any mass of fissionable material will produce an atomic explosion, but only the critical mass, so not just any quantity of power will lead to brutal abuse, but only the critical quantity. Hence we might call our theory also an *atomic theory of social misery*, the more so since, once the critical power is reached, abuse will result *spontaneously*. Lastly, because the vital element is not so much power but the size of power which, as will soon become obvious, depends in turn on the size of the social group by which it is generated, we might call the theory also the *size theory of social misery*.

But what is the critical magnitude leading to abuse? The answer is not too difficult. It is the volume of power that ensures immunity from retaliation. This it does whenever it induces in its possessor the belief that he cannot be checked by any existing larger accumulation of power. Depending on the nature of different individuals or groups, the critical volume represents a different magnitude in each different case, giving rise to the idea that there are really other elements than mere physical magnitudes responsible for criminal outbursts. However, as the boiling point is low for some substances and high for others, so the volume of power leading to abuse is low for some individuals or groups and high for others. And similarly, as rising temperatures will in the end bring even the most resistant metals to the boiling point, so the rising mass of power will, in the end, brutalize even the best, not necessarily in a subjective sense, but certainly in its effects.

This means that, whether we are individuals or groups, once the critical point is reached, we become brutes almost in spite of ourselves. If prison guards and police officials have such a universal record of brutality, it is not because they are worse than other men but because in their relationship with their captives they are nearly always equipped with the critical quantity of power. The moment this is missing, they are as considerate, humble, and complying as the rest of us. Similarly soldiers, who may have committed their souls to God in the morning, may pillage, rape, and rob by nightfall, not because they have suddenly changed, but because the confusion following the conquest of a town often provides them with that dangerous cloak of immunity that goes with the acquisition of a momentarily uncheckable power.

While some professions are thus inherently productive of brutality because they are by their very nature repositories of critical quantities of power, the most dangerous source of brutality is not professional or institutional, but physical. It is bulk - sheer physical bulk. For bulk, size, mass, not only *leads* to power; like energy it is power - power congealed into the dimension of matter. This is why Gulliver, after being cast ashore at Brobdingnag, the land of the giants, was not unreasonable in his apprehensions when he remembered that 'human creatures are observed to be more savage and cruel in proportion to their bulk'.¹ It also explains why small children, without losing either charm or innocence, do to little creatures what they would never do to larger ones. Thanks to their almost infinite superiority in size, they do not even *feel* that they are cruel when they tear out the wings of a fly or the legs of a frog, just as the giants of our fairy tales are quite appropriately pictured as no more sensitive and conscious of their monstrosity when they feast on humans, than humans are when they feast on live oysters.

Yet *individual* bulk is only a minor power-breeding magnitude and, hence, only a minor social problem, since even the biggest amongst us cannot grow much bigger than most others. As a result, they will normally need such additional power-creating assets as a hypnotic personality, a gang, or the possession of guns - all bulk-extending devices and all reducible to physical terms - before they can gratify their evil instincts. And then their available power will hover too close to the margin where the critical volume becomes sub-critical to ensure them a wide enough range of immunity for long enough a time. Consequently the relative infrequency of crime as well as the relatively infrequent intervals at which even the most hardened offenders will engage in criminal activities.

But there is one element capable of accumulating its physical substance so far and so unequivocally beyond the critical limit that no force on earth can check it. This is the immense *collective* bulk of the most courted organism of our time, the human mass, the people which, at a given size and density, not only generates the ideal condition of anonymity at which a greater number of individuals can, without danger of detection, sweep up critical quantity of power than would be possible at the more translucent lesser densities; at a given point the mass becomes itself so spontaneously vile that, in addition to the increased quantum of individual misdeeds, performed under the cloak of its darkening multitudes, it begins to produce a quantum of its own, and wholly detached, badness that bears a relationship to its size, but not to the nature of the human molecules composing it.

When this social volume is reached, everything becomes predictable, and nothing preventable. The question is then no longer: how many crimes will be committed, but who will choose in the freedom of his will to be the criminal tool of the law of averages whose provisions are so predetermining that any statistician, after correlating a community's size with its density and the pace of its population² can predict everything from the number of its deaths, fatal accidents, and false fire alarms to the fact that, for instance, in Chicago, within the next thirty days, 'just under 1000 burglaries will be committed. About 500 citizens will be held up and robbed at the point of a gun, or with some dangerous weapon. Some 15 people...will be murdered. Thirty or more women will be waylaid and attacked.'³

A crowded society is thus full of inherent dangers even in a state of relative repose. But this is nothing compared with the danger it creates when it becomes collectively agitated and, besides contracting to still greater density, as frequently happens on occasions such as feast days, it also begins to increase its velocity. Then its misdeeds will not only increase. They will increase at a geometric rate, beginning with pickpocketing, followed by altercations, brawls, knifings and, depending on its rate of further contraction and increasing velocity, by massacres that will explode with the violence of a cosmic occurrence, receding only when enough cohesive energy has been spent to allow the crowds to thin back and slow down to their original density and pace.

¹ Jonathan Swift, *Gulliver's Travels*. New York Crown Publishers, 1947 p. 88.

² As is shown later, the velocity of a population is a conditioning factor of its density, and both are determinants of a community's size. As a faster circulating currency has the effect of increasing the quantity of currency, so a faster moving community has the effect of increasing its social mass.

³ *The Field Glass*, House Organ of the Marshall Field Co., Chicago, 6 October 1952, p.4.

This is why the police force of communities, to cope with the ever present danger of sudden social fusion, must increase at a more than proportionate rate as the population increases, not because larger cities harbour proportionately more bad men than smaller ones, but because, after a certain point, social size becomes itself the chief criminal.⁴ There is no crowd on earth that could not in an instant turn into a wolf pack, however saintly its original dedication, as we can see from the many religious holidays (St. Bartholomew's, Michaelmas) that ended in massacres, and the many massacres that ended in holidays⁵. It also explains why even crusaders, who set out from France singing hymns, began to commit atrocities by the time they reached Hungary or Italy, after their armies had gathered up so many devout followers of the Cross that eventually they acquired uncontrollable critical size. And it explains why even the most solemn processions or large funerals are in perpetual need of police protection. Protection from what? Always from the same danger - the atomic consequences of their own mass.

The Origin of Crime-condoning Philosophies

However, the sheer physical size of a social aggregation seems responsible not only for the number of crimes committed by its component individuals or groups; more significantly and dangerously, the frequency of crime, growing with the increasing size of the group, seems to be responsible also for the development of a corresponding frame of mind, a condoning philosophy. And a condoning philosophy, in turn, will invariably (as a secondary cause) exert an intensifying pressure on the frequency of crime. Hence the phenomenon by which, historically, every increase in the quantity of victims has normally resulted in a more than proportionate increase in the ferocity of persecution. This indicates that not only the frequency of persecution but even the philosophy of crime is determined less by a corrupting moral climate, as is so often believed, than by the physical element of mass, numbers, power and, in the last analysis, social size. As society and, with it, power grows, so grows its corrupting effect on the mind. Or, to rephrase slightly Lord Acton's famous statement, relative power corrupts relatively, and absolute power absolutely.

We shall understand this better if we visualize the successive stages through which socially condoned criminal action proceeds. As long as the victims of persecution are few, the method of execution or, to use a Marxian term, the *mode of production*, will consist in ceremonial knifings, hangings, or shootings, preceded by a semblance of legal process and followed by a semblance of civilized burial. The executioners, moreover, still not quite sure as to the sufficiency of their power and still feeling their wrong because of the singularity of their acts, will have an urge to apologize. But as the number of their victims increases, the time for apologies and even for indulging in guilt feelings begins to dwindle, and individual executions or burials not only become cumbersome but technically unfeasible. So new practices have to be initiated. Now the victims are led to wells, trenches, or rivers, executed on the spot, and then simply thrown in. This represents less an increase in viciousness than an adjustment to the requirements of new situations which could not be handled with previous means. Hence the spectacle in past or present of corpse-filled trenches in France, Germany, Russia, Korea, or wherever else the commission of mass slaughter demanded mass disposition of bodies. As the victims increase still further in number, even trench burial becomes impracticable. So we find corpses arranged in stacks, as was

⁴ The following figures, taken from the Municipal Yearbook, 1951, give a clear picture of this progression: North Plainfield, N.J., with a population of 12,760, needs a police force of 15; Plainfield, N.J., with a population of 42,212: 78; Elisabeth, N.J., with a population of 112,675: 257; Buffalo, N.Y., with a population of 577,394: 1,398; Chicago, with a population of 3,606,439: 7,518; and New York City, with a population of 7,835,099: 19,521.

⁵ Alexandre Dumas describes an incident well illustrating the massacre-holiday moods of crowds. After the fall of Napoleon in 1815 a number of citizens of Nîmes, shouting *vive le roi*, set out in search of an individual against whom they had a grudge. Unable to find him, 'and a victim being indispensable', they murdered his uncle instead and dragged his body into the street. In the terms of Dumas, 'the whole town came to see the body of the unfortunate man. Indeed the day which followed a massacre was always a holiday, everyone leaving his work undone and coming to stare at the slaughtered victims. In this case, a man wishing to amuse the crowd, took his pipe out of his mouth and put it between the teeth of the corpse - a joke which had a marvellous success, those present shrieking with laughter.' (Alexandre Dumas, *Celebrated Crimes*. New York: P. F. Collier and Son, 1910, vol.2, p. 794.)

observed with irrational consternation in the concentration camps of the nazis, or blocking doors and carriage ways, as historians report with irrational surprise of the Paris of the sixteenth century.

Finally, when this, too, becomes impossible, the situation demands the last in the heretofore known modes of production - burning. With other methods falling short of the requirements of the task, the victims are now simply herded together, placed into a building, and set afire either *with* the building as in the mill at Carmes, where the techniques of mass cremation were as yet undeveloped, or *without* the building as in the modern crematoria of the nazis. In the future, use will undoubtedly be made of atomic power, which not only suggests itself as the only efficient means of coping with the number of victims made available by our overpopulated modern mass societies, but is also by far the cheapest means of performing what is expected of it. Discussing the 'economics of extermination' the British mathematician and astronomer Fred Hoyle calculated that, while the cost of killing in World War II was still several thousand pounds per victim, the new atomic rate per corpse has been brought down to a single pound (\$2.80).⁶

We see then that it is not atrocious design that breeds multiple slaughter, but multiple slaughter that breeds atrocious design. No personal element needs to be involved in this wholly objective phenomenon. But there is yet another relationship of moral adjustment to physical magnitudes that demands attention. While the degree of atrocity reveals a natural as well as impersonal tendency to increase with every increase in the number of victims, the degree of human disapproval, the philosophy of censure, reveals a proportionate and equally natural tendency to decline. Were this not so, the experience of witnessing mounting misery would soon overtax our compassion and kill us. In fact, the greater our decency and ability for compassion, the faster we would succumb.

But this was obviously not nature's intent. So, in the interest of our own survival, it has helped us to counteract the annihilating terror of mass atrocity by providing us with an adjustable cushion of moral numbness. As a result, instead of becoming more conscience-ridden as the rate of socially committed crimes rises, the ordinary human being is inclined to lose even the little conscience he may still have had so long as the victims were few. For as there is a *law of diminishing utility*, according to which each successive unit of a good, acquired at a given time, yields its owner less satisfaction than the preceding one, there seems also to be a *law of diminishing sensitivity*, according to which each successive commission of a crime burdens its perpetrator with less guilt feeling, and the people in general with less shock, than the preceding one⁷. This goes so far that, when misbehaviour reaches the stage of mass perpetration, such general numbness and sophistication may set in that murderers lose all their sense of criminality, and onlookers all their sense of crime.

⁶ AP dispatch from London, 25 September 1952.

⁷ This explains why the most genuinely felt shock registered by the world at nazi misdeeds was experienced at the very beginning of their rule, when their victims were still few. The shock registered subsequently by Allied observers, when they saw bodies of victims by the wagon load, seems to have been largely artificial and propagandistic, to judge from the fact that hardly anyone registered shock at similar sights, some of them sketchily described in Chapter I, in countries whose alignment immunized them against unfriendly interpretation. This did not show collusion, but it demonstrated that, contrary to the contentions of the obviously hard-boiled eye-witnesses and the meaning of such legal constructions as genocide, the frequency of commission never makes a crime seem worse. It merely normalizes it. We may appraise the degree to which our conscience has become blunted as a result of our familiarity with mass crimes, if we ask ourselves how many cocktails we have missed after reading accounts such as those concerning our Korean co-defenders of civilization. After calling the Korean conflict an 'ugly war', a correspondent of *Time* described it in these terms: 'This means not the usual, inevitable savagery of combat in the field, but savagery in detail - the blotting out of villages where the enemy *may* be hiding; the shooting and shelling of refugees who *may* include North Koreans...The South Korean police and the South Korean marines whom I observed in front line areas are brutal. They murder to save themselves the trouble of escorting prisoners to the rear; they murder civilians simply to get them out of the way.' (*Time*, 21 August 1950.) Our only redeeming feature is the fact that the law of diminishing sensitivity applies also to us, causing us to accept our large-scale atrocities as nonchalantly as the Germans accepted those of the nazis.

This is when the perpetrators begin to show a craftsman's pride in their accomplishments, express satisfaction for jobs well done, and expect promotions instead of punishment for duties meticulously performed. The bystanders, on the other hand, now begin to treat massacres as if they were holidays and, with the detachment that goes with disindividualized great numbers, to detect the scientific and commercial potentialities of the condition. Doctors suddenly see that the dying can be used for medical experiments; matrons, that tattooed skins look nice on lampshades; apothecaries, that human fat lends itself to the production of medicinal substances; and agriculturalists, that crushed bones furnish excellent fertilizer. So progressive is man's increasing insensitivity to the mounting intensity of atrocity that, in the end, mass murder becomes just like any other profession in which its practitioners assume all the attributes of honourable and honoured men, a culmination effectively portrayed by Charlie Chaplin in his elegant *Monsieur Verdoux*. No murderer of just a single person could ever be conceived as developing similar polish or noblesse. On the contrary. Not only will he be plagued by his own feeling of inadequacy; he will be treated with contempt even in the company of murderers. What a difference from the mass perpetrator who considers himself not only a master but a gentleman, and for whom even his antagonists will often feel a grudging admiration. This explains why, before they dispatched the war criminals, many of their captors seemed quite pleased to be photographed with them.

3. Critical Magnitudes

To sum up, the following conclusions appear to result from the foregoing:

(a) The principal immediate cause behind both the regularly recurring outbursts of mass criminality and the accompanying moral numbness in large sections of even the most civilized societies does not seem to lie in a perverted leadership or corrupted philosophy but in a purely physical element. It is linked with frequencies and numbers, which exert an intensifying effect, and with the possession of the critical quantity of power, which has a detonating effect. At a given volume a chain reaction of brutal acts and, in due course, the appropriate condoning philosophy will apparently result quite spontaneously.

(b) Though the critical volume of power is the immediate element leading to social barbarism, it is itself dependent on another physical element - a social mass of a given size. In a small society, the critical quantity of power can only rarely accumulate since, in the absence of great numerical weight, the cohesive force of the group is easily immobilized by the self-balancing centrifugal trends represented by the numerous competitive pursuits of its individuals⁸. In larger societies, on the other hand, the co-ordinating pressure of numbers may become such that competitive individual trends disappear and the danger of social fusion to the critical point is ever present. So, if critical power is the immediate cause of social evil, we may say that critical social size, being the breeding ground of critical power, is its ultimate or primary cause.

(c) In evaluating the critical size of a society, it is however not sufficient to think only in terms of the size of its population. Its density (correlating population with geographic area), and its velocity (reflecting the extent of its administrative integration and technological progress) must likewise be taken into account. If a population is thinly spread, it may be larger in numbers and occupy a bigger area, and yet constitute a smaller society than a less numerous but denser group. Similarly, a volatile and faster moving society may be larger than a more numerous but slower moving community. To understand this, we need but think of the number of exits in a theatre. The same number may be sufficient for a crowd moving at its normal pace, but hopelessly inadequate if the crowd becomes excited and doubles its speed. The effect is then the same as if the crowd itself had doubled. However, in spite of these qualifying features, density, velocity, as well as the social integration which they necessitate, are not separate elements but consequences as well as determinants of the physical concept of social size. For if a given area fills up with an increasing population, its society becomes automatically more dense. As it becomes denser, it

⁸ The situation is somewhat different in a society which is too small and which, as a result, forces on its members a greater protective density than would be necessary in a society of optimum size. Too small and too large societies have therefore certain similarities. Moving and living more as collective organisms than as aggregations of individuals, too small societies can easily achieve critical size in relation to rejected and ostracized individuals. The basic difference between too small and too large societies is discussed in later chapters.

requires an increasing measure of integration. And integration of the distant parts of the community with its centre will gradually impart to an increasing number of citizens an increased velocity which, in turn, will grow in proportion to its technological progress. A progressive society will, therefore, be a more integrated and faster society, and a faster society will have the same power effect as if it were larger in number. But ultimately, other things such as area, technological progress, social integration, and natural resources being equal, the most powerful society will be the one with the largest population.

In view of all this, we are not only in a position to understand the full meaning of the alternative and more significant name we have given to our theory - *the size theory of social misery*; having diagnosed the origin and primary cause of the disease, we are moreover for the first time in a position to suggest a cure. For if socially produced brutality, be it on an individual or mass scale, is largely nothing but the spontaneous result of the critical volume of power generated whenever the human mass reaches a certain magnitude, it can be prevented only through a device that keeps power-breeding social size at a sub-critical level. This can be accomplished in two ways: through the *increase* of the controlling power to the level of the challenging power, or through attacking the problem at its root by bringing about a *decrease* in social size. The conventional method is to resort to the first alternative. It provides saturation police forces large enough to match at all times the latent power of the community. This is simple in small social units. But in large ones it is both difficult and dangerous. It is difficult because, as history has shown, social fusion in massive societies can unexpectedly reach such a degree that no police force on earth can check it. And it is dangerous because, as long as police power can check it, it possesses itself the critical volume so that, to the extent that it saves us from popular atrocities, it may present us with the subtler atrocities of a police state instead.

This leaves as the only reliable method of coping with large-scale brutality and criminality the second alternative: the establishment of a system of social units of such *small size* that accumulations and condensations of collective power to the danger point can simply not occur. The answer therefore is not increase in police power, but reduction of social size - the dismemberment of those units of society that have become too big. If we want to eliminate the Chicago rate of crime, we must not educate Chicago or populate it with members of the Salvation Army. We must eliminate communities of the *size* of Chicago. Similarly, if we want to discourage the development of crime-condoning attitudes and philosophies, we shall get nowhere by spreading the gospel. We must destroy those overgrown social units which, by their very nature, are governed not by the gospel but the number conditioned law of averages.

4. The Cause of War

If we now turn from the cause of society's principal internal misery to that of its principal external misery - the periodic eruption of aggressive warfare - we shall see that the power, atomic, or size theory will again furnish more satisfactory answers than the various other theories. The same causal relationships will reveal themselves once more. Again we shall find that the dreaded result of a society's behaviour is the consequence not of evil schemes or evil disposition but of the power that is generated by excessive social size. For whenever a nation becomes large enough to accumulate the critical mass of power, it will in the end accumulate it. And when it has acquired it, it will become an aggressor, its previous record and intentions to the contrary notwithstanding.

Because of the significance of these causal relationships and the use made throughout this book of their implications, let us define the nature of the critical volume of power and the role of its underlying social size once more, with its focus this time turned on external aggression rather than internal atrocity. In contrast to the sharply defined mass of power necessary to set off an atomic explosion, the critical mass of power necessary to produce war is again somewhat relative. As in the case of internal criminal outbursts, it varies with the sum of power available to any possible combination of opponents. But the moment it is greater than this sum *in the estimate* of those holding it, aggression seems to result automatically. Inversely, the moment the power of a nation declines to below the critical point, that nation will automatically become, not *peace-loving*, which, as we have seen, no nation is likely to be, but *peaceful*, which is just as good.

Moreover, the same law that causes an atom bomb to go off *spontaneously* when the fissionable material reaches the critical size, seems also to cause a nation to become spontaneously aggressive when its power reaches the critical volume. No determination of its leaders, no ideology, not even the Christian ideology

of love and peace itself, can prevent it from exploding into warfare. By the same token, no aggressive desire and no ideology, not even the ideology of nazism or communism, as is pointed out later in this chapter, can drive a nation into attack as long as its power remains below the critical volume. It is always this physical element of power, dependent in its magnitude on the size of the community from which it flows, and generating at a given volume as its inevitable consequence aggression. It seems the cause of any and all wars, the only cause of wars, and always the cause of wars.

Even the most superficial historic survey confirms this relationship. There could be no gentler peoples on earth today than the Portuguese, the Swedes, the Norwegians, or the Danes. Yet, when they found themselves in possession of power, they lashed out against any and all comers with such fury that they conquered the world from horizon to horizon. This was not because, at the period of their national expansion, they were more aggressive than others. They were more powerful. At other times, the British and the French were the world's principal aggressors. When *they* had the critical volume of power that allowed them to get away with aggression, they too drove everything in front of them with fire and sword until a vast part of the earth's surface was theirs. The only thing that stopped them in the end was their inability, their lack of power, to go any further. At still other times, peoples such as the Dutch were peaceful in Europe where their power was sub-critical, and aggressive in remote regions where their relative power was critical. More recently, and this is their only distinction and difference, Germany and Russia emerged as the champion aggressors. But the reason for their belligerence was still the same. Not their philosophy drove them to war but their suddenly acquired great power with which they did what every nation in similar condition had done previously - they used it for aggression.

However, as powerful Germany was as aggressive as others, weak Germany was as harmless. The same people that overran the world with the formidable soldiers of Hitler's formidable Reich, formed externally the most inoffensive of human societies as long as they lived divided into jealous and independent small principalities such as Anhalt-Bernburg, Schwarzburg-Sondershausen, Saxe-Weimar, or Hohenzollern-Sigmaringen. They had their little wars, of course, but none that would have stamped them as different from the Italians of Parma, the French of Picardy, the English of Devonshire, or the Celts of Cornwall. Where they escaped the power-breeding unification of Bismarck, they remained peaceful even through the periods of the two world wars as was demonstrated by the inhabitants of Liechtenstein and Switzerland. Confining themselves within boundaries so narrow that they are unable by force of circumstance ever to acquire power unless they discover how to make atom bombs out of the pebbles of their mountain brooks, these two German tribes are for ever condemned to be as peoples amongst the most peaceful in spite of the fact that, as individuals, they may outrank even the Irish as lovers of a good brawl. And the Germans of the Reich itself, stripped of all power as they were after World War II, threatened to become again as peaceful in the nineteen-fifties as the Anhalters were a hundred years ago. Hence the extraordinary string of socialist election victories which were so puzzling to so many of our commentators who were unable to understand how a party in a *war-loving* country could win on an almost cantankerously antimilitarist platform. Clearly, deprived of power, even the aggressive Germans see no charm in a military destiny just as, endowed with power, even the saintly Indians have demonstrated in their bullying campaigns against Hyderabad, Kashmir, and Nepal, that they are not averse to the pleasures of warfare. Only in the face of the seemingly almighty Chinese and Russians do the disciples of Gandhi practise what they preach - love of peace.

We thus see that the phenomenon seems invariable as well as universal according to which the danger of aggression arises spontaneously, irrespective of nationality or disposition, the moment the power of a nation becomes so great that, in the *estimate* of its leaders, it has outgrown the power of its prospective adversaries. This *estimate*, which has already been mentioned but not stressed, seems to introduce a subjective and psychological element indicating that the objective fact of physical power alone is not all that is needed in order to cause its eruption into war. It must be coupled with the *belief* that the critical volume of strength has actually been reached, for, without such conviction, even the greatest power is no power while, with it, even inferior strength may provide the impetus of aggression. This is true, but should not obscure the fact that the source of aggressiveness lies nevertheless not in the psychological but in the physical realm. And it does so exclusively, since mere belief in power can obviously not be engendered without the reality of power; and the reality of power, on the other hand, is such that, at a given magnitude, it brings forth the corresponding belief in its existence and, with it, the corresponding aggressive ideology under any circumstances and even in the most timid of peoples. The only

significance of the psychological factor is that it blurs the sharp outlines, surrounding the critical mass of power - in contrast to the precise weight limits of fissionable material - with a marginal area of some depth within which the aggressive explosion can occur anywhere, depending on whether the leaders are *more* or *less* certain of having acquired the necessary volume. The more confident will push their nations into war close to the inner boundary of the margin, and the more hesitant, in the belief of being more peace-loving while they are simply less confident, close to the outer boundary.

This subjective element which, created by power, and growing in proportion to its magnitude, acts within the limits of the critical margin as its detonator, explains why at times even a colossal power seems peaceful - when it is uncertain of its real strength. It also explains why at times several nations become aggressive simultaneously. This happens whenever, as in the case of the Franco-Prussian War, each gets the idea that it has become stronger than the other at the same time. At still other times, only one nation may become aggressive. This is the case when not only its own leaders think its power is invincible but the leaders of its victims as well. This happened in France under Napoleon, and in Germany under Hitler. It finally explains aggressions such as that of North Korea which became inevitable the moment the United States, by withdrawing from South Korea, produced the condition which turned the previously sub-critical mass of Northern power into a critical mass. Since the power theory would have made this aggression predictable with mathematical certainty, its acceptance might well have prevented this catastrophic advance battle of World War III.⁹

Thus we see that history is full of instances showing how previously peaceful peoples have suddenly and unaccountably become aggressive savages, and aggressors angelic defenders of peace. Not in a single case could their fateful change of heart be attributed to either barbarizing or civilizing influences. The mystery of their war-mindedness was always their sudden acquisition of power, as the mystery of their conversion to the abandoned ways of peace was always their sudden loss of power. Nothing else ever counted.

5. Lead us not into Temptation

Unfortunately, as we have seen in Chapter 1, all this contradicts accepted doctrine according to which power does not go off in the hands of just anybody. Only bad countries, bad men, or men infested with bad ideologies are supposed to yield to the temptation that comes from holding an explosive. The good would not. As a result, instead of attacking the problem in its physical aspect, which would suggest that the only way of preventing war is to prevent the organization of societies so large that they can accumulate the critical mass of power, most of our theorists and diplomats are still trying to attack it on a moral plane. They want to turn us all into good and decent fellows by giving us a sounder education or by conjuring up before our eyes the consequences of evil deeds. This accomplished, they feel the peace of the world would be ensured. They will not concede that, as the possession of power is the element that causes misbehaviour, its absence is the only element that ensures our virtue. For the thought of *throwing* the explosive does not come from our philosophic attitude but from the fact that we are *holding* it.

Though many of us refuse to accept the implications of this reasoning when thinking in political terms, in our everyday relations we have adopted them to such an extent that we would hardly consider them a great discovery. The Germans have described this cause-effect relationship in a meaningful saying: *Gelegenheit macht Diebe* - Opportunity creates Thieves - indicating that it is opportunity that causes us to misbehave, not any particular sort of depravity. And opportunity is, of course, nothing but another word for the seemingly critical volume of power. Even a confirmed thief will not steal if he has no chance of getting away with it. On the other hand, even an honest man will misbehave if he has the opportunity, the power to do so.

⁹ The power theory might also have averted the Anglo-French-Israeli invasion of Egypt which, as I predicted in a letter to the *New York Times* of 19 September 1956, paradoxically became inevitable after America declared she would not participate in it. This made it likely that Russia, not more anxious to get involved in world war than America, would stay on the sidelines too. Left to themselves, the power of not only England and France, but also of Israel, turned in relation to Egypt from sub-critical to critical with the result that within weeks Egypt was involved not in one but two wars.

This explains why all of us, the good even more so than the bad, pray to the Lord not to lead us into temptation. For we know better than many a political theorist that our only safeguard from falling is not moral stature or threat of punishment, but the absence of opportunity. It also explains why mothers all over the world have long decided that the only way of protecting their jam from the hands of their children is to put it beyond the reach of their power. No story of the mythical boy who resisted the temptation of stealing an apple in an unobserved moment, and then was given it as a reward for his victory over himself, will ever produce similar results. True, some may develop an extraordinary will power and stay good because of sheer intellectual fortitude; but the mere fact that they, too, have to fight hard battles with the forces of opportunity shows the elementary character of these forces. The very first sin of man, the original sin, consisted in the use of the power to get hold of the one fruit of all that was forbidden. No warning, no appeal to reason, not the threat of the loss of paradise, prevented Eve from falling. And nothing has changed in this respect since the dawn of history. For virtue and vice are not internal qualities of the human soul that could be influenced by the mind except to an insignificant degree in the marginal area, but the automatic response to, and reflex of, a purely external condition - a given volume of power.

If we are still doubtful about this, we need only remember the little or large sins we have ourselves committed in the past. Who of us did not steal a sweetmeat as a child? As we grow older, we get wiser and conscious of moral behaviour, but the thing that makes us better is neither the process of ageing nor of training. It is the gradual disappearance of tempting opportunities. The moment an accidental opportunity falls into our lap even in later years, our primeval instincts are immediately at work again. That is when the worthiest of us begin to steal books, not from bookshops, where opportunities are few and consequences embarrassing, but from our best friends. Almost all of us have at some time or other gleefully cheated public transportation facilities of their dues, using other people's *nontransferable* season tickets, or otherwise escaping payment whenever possible. I myself, along with a number of professorial colleagues, used to be a heavy offender in this respect.¹⁰ Policemen who, being entrusted with the enforcement of the law, have also a unique chance of breaking it without danger of detection, rank for this reason professionally amongst the worst violators of our criminal codes, as the regularly recurring police scandals in most of the world's big cities show. Bank clerks, however carefully chosen, are likewise so continually exposed to temptation that, according to President Truman, there were in 1951 'something like 600 defalcations and embezzlements' in this most conservative of all professions in the United States. 'One out of every 300 bank officers was found to be crooked'.¹¹ One should assume that at least the idealistic workers and delegates of the United Nations should be resistant to man's little dishonesties. Yet, they too seem not above the rest of us. According to a news item in *Time*, 'New York City's Board of Transportation reported that during 1946, while United Nations delegates met in the city, subway turnstiles had absorbed 101,200 foreign coins'.¹²

Thus, what Bernard Shaw said of a woman's morality, that it is merely her lack of opportunity, applies to all our virtues. We refrain from misbehaving only if, and so long as, opportunity is lacking. When it arises in an unequivocal shape, only the saints amongst us will be able to resist. And sometimes probably not even they, to judge from such incidents as the one reported from Pensacola, Florida, where 'Henry Moquin, a private detective and past president of an East Pensacola Heights civic club, pleaded guilty to

¹⁰ Public facilities are always subject to cheating even on the part of the best such as the traditionally honest English public. Thus, when the British Post Office increased its telephone rates from two to three pence on 1 October 1951, it hoped to avoid losses from its inability to convert all its call boxes at once by putting the entire nation on its honour. But unofficial polls (UP dispatch from London of 30 September 1951) indicated that the Post Office was 'in for a beating. One newspaper said it found that cheating the tax collector is not considered a crime by many persons of otherwise unblemished integrity. And it found that the Post Office falls into the same category.' But above all it falls into the category of those institutions which offer a large measure of criminal opportunity which even persons of unblemished integrity have difficulty in resisting.

¹¹ President Truman, 29 September 1952.

¹² *Time*, 23 December 1946.

stealing cigars from a blind man¹³. When I was a boy, I was considered a paragon of virtue by my parents who must have been completely unaware of the secret joy I derived from smashing windows. I did not smash too many because the chances were not too abundant. But once a hailstorm broke some of our bedroom windows which consisted of countless small panes held together in a lovely mosaic pattern by a lattice-work of leaden frames such as one finds in churches. Being alone in the house, and with no one in the streets, I became suddenly aware that my power had reached critical mass. It was a magnificent opportunity I collected a number of pebbles in the garden, went into the street, and then indulged in the most pleasant orgy of window smashing of my lifetime. When my parents returned, I naturally looked as innocent as one is supposed to be at that tender age, and agreed sorrowfully when my father complained that the storm seemed to have played havoc with our house. Everything would have been perfect had I not overlooked a minor item. Hailstones melt, but pebbles do not. These were what my father found strewn over our bedroom floor. So I did not get away with my misdeed after all, but the point is that I thought I would. If I refrain from committing similar misdeeds now, it is not because my sense of morality and other people's property has improved. It is because it would look ridiculous for a professor of economics to be caught smashing the windows of his university. In other words, I have not really the power to do it. If I had...

As long as we think in terms of personal experience, we fully realize what critical power does to us. Though some may have been so lacking in opportunities that they never witnessed the thrill of their own reaction to the possession of power, certainly most of us have witnessed such reactions in others, as for instance in taxi drivers, elevator operators, shop assistants, or waiters during World War II. Once the extent of their authority over their customers dawned upon them, they turned from servants of the public into its insulting masters. Under the impact of the war-produced scarcity of their services and the resulting emergence of their power, I saw even officials of the YMCA, one of the most humble and Christian of all institutions, pervert themselves into Napoleons of aggressiveness, Hitlers of arrogance, and Himmlers of sadism, giving evidence in the most unexpected quarters of that vile and universal attitude which Shakespeare has so well described in Hamlet's great soliloquy as the *insolence of office*. The power that goes with office will turn any of us into Prussians¹⁴. And military power, a power great enough to give us reason to believe that it cannot be checked, will turn any of us into aggressors.

6. Why Russia's Leaders are beyond the Reach of Reason

To recognize this seems of vital importance. For, as long as we ignore the nature and role of power, we shall ascribe its consequences to the wrong causes such as the changeable disposition of the human mind, and search for its cure in the wrong direction. This is in fact what many of our diplomats under the influence of obsolete but tenacious theories are still doing. Having at last discovered that the present war danger no longer emanates from the Germans to whose doorsteps they have traced them until so recently, they are now ascribing it to the Russians, and in particular to the depraved ambition and state of mind of an obstinately wicked group of communist leaders. As a result, they are trying again what, at one time, they have tried in vain with the nazi leaders. They are out to change their dangerous disposition by soothing appeasement, appeals to reason and humanity, force of argument and, if all fails, the threat of replacing them. But even if they should succeed along the entire line, the danger of war would not be more dissipated than it was by the removal of the nazi leaders. For Russia would follow the same policy of aggression if she were led by a group of saints, just as Germany was driven on the path of aggression not only by Hitler but also by Emperor Wilhelm who, unlike the uncouth and blasphemous Führer, was, if not exactly a saint, at least a devout believer and the head of his country's Protestant church. Russia, in her present power-breeding size, would be a danger to world peace even in the hands of an American proconsul, as ancient Gaul was a threat to Rome in the hands of anybody, particularly in the masterful hands of Rome's own generals.

¹³ *Time*, 3 December 1951. According to the *Washington News*, even United States Senators were found to consider it not beneath their dignity to take occasionally advantage of blind newsvendors in the entrance hall of the Senate building. Blindness, be it physical, moral, or administrative, is always an invitation to sin.

¹⁴ I do not, of course, think that insolence of office is a particularly Prussian attitude. The term Prussian is used here in the misleading sense our authors have given it.

The present danger to the peace of the world lies therefore not in an aggressive state of mind but in the existence of a near-critical mass of power which would have produced the aggressive state of mind even if it had not been in existence already. As a result, if the Russian leaders act as they do, it is not because they are bad, nor because they are communists, nor because they are Russians. They act aggressively because they have emerged from World War II with such a formidable degree of social power that they think they cannot be checked by any possible combination confronting them, or that there will be a time in the near future when they can no longer be checked. Wherever and whenever they had this conviction in the recent past, they attacked, invaded, and made war. Finland, Estonia, Latvia, Lithuania, Czechoslovakia, and the other satellites are all monuments to Russian *power*, not to Russian mentality or communist indoctrination. If Moscow has left other small states such as Greece, Iran, or Turkey unattacked, it is only because these countries are backed by the formidable power of the United States, of which the masters of the Kremlin are not yet convinced that it can be challenged with impunity. But the moment they come to this conviction, World War III will have started.

It is said that the realistic rulers of the Kremlin would not repeat Hitler's error of waging war against the entire world. In fact the late Stalin himself has made this point. But Hitler, too, said he would not repeat the Kaiser's error of waging a war on two fronts at the same time, or Napoleon's error of letting himself be absorbed into the bottomless depth of Russia. Yet, in the end, he committed both. And Napoleon said he would not jeopardize his empire by attacking the Russian Tsar, with whom he thought at first it would be wiser to share rather than dispute the world. Yet, he did. Does this indicate that all these geniuses of conquest had suddenly lost their mental balance? By no means! It simply demonstrates that no vision, wisdom, or intelligence can restrain power once it has reached the critical volume. The only way of preventing aggression is then not by threatening destruction or appealing to the horse sense and humanity of leaders, but by putting the kettle, in which it simmers, away from the hob of power, even as the only way of preventing water from boiling once it has reached a certain temperature is not by appealing to its native coolness but by separating it from the source that has caused its condition - heat.

Both Napoleon and Hitler were thus probably quite sincere in their earlier declarations of restraint because, at the beginning of their wars, their power was not such that they would have been able to handle all corners. It had reached critical size only in relation to some states but not to the entire world. So they were at first aggressive only against those with whom they could deal safely. But each conquest increased their power until in the end it was so great that they had reason to believe that no hostile combination on earth was left to check them. That was the moment when both committed what earlier had seemed folly but was folly no longer. For the same reason the tough realists of the Kremlin will attempt world conquest in spite of the previous examples of failures and their own resolve to be wiser than their predecessors. When the power scales tip to their sides, the inevitable will occur. At the critical mass, Russian power will explode spontaneously even in the absence of a deliberate detonation by the Kremlin. The only chance to prevent this without deflating that power is to build up a containing power, a sort of saturation police force, of equal magnitude. This, in fact, is our present method of preserving peace. But on so vast a scale, the balance is so precarious that the detonation might occur in the containing power just as easily. For all that applies to Russia applies to the United States as well. That is why, in spite of our desire for peace, Russia is justly as apprehensive of American power as we are of hers, and her assertions of peace are quite possibly as genuine as ours.

It is thus always the critical mass of power that turns nations into aggressors, while the absence of critical power seems always the condition that makes them peaceful. Peacefulness is therefore not a mental attitude or an acquired quality that can be trained into us. It falls to us automatically as the result of physical weakness. The most savage tribes are peaceful when they are weak. But, for the same reason, civilized peoples become savages when they are strong. As an overdose of poison is safe in nobody's system, however sound and healthy he may be, so power is safe in nobody's hands, not even in those of a police force charged with the task of averting aggression.

* * *

But so as not to lose sight of the primary causal element, let us return from the power aspect, emphasized in the last few pages, to the size aspect of the theory explaining war, and recapitulate once more briefly the latter's meaning. Being a physical force, and depending for its magnitude on the magnitude of the society from which it flows, power can accumulate to the critical point only in a society of critical size.

The question is, what do we exactly understand by social size? What is larger and what is smaller? Considering that social size is a function of *physical* size, and that the ultimate particle from which a unit of power can be extracted is the individual member of a given group, social size must be the greater the larger the number of the population. The socially largest society is the one with the physically greatest number of people. And the critical society is the one with a population larger than the sum of populations that can be aligned against it.

However, as long as various societies find themselves at different levels of development, a number of qualifying concepts must be introduced in the appraisal of the effective, or usable, or social, size of a group. For prior to the achievement of identical development levels, the social size of different communities is not necessarily equal to their physical size. As has been shown earlier, a denser society may then for a time be socially more effective and powerful than a numerically larger one; a progressive society larger than a retarded one; a faster society larger than a slower one; and a more highly organized society larger than a less organized one. This explains why a well-organized minority may socially frequently constitute a majority, or why less populous groups have historically often been more aggressive than more populous ones. For in times of transition, organization (as also density and velocity) acts as a multiplier of the population number, and an accelerator in the achievement of larger social size, extracting greater energy from an equal number of power-carrying particles by simply rearranging them in a more efficient manner. However, as nations continue to become more populous, density, velocity, and organization will in the end set in spontaneously even in the absence of a deliberate effort, so that in the last stage of development - such as is seemingly being reached by an increasing number of contemporary societies at the present time - social size will again equal physical size, with the numerically larger societies being the socially more powerful ones. And being more powerful, they will develop more readily the various social miseries and complexities, whose analysis is the subject of this study, than smaller societies.

A last modifying element which should be mentioned for the sake of completion in the evaluation of effective social power concerns the geographic distance of the place of its exercise from that of its origin. For effective power, like sound or light, diminishes as distance increases. This explains why empires, though they may retain their position as great powers at the centre, invariably begin to crumble at the periphery as result of even minor local power development. The American colonies, drawing from a relatively small population number, could therefore none the less develop critical superiority and attack British power which, though enormous in Europe, was only a ripple at the distance of 3,000 miles. Had it not been for the fact that effective social power is inversely proportionate to the distance from its centre, the American colonists would hardly have begun to cultivate the idea that taxes with representation are more enjoyable than taxes without representation.

7. Objections to the Power Theory

There are many who will voice objections against the power or size theory of social misery on the ground that it sounds too much like a materialistic interpretation of history. And so it is. But there is nothing wrong with this fact. Simply because the materialistic interpretation was fathered by Marx does not mean that it is untenable. And not every materialistic interpretation is necessarily atheistic. This one is not. We live in a material universe, so why should there be anything strange in the idea that material circumstances have overpowering influences on our behaviour? God, not Karl Marx, created it that way. It is through our *senses* and through *matter* that He communicates to us the manifestations of His existence. His directions are conveyed to us through *things* and the laws embodied in *things*. To consider His physical creation as meaningless in the interpretation of human and social processes would thus seem much more blasphemous than the Marxian interpretation, which is unsatisfactory less because it is fallacious than because it is incomplete. It denies God, but at least it accepts the grandeur and meaningfulness of His design - which cannot always be said of its detractors. As Churchill has warned us, though we shape our buildings, our buildings shape us.

Nor does a materialistic interpretation of history deprive man of moral responsibility for his actions, or of his influence over historic development. Though our behaviour may be but a response to an external physical condition such as the magnitude of power or, more fundamentally, the size of society, we have both the intelligence and the freedom of action to determine the nature of the physical conditions producing our responses. If our intelligence tells us that a certain degree of power corrupts us all, we need

but use our freedom of action and see to it that the corrupting volume of power will not come into our possession. And if we know that the corrupting volume of power can accumulate only in societies that have become too large, nothing prevents us from being wiser still and seeing to it that social aggregations do not grow beyond their critical limits. Ulysses, knowing that no human being could withstand the songs of the sirens, was not, therefore, doomed to become the hopeless victim of a bewitching physical circumstance. Applying his common sense and freedom of action, he plugged his sailors' ears so that they could not hear his commands. Then he deprived himself of the power to perform an otherwise inevitable act of insanity by having his robust body chained to a mast while passing the dangerous island. There is nothing in a materialistic interpretation of history that could be construed as an excuse for man's failure to apply his wit, and change a corrupting socio-physical environment in such manner that unwelcome human responses will automatically cease, and more appropriate responses automatically arise.

Though the theory submitted here represents a materialistic interpretation, it is thus neither amoral nor atheistic. Nor is it Marxian. According to Marx, the primary cause explaining both historic change and, along with it, our changing actions, attitudes, and institutions, is our *changing mode of production*. According to the theory underlying the analysis of this book, it is the *changing size of society*. If Marx's theory represents mainly an economic interpretation, the theory of this book represents mainly a social or, because of its emphasis on physical magnitudes, a physical, or socio-physical, interpretation of history. It tries to fill the gaps left open by the Marxian approach. This does not mean that the Marxian interpretation cannot explain a great deal. It does. In fact, it is one of the most lucid tools of understanding ever to be developed. But there are fundamental areas in which it fails.

Thus, while the Marxian *mode of production* gives a highly persuasive explanation of changes within given historic periods, it has never been able to explain satisfactorily changes *between* historic periods. Appearing always as a *deus ex machina*, it could reason out everything except the cause of its own emergence and decline. It offers no explanation, for example, why the self-sufficient subsistence mode of production of primitive societies should have given way to the interdependent methods of specialization. The size theory, on the other hand, makes the answer quite simple. For specialization appears to be nothing but the spontaneous adaptation of the mode of production to the possibilities and requirements of a society that has reached a certain physical magnitude. Again, viewing the charming still life and unchanging institutions of the Middle Ages against the background of the slowness of pace of the handicraft mode of production, the Marxian approach is full of subtleness. But once more it fails to offer a reason for the rise and prolonged application of the handicraft mode itself. Viewing the problem against the background of social size on the other hand, we can understand not only the social still life of the Middle Ages with all its implications of thought and habit, but the leisurely handicraft mode of production as well. For a leisurely way of life with its accompanying religiosity, its amiable courtesies, its respect for accomplishment and hierarchy, its concept of the just price, the fair wage, the sinfulness of interest, and lastly its unhurried method of gaining the means of its subsistence, are all characteristic reflexes not so much of economic activities as of life in *small* communities. Conversely, ideals such as equality, uniformity, socialism, easy divorce, which the Marxian interpretation attributes to the levelling effect of mass production and the interchangeability of human beings manipulating machines, can be much more easily understood if we think of them, along with the mass mode of production itself, as the consequence of the requirements of life in *large* societies and the levelling effect of *great* multitudes. Reaching the limit at which growing societies can no longer satisfy their needs by hand production, they automatically produce the equalizing, materialistic, semi-pagan, inventive climate of which the machine mode of production is not cause but consequence.

While there can be no doubt that the mode of production acts as an important secondary influence, a multiplier, and an accelerator of trends, and is therefore always useful in historic analysis, as a primary cause it appears to have no greater significance than Marx attributed to political ideas or legal institutions. As the preceding chapters have shown with regard to certain social miseries and philosophies, and as the following chapters will make increasingly clear with regard to a number of other areas of economic, cultural, political, and philosophic attitudes of good as well as of evil impact, the primary cause influencing human history and action will, in the ultimate analysis, nearly always appear to be the size of the group within which we live. Because Marx ignored this, his otherwise so brilliantly reasoned analysis led to those puzzling miscalculations which his opponents never tire of emphasizing (while at the same time only rarely giving evidence of grasping the connection themselves). He thought, for example, that

socialism, evolving as the unwanted by-product of capitalist mass production, would first arise in the most advanced capitalist country. Actually it arose first in Russia, the most retarded. But Russia was the biggest - which explains the miscalculation. For socialism, with its integrating plans and social controls, is the natural by-product not of a mode of production but of a society whose extent and business units have become so large that the self-balancing mechanism of a multitude of competing individual activities has ceased to provide an orderly pattern¹⁵. Marx also thought that an increase in competition would lead to an end of competition, an increase in the accumulation of profit to an end of profit, an increase in capitalist production to the impossibility of selling the product, with the result that capitalism would be destroyed through its own pursuits. This seemed true of a number of large countries which, throughout the world, have shown a trend to increasing socialization. But it has not been true of small ones. Switzerland is as capitalist and sound as ever. And the reason for this is that the true germ of destruction is not competition but, as Marx himself must have sensed to judge from the phrasing of his famous capitalist contradictions, the *increase* in competition; not profit, but the *increase* in profit; not capitalism, but the unlimited *growth* of capitalism. But so that the germ may grow to the limit of destruction, it dearly requires a social hinterland large enough to permit such growth in the first place. The puzzling shortcomings of the Marxian analysis seem thus all resolved when we replace the mode of production by social size as the primary causal influence of historic development.

Many will object to the power or size theory also on the ground that it is based on an unduly pessimistic interpretation of man. They will claim that, far from being inspired and seduced by power, we are generally and predominantly animated by the ideals of decency justice, magnanimity, and so forth. This is true, but only because most of the time we do not possess the critical power enabling us to get away with indecency. We behave simply because we know that crime does not pay and that, with the limited power at our disposal, it is more profitable to use it for good than for bad.

This assertion is however no more a slur against mankind than Adam Smith's concept that the capitalist businessman is a cunning schemer with nothing in mind except his own interest, and conspiring whenever he can to enrich himself at the expense of the consumer. We just seem to be that way. Yet Adam Smith saw no reason to attack the freedom of capitalist individualism on this account. On the contrary, he was its staunchest defender. He knew that the individual's meanness was checked by the self-correcting device of competition, which is nothing other than a mechanism to keep the businessman's power down to proportions within which it can do no damage. It is because of his inability to do harm, not because of superior virtue, that the capitalist profit seeker will paradoxically behave as if *guided by an invisible hand* to serve society well. Since bad service would not yield profit, he becomes altruistic out of sheer egoism. But whenever he finds the opportunity of getting away with conspiracy against his fellow men, he will grasp it with relish, as has been shown by those who have succeeded in becoming monopolists. As a result of the large size of their business units, they alone in a competitive capitalist society have the power to misbehave with impunity, and promptly do so until checked by another power, the power of government drawing from still larger size.

Competitive capitalism thus does not seem to have suffered from putting trust more in the reliability of man's imperfections in pursuit of social aims than in the fiction of human goodness which has caused the disintegration of the idealistic plans of most social reformers. Nor has the Catholic Church, which was built on similar assumptions when Jesus chose not the gentle and saintly John as His successor, but earthly Peter, a man so full of weaknesses that he betrayed his own Master three times in a single night. And yet it was Peter whom his Master considered the rock on which to found the indestructible monument to His existence, not Saint John. Only socialists pay man the compliment of crediting him with an essentially good nature. But they, too, make this somewhat dependent on an external *social* condition, the absence of private property resulting from a given mode of production, as I suggested its dependence on an external *physical* condition, the absence of power resulting from a given size of the community. But

¹⁵ As socialism is the natural system of excessively large societies it is natural also in societies which are too small. But the development possibilities are different. As they grow, a large society becomes more socialist and a too small society less so. In the former case, growth has a collectivizing, in the latter case, an individualizing effect. See the author's essay: *Economic Systems and Social Size* in Robert Solo, *Economics and the Public Interest*, New Brunswick, Rutgers University Press, 1955.

the fact remains that capitalism, as long as it was based on the idea of competitive mischief, seems to have produced infinitely greater economic and spiritual values than socialism with its benign and unrealistic assumption that man's nature can be improved along with his economic environments.

One may say in fairness to socialism that it has not yet been given the chance and time to prove itself while capitalism has. But so has socialism. Man's first societies were socialist, and there were numerous attempts throughout history to establish idealistic cells for communal living freed from the degrading effects of private property. They all have had their chance and time, as the very fact proves that, in time, they all failed. And they failed not because of the eventual development of private property, but because from some of these properties, increasing in size, sprouted power. And it was power which broke socialist societies at their beginning, as it is power which threatens through the creation of monopolies to break up capitalist societies at their end.

Objections are finally due to arise from those who, like the ideological theorists of Chapter I, feel it would be dangerous to underestimate the role of ideas as the cause of social miseries such as aggressions and wars. However, the size or power theory does not underestimate ideas. All it maintains is that, as *primary* causal forces, they are irrelevant. An aggressive ideology such as fascism, nazism, or communism can do nothing to fulfil itself unless it has power - as contemporary Spain, Portugal, or San Marino amply illustrate. On the other hand, and this is the point of significance, if it possesses power, it becomes aggressive on that account, not because of its ideological content.

While thus denying the primary role of ideologies such as nazism or communism, the power or size theory does not contest their secondary significance. Though they cannot in themselves cause wars, they act-as already stated - as *accelerators* in the process of building up power to the point where it will explode spontaneously irrespective of how and by whom it has been created. But even in this respect, their effectiveness has become limited since, in the present stage of development, the critical mass can be accumulated only in very populous states. As a result, power philosophies, however incendiary they may be, can constitute no external problem if confined to small societies.

In large ones, however, they can indeed exert their influence. In Germany, for example, where the nazi ideology aspired to the critical volume of power not as an accidental by-product of growth but an end in itself, it managed to speed up the inevitable accumulation process (leading at a given magnitude to war) by perhaps a quarter of a century. But the more important point is that, because of her vast power potential over which she disposed since her unification in 1871- a potential that was destroyed neither in 1918 nor in 1945 when the Allies merely eliminated her then existing power but not the power-breeding unity of a state of more than sixty million people - Germany would have become aggressive after World War I even without nazism. The only difference would have been that, in the absence of a power philosophy, it would have taken longer, say until 1960 or 1970. She would have grown on the basis of her peace-directed instead of war-directed activities. But finally she would have exploded anyway, as a snowball on its descent from a mountain grows until it reaches proportions which are in themselves destructive, irrespective of whether it was set on its course by an innocent child or an evil schemer. What our peace planners must watch is, therefore, less the resurgence of nazism amongst the Germans, but of power - the very thing circumstances drive them to build up again. But power, unless kept at a sub-critical level - a difficult proposition once it has come dose to it - will not be any safer in the hands of an Adenauer or an anti-militarist socialist leader than in the hands of a new Hitler, a German Stalin or, for that matter, an Allied overlord. Ideologies may either delay or hasten, but neither cause nor prevent.

8. Power and Size in the United States

A similar reasoning applies to the United States which so far has seemed to provide a spectacular exception to the size theory. Here we have one of the largest and, perhaps, the most powerful nation on earth, and yet she does not seem to be the world's principal aggressor as in theory she should be. Moreover, it would seem she is not aggressive at all.

This is quite true but, as we have seen, to become effective, power must be accompanied by the awareness of its magnitude. Within the limits of the marginal area, it is not only the physical mass that matters, but the state of mind that grows out of it. This state of mind, the *soul* of power, grows sometimes faster than the body in which it is contained and sometimes slower. The latter has been the case in the United States. Though she has been by far the greatest *physical* power on earth since before World War I,

and has thus long ago entered the critical area, she has been overshadowed as a *political* and *military* power until relatively recently by all other great powers because she lacked the appropriate power state of mind. Her terrific but socially unco-ordinated energies could still be utilized in so many other directions that she saw no necessity of measuring her strength in international competition beyond the boundaries of the Western hemisphere. Thus, with an eagerness quite beyond the comprehension of European nations, she destroyed her military power after World War I as fast as she could and, instead of getting conquering ideas, became isolationist, losing completely the will of being a power anywhere outside the Americas. But within the Western hemisphere, even the United States developed attitudes that cannot always be held up as examples of gentleness. Here she was a power, whether she wanted or not, and *behaved* like one.

After World War II, a similar trend of destroying her own world power set in, at a pace however that was not only considerably slower. It has in the meantime been stopped altogether. There is no longer a possibility of the United States not being a great power. As a result, the corresponding state of mind, developing as a perhaps unwanted but unavoidable consequence, has begun to manifest itself already at numerous occasions as, for example, when President Truman's Secretary of Defence, Louis Johnson, indicated in 1950 the possibility of a preventive war, or when General Eisenhower, in an address before Congress in the same year, declared that united we can *lick* the world. The latter sounded more like a statement by the exuberant Kaiser of Germany than by the then President of Columbia University. Why should a defender of peace and democracy want to lick the world? Non-aggressively expressed, the statement would have been that, if we are united, the entire world cannot lick us. However, this shows how power breeds this peculiar state of mind, particularly in a man who, as a general must, knows the full extent of America's potential. It also shows that no ideology of peace, however strongly entrenched it may be in a country's traditions, can prevent war if a certain power condition has arisen. It may have a retarding and embellishing effect, but that is all, as the deceptive myth of preventive war indicates which advocates aggression for the solemnly declared purpose of avoiding it. It is as if someone would kill a man to save him the trouble of dying.

Yet, generally speaking, the mind of the United States, being so reluctantly carried into the inevitable, is still not completely that of the power she really is, at least not from an internal point of view. But some time she will be. When that time comes, we should not naively fool ourselves with pretensions of innocence. Power and aggressiveness are inseparable twin phenomena in a state of near critical size, and innocence is a virtue only up to a certain point and age. If there ever should be a powerful country without any desire to lick and dominate others, it would not be a sign of virtue but of either overage or mongoloid under-development. In the United States, neither is the case. So, unless we insist once more that Cicero's definition of man does not apply to us, the critical mass of power will go off in our hands, too.

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With this we have for the second time arrived at the point where we can suggest a cure for one of the most disturbing social miseries on the basis of the power or size theory. Having found that the same element which causes crime and criminality seems responsible also for war and its resultant ideology of aggression, it appears that the same device offered as the solution of the first problem must apply also to the second. If wars are due to the accumulation of the critical mass of *power*, and the critical mass of power can accumulate only in social organisms of critical *size*, the problems of aggression, like those of atrocity, can clearly again be solved in only one way - through the reduction of those organisms that have outgrown the proportions of human control. As we have seen, in the case of internal social miseries, already cities may constitute such overgrown units. In the case of external miseries, only states can acquire critical size. This means that, if the world is to be relieved of some of the pressures of aggressive warfare, we can do little by trying to unite it. We should but increase the terror potential that comes from large size. What must be accomplished is the very opposite: the dismemberment of the vast united national complexes commonly called the great powers. For they alone in the contemporary world have the social size that enables them to spread the miseries we try to prevent, but cannot so long as we leave untouched the power which produces them.