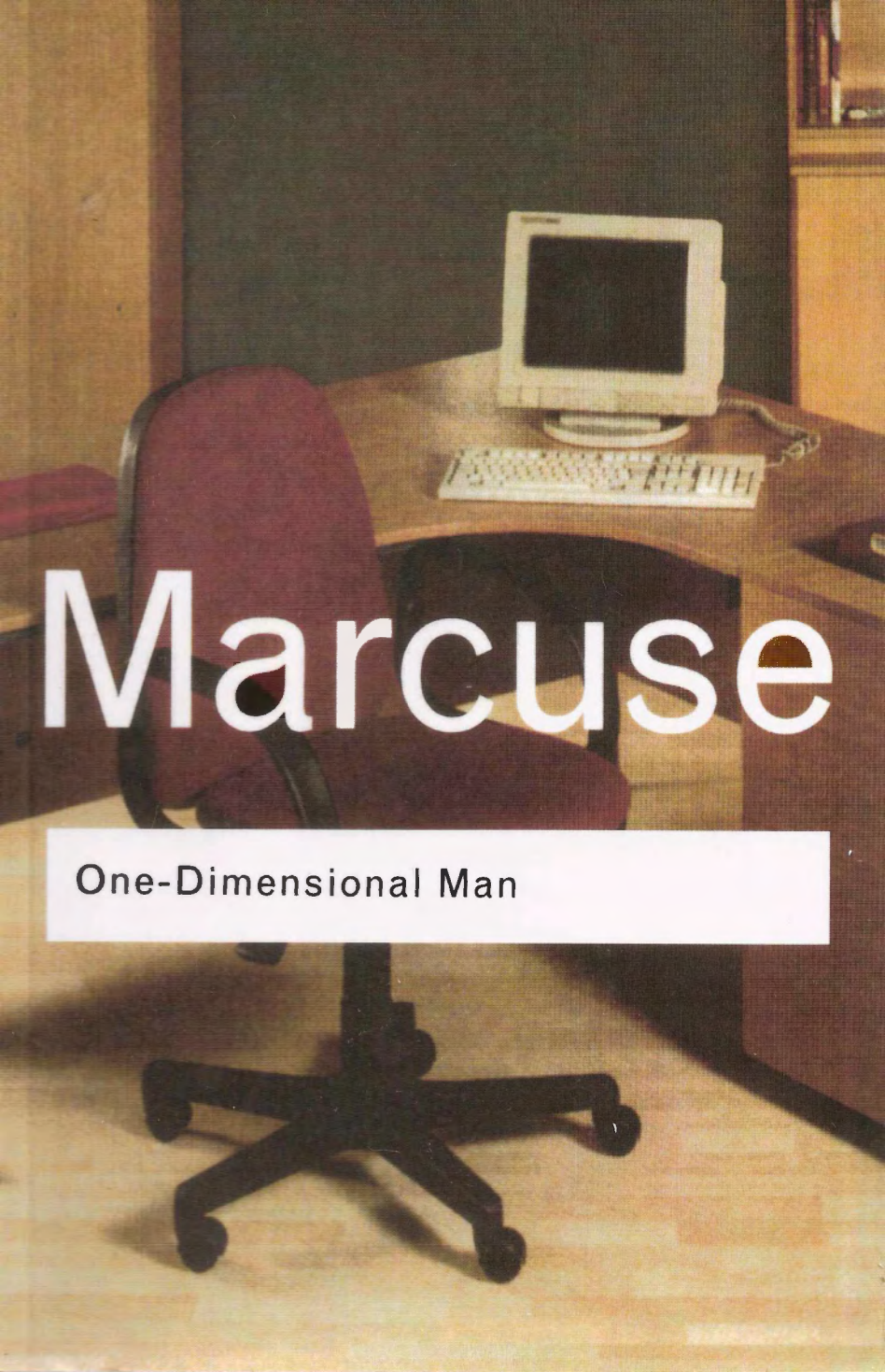
Marcuse
One-Dimensional Man

One-Dimensional Man

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Marcuse

One-Dimensional Man

Studies in the ideology of
advanced industrial society

With an introduction by Douglas Kellner

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For Inge

CONTENTS

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INTRODUCTION TO THE FIRST EDITION

The paralysis of criticism: society without opposition

Does not the threat of an atomic catastrophe which could wipe out the human race also serve to protect the very forces which perpetuate this danger? The efforts to prevent such a catastrophe overshadow the search for its potential causes in contemporary industrial society. These causes remain unidentified, unexposed, unattacked by the public because they recede before the all too obvious threat from without—to the West from the East, to the East from the West. Equally obvious is the need for being prepared, for living on the brink, for facing the challenge. We submit to the peaceful production of the means of destruction, to the perfection of waste, to being educated for a defense which deforms the defenders and that which they defend.

If we attempt to relate the causes of the danger to the way in which society is organized and organizes its members, we are immediately confronted with the fact that advanced industrial society becomes richer, bigger, and better as it perpetuates the

danger. The defense structure makes life easier for a greater number of people and extends man's mastery of nature. Under these circumstances, our mass media have little difficulty in selling particular interests as those of all sensible men. The political needs of society become individual needs and aspirations, their satisfaction promotes business and the commonweal, and the whole appears to be the very embodiment of Reason.

And yet this society is irrational as a whole. Its productivity is destructive of the free development of human needs and faculties, its peace maintained by the constant threat of war, its growth dependent on the repression of the real possibilities for pacifying the struggle for existence—individual, national, and international. This repression, so different from that which characterized the preceding, less developed stages of our society, operates today not from a position of natural and technical immaturity but rather from a position of strength. The capabilities (intellectual and material) of contemporary society are immeasurably greater than ever before—which means that the scope of society's domination over the individual is immeasurably greater than ever before. Our society distinguishes itself by conquering the centrifugal social forces with Technology rather than Terror, on the dual basis of an overwhelming efficiency and an increasing standard of living.

To investigate the roots of these developments and examine their historical alternatives is part of the aim of a critical theory of contemporary society, a theory which analyzes society in the light of its used and unused or abused capabilities for improving the human condition. But what are the standards for such a critique?

Certainly value judgments play a part. The established way of organizing society is measured against other possible ways, ways which are held to offer better chances for alleviating man's struggle for existence; a specific historical practice is measured

against its own historical alternatives. From the beginning, any critical theory of society is thus confronted with the problem of historical objectivity, a problem which arises at the two points where the analysis implies value judgments:

1. the judgment that human life is worth living, or rather can be and ought to be made worth living. This judgment underlies all intellectual effort; it is the *a priori* of social theory, and its rejection (which is perfectly logical) rejects theory itself;
2. the judgment that, in a given society, specific possibilities exist for the amelioration of human life and specific ways and means of realizing these possibilities. Critical analysis has to demonstrate the objective validity of these judgments, and the demonstration has to proceed on empirical grounds. The established society has available an ascertainable quantity and quality of intellectual and material resources. How can these resources be used for the optimal development and satisfaction of individual needs and faculties with a minimum of toil and misery? Social theory is historical theory, and history is the realm of chance in the realm of necessity. Therefore, among the various possible and actual modes of organizing and utilizing the available resources, which ones offer the greatest chance of an optimal development?

The attempt to answer these questions demands a series of initial abstractions. In order to identify and define the possibilities of an optimal development, the critical theory must abstract from the actual organization and utilization of society's resources, and from the results of this organization and utilization. Such abstraction which refuses to accept the given universe of facts as the final context of validation, such "transcending" analysis of the facts in the light of their arrested and denied possibilities, pertains to the very structure of social theory. It is opposed to all metaphysics by virtue of the rigorously historical

character of the transcendence.[1] The "possibilities" must be within the reach of the respective society; they must be definable goals of practice. By the same token, the abstraction from the established institutions must be expressive of an actual tendency—that is, their transformation must be the real need of the underlying population. Social theory is concerned with the historical alternatives which haunt the established society as subversive tendencies and forces. The values attached to the alternatives do become facts when they are translated into reality by historical practice. The theoretical concepts terminate with social change.

But here, advanced industrial society confronts the critique with a situation which seems to deprive it of its very basis. Technical progress, extended to a whole system of domination and coordination, creates forms of life (and of power) which appear to reconcile the forces opposing the system and to defeat or refute all protest in the name of the historical prospects of freedom from toil and domination. Contemporary society seems to be capable of containing social change—qualitative change which would establish essentially different institutions, a new direction of the productive process, new modes of human existence. This containment of social change is perhaps the most singular achievement of advanced industrial society; the general acceptance of the National Purpose, bipartisan policy, the decline of pluralism, the collusion of Business and Labor within the strong State testify to the integration of opposites which is the result as well as the prerequisite of this achievement.

A brief comparison between the formative stage of the theory of industrial society and its present situation may help to show how the basis of the critique has been altered. At its origins in

[1] The terms "transcend" and "transcendence" are used throughout in the empirical, critical sense: they designate tendencies in theory and practice which, in a given society, "overshoot" the established universe of discourse and action toward its historical alternatives (real possibilities).

the first half of the nineteenth century, when it elaborated the first concepts of the alternatives, the critique of industrial society attained concreteness in a historical mediation between theory and practice, values and facts, needs and goals. This historical mediation occurred in the consciousness and in the political action of the two great classes which faced each other in the society: the bourgeoisie and the proletariat. In the capitalist world, they are still the basic classes. However, the capitalist development has altered the structure and function of these two classes in such a way that they no longer appear to be agents of historical transformation. An overriding interest in the preservation and improvement of the institutional status quo unites the former antagonists in the most advanced areas of contemporary society. And to the degree to which technical progress assures the growth and cohesion of communist society, the very idea of qualitative change recedes before the realistic notions of a non-explosive evolution. In the absence of demonstrable agents and agencies of social change, the critique is thus thrown back to a high level of abstraction. There is no ground on which theory and practice, thought and action meet. Even the most empirical analysis of historical alternatives appears to be unrealistic speculation, and commitment to them a matter of personal (or group) preference.

And yet: does this absence refute the theory? In the face of apparently contradictory facts, the critical analysis continues to insist that the need for qualitative change is as pressing as ever before. Needed by whom? The answer continues to be the same: by the society as a whole, for every one of its members. The union of growing productivity and growing destruction; the brinkmanship of annihilation; the surrender of thought, hope, and fear to the decisions of the powers that be; the preservation of misery in the face of unprecedented wealth constitute the most impartial indictment—even if they are not the *raison d'être* of this society but only its by-product: its sweeping

rationality, which propels efficiency and growth, is itself irrational.

The fact that the vast majority of the population accepts, and is made to accept, this society does not render it less irrational and less reprehensible. The distinction between true and false consciousness, real and immediate interest still is meaningful. But this distinction itself must be validated. Men must come to see it and to find their way from false to true consciousness, from their immediate to their real interest. They can do so only if they live in need of changing their way of life, of denying the positive, of refusing. It is precisely this need which the established society manages to repress to the degree to which it is capable of "delivering the goods" on an increasingly large scale, and using the scientific conquest of nature for the scientific conquest of man.

Confronted with the total character of the achievements of advanced industrial society, critical theory is left without the rationale for transcending this society. The vacuum empties the theoretical structure itself, because the categories of a critical social theory were developed during the period in which the need for refusal and subversion was embodied in the action of effective social forces. These categories were essentially negative and oppositional concepts, defining the actual contradictions in nineteenth century European society. The category "society" itself expressed the acute conflict between the social and political sphere—society as antagonistic to the state. Similarly, "individual," "class," "private," "family" denoted spheres and forces not yet integrated with the established conditions—spheres of tension and contradiction. With the growing integration of industrial society, these categories are losing their critical connotation, and tend to become descriptive, deceptive, or operational terms.

An attempt to recapture the critical intent of these categories, and to understand how the intent was cancelled by the social

reality, appears from the outset to be regression from a theory joined with historical practice to abstract, speculative thought: from the critique of political economy to philosophy. This ideological character of the critique results from the fact that the analysis is forced to proceed from a position "outside" the positive as well as negative, the productive as well as destructive tendencies in society. Modern industrial society is the pervasive identity of these opposites—it is the whole that is in question. At the same time, the position of theory cannot be one of mere speculation. It must be a historical position in the sense that it must be grounded on the capabilities of the given society.

This ambiguous situation involves a still more fundamental ambiguity. *One-Dimensional Man* will vacillate throughout between two contradictory hypotheses: (1) that advanced industrial society is capable of containing qualitative change for the foreseeable future; (2) that forces and tendencies exist which may break this containment and explode the society. I do not think that a clear answer can be given. Both tendencies are there, side by side—and even the one in the other. The first tendency is dominant, and whatever preconditions for a reversal may exist are being used to prevent it. Perhaps an accident may alter the situation, but unless the recognition of what is being done and what is being prevented subverts the consciousness and the behavior of man, not even a catastrophe will bring about the change.

The analysis is focused on advanced industrial society, in which the technical apparatus of production and distribution (with an increasing sector of automation) functions, not as the sum-total of mere instruments which can be isolated from their social and political effects, but rather as a system which determines *a priori* the product of the apparatus as well as the operations of servicing and extending it. In this society, the productive apparatus tends to become totalitarian to the extent to which it determines not only the socially needed occupations,

skills, and attitudes, but also individual needs and aspirations. It thus obliterates the opposition between the private and public existence, between individual and social needs. Technology serves to institute new, more effective, and more pleasant forms of social control and social cohesion. The totalitarian tendency of these controls seems to assert itself in still another sense—by spreading to the less developed and even to the preindustrial areas of the world, and by creating similarities in the development of capitalism and communism.

In the face of the totalitarian features of this society, the traditional notion of the "neutrality" of technology can no longer be maintained. Technology as such cannot be isolated from the use to which it is put; the technological society is a system of domination which operates already in the concept and construction of techniques.

The way in which a society organizes the life of its members involves an initial *choice* between historical alternatives which are determined by the inherited level of the material and intellectual culture. The choice itself results from the play of the dominant interests. It *anticipates* specific modes of transforming and utilizing man and nature and rejects other modes. It is one "project" of realization among others.[2] But once the project has become operative in the basic institutions and relations, it tends to become exclusive and to determine the development of the society as a whole. As a technological universe, advanced industrial society is a *political* universe, the latest stage in the realization of a specific historical *project*—namely, the experience, transformation, and organization of nature as the mere stuff of domination.

[2] The term "project" emphasizes the element of freedom and responsibility in historical determination: it links autonomy and contingency. In this sense, the term is used in the work of Jean-Paul Sartre. For a further discussion see chapter 8 below.

As the project unfolds, it shapes the entire universe of discourse and action, intellectual and material culture. In the medium of technology, culture, politics, and the economy merge into an omnipresent system which swallows up or repulses all alternatives. The productivity and growth potential of this system stabilize the society and contain technical progress within the framework of domination. Technological rationality has become political rationality.

In the discussion of the familiar tendencies of advanced industrial civilization, I have rarely given specific references. The material is assembled and described in the vast sociological and psychological literature on technology and social change, scientific management, corporative enterprise, changes in the character of industrial labor and of the labor force, etc. There are many unideological analyses of the facts—such as Berle and Means, *The Modern Corporation and Private Property*, the reports of the 76th Congress' Temporary National Economic Committee on the *Concentration of Economic Power*, the publications of the AFL-CIO on *Automation and Major Technological Change*, but also those of *News and Letters* and *Correspondence* in Detroit. I should like to emphasize the vital importance of the work of C. Wright Mills, and of studies which are frequently frowned upon because of simplification, overstatement, or journalistic ease—Vance Packard's *The Hidden Persuaders*, *The Status Seekers*, and *The Waste Makers*, William H. Whyte's *The Organization Man*, Fred J. Cook's *The Warfare State* belong in this category. To be sure, the lack of theoretical analysis in these works leaves the roots of the described conditions covered and protected, but left to speak for themselves, the conditions speak loudly enough. Perhaps the most telling evidence can be obtained by simply looking at television or listening to the AM radio for one consecutive hour for a couple of days, not shutting off the commercials, and now and then switching the station.

My analysis is focused on tendencies in the most highly developed contemporary societies. There are large areas within

and without these societies where the described tendencies do not prevail—I would say: not yet prevail. I am projecting these tendencies and I offer some hypotheses, nothing more.

1

THE NEW FORMS OF CONTROL

A comfortable, smooth, reasonable, democratic unfreedom prevails in advanced industrial civilization, a token of technical progress. Indeed, what could be more rational than the suppression of individuality in the mechanization of socially necessary but painful performances; the concentration of individual enterprises in more effective, more productive corporations; the regulation of free competition among unequally equipped economic subjects; the curtailment of prerogatives and national sovereignties which impede the international organization of resources. That this technological order also involves a political and intellectual coordination may be a regrettable and yet promising development.

The rights and liberties which were such vital factors in the origins and earlier stages of industrial society yield to a higher stage of this society: they are losing their traditional rationale and content. Freedom of thought, speech, and conscience were—just as free enterprise, which they served to promote and protect—essentially critical ideas, designed to replace an

obsolescent material and intellectual culture by a more productive and rational one. Once institutionalized, these rights and liberties shared the fate of the society of which they had become an integral part. The achievement cancels the premises.

To the degree to which freedom from want, the concrete substance of all freedom, is becoming a real possibility, the liberties which pertain to a state of lower productivity are losing their former content. Independence of thought, autonomy, and the right to political opposition are being deprived of their basic critical function in a society which seems increasingly capable of satisfying the needs of the individuals through the way in which it is organized. Such a society may justly demand acceptance of its principles and institutions, and reduce the opposition to the discussion and promotion of alternative policies within the status quo. In this respect, it seems to make little difference whether the increasing satisfaction of needs is accomplished by an authoritarian or a non-authoritarian system. Under the conditions of a rising standard of living, non-conformity with the system itself appears to be socially useless, and the more so when it entails tangible economic and political disadvantages and threatens the smooth operation of the whole. Indeed, at least in so far as the necessities of life are involved, there seems to be no reason why the production and distribution of goods and services should proceed through the competitive concurrence of individual liberties.

Freedom of enterprise was from the beginning not altogether a blessing. As the liberty to work or to starve, it spelled toil, insecurity, and fear for the vast majority of the population. If the individual were no longer compelled to prove himself on the market, as a free economic subject, the disappearance of this kind of freedom would be one of the greatest achievements of civilization. The technological processes of mechanization and standardization might release individual energy into a yet uncharted realm of freedom beyond necessity. The very

structure of human existence would be altered; the individual would be liberated from the work world's imposing upon him alien needs and alien possibilities. The individual would be free to exert autonomy over a life that would be his own. If the productive apparatus could be organized and directed toward the satisfaction of the vital needs, its control might well be centralized; such control would not prevent individual autonomy, but render it possible.

This is a goal within the capabilities of advanced industrial civilization, the "end" of technological rationality. In actual fact, however, the contrary trend operates: the apparatus imposes its economic and political requirements for defense and expansion on labor time and free time, on the material and intellectual culture. By virtue of the way it has organized its technological base, contemporary industrial society tends to be totalitarian. For "totalitarian" is not only a terroristic political coordination of society, but also a non-terroristic economic-technical coordination which operates through the manipulation of needs by vested interests. It thus precludes the emergence of an effective opposition against the whole. Not only a specific form of government or party rule makes for totalitarianism, but also a specific system of production and distribution which may well be compatible with a "pluralism" of parties, newspapers, "countervailing powers," etc.[1]

Today political power asserts itself through its power over the machine process and over the technical organization of the apparatus. The government of advanced and advancing industrial societies can maintain and secure itself only when it succeeds in mobilizing, organizing, and exploiting the technical, scientific, and mechanical productivity available to industrial civilization. And this productivity mobilizes society as a whole, above and beyond any particular individual or group interests.

[1] See p. 54.

The brute fact that the machine's physical (only physical?) power surpasses that of the individual, and of any particular group of individuals, makes the machine the most effective political instrument in any society whose basic organization is that of the machine process. But the political trend may be reversed; essentially the power of the machine is only the stored-up and projected power of man. To the extent to which the work world is conceived of as a machine and mechanized accordingly, it becomes the *potential* basis of a new freedom for man.

Contemporary industrial civilization demonstrates that it has reached the stage at which "the free society" can no longer be adequately defined in the traditional terms of economic, political, and intellectual liberties, not because these liberties have become insignificant, but because they are too significant to be confined within the traditional forms. New modes of realization are needed, corresponding to the new capabilities of society.

Such new modes can be indicated only in negative terms because they would amount to the negation of the prevailing modes. Thus economic freedom would mean freedom *from* the economy—from being controlled by economic forces and relationships; freedom from the daily struggle for existence, from earning a living. Political freedom would mean liberation of the individuals *from* politics over which they have no effective control. Similarly, intellectual freedom would mean the restoration of individual thought now absorbed by mass communication and indoctrination, abolition of "public opinion" together with its makers. The unrealistic sound of these propositions is indicative, not of their utopian character, but of the strength of the forces which prevent their realization. The most effective and enduring form of warfare against liberation is the implanting of material and intellectual needs that perpetuate obsolete forms of the struggle for existence.

The intensity, the satisfaction and even the character of human needs, beyond the biological level, have always been

preconditioned. Whether or not the possibility of doing or leaving, enjoying or destroying, possessing or rejecting something is seized as a *need* depends on whether or not it can be seen as desirable and necessary for the prevailing societal institutions and interests. In this sense, human needs are historical needs and, to the extent to which the society demands the repressive development of the individual, his needs themselves and their claim for satisfaction are subject to overriding critical standards.

override critical standards.

false needs:

We may distinguish both true and false needs. "False" are those which are superimposed upon the individual by particular social interests in his repression: the needs which perpetuate toil, aggressiveness, misery, and injustice. Their satisfaction might be most gratifying to the individual, but this happiness is not a condition which has to be maintained and protected if it serves to arrest the development of the ability (his own and others) to recognize the disease of the whole and grasp the chances of curing the disease. The result then is euphoria in unhappiness. Most of the prevailing needs to relax, to have fun, to behave and consume in accordance with the advertisements, to love and hate what others love and hate, belong to this category of false needs.

Such needs have a societal content and function which are determined by external powers over which the individual has no control; the development and satisfaction of these needs is heteronomous. No matter how much such needs may have become the individual's own, reproduced and fortified by the conditions of his existence; no matter how much he identifies himself with them and finds himself in their satisfaction, they continue to be what they were from the beginning—products of a society whose dominant interest demands repression.

vital needs:

The prevalence of repressive needs is an accomplished fact, accepted in ignorance and defeat, but a fact that must be undone in the interest of the happy individual as well as all those whose misery is the price of his satisfaction. The only needs that have an

unqualified claim for satisfaction are the vital ones—nourishment, clothing, lodging at the attainable level of culture. The satisfaction of these needs is the prerequisite for the realization of *all* needs, of the unsublimated as well as the sublimated ones.

For any consciousness and conscience, for any experience which does not accept the prevailing societal interest as the supreme law of thought and behavior, the established universe of needs and satisfactions is a fact to be questioned—questioned in terms of truth and falsehood. These terms are historical throughout, and their objectivity is historical. The judgment of needs and their satisfaction, under the given conditions, involves standards of *priority*—standards which refer to the optimal development of the individual, of all individuals, under the optimal utilization of the material and intellectual resources available to man. The resources are calculable. "Truth" and "falsehood" of needs designate objective conditions to the extent to which the universal satisfaction of vital needs and, beyond it, the progressive alleviation of toil and poverty, are universally valid standards. But as historical standards, they do not only vary according to area and stage of development, they also can be defined only in (greater or lesser) *contradiction* to the prevailing ones. What tribunal can possibly claim the authority of decision?

In the last analysis, the question of what are true and false needs must be answered by the individuals themselves, but only in the last analysis; that is, if and when they are free to give their own answer. As long as they are kept incapable of being autonomous, as long as they are indoctrinated and manipulated (down to their very instincts), their answer to this question cannot be taken as their own. By the same token, however, no tribunal can justly arrogate to itself the right to decide which needs should be developed and satisfied. Any such tribunal is reprehensible, although our revulsion does not do away with the question:

how can the people who have been the object of effective and productive domination by themselves create the conditions of freedom?[2]

The more rational, productive, technical, and total the repressive administration of society becomes, the more unimaginable the means and ways by which the administered individuals might break their servitude and seize their own liberation. To be sure, to impose Reason upon an entire society is a paradoxical and scandalous idea—although one might dispute the righteousness of a society which ridicules this idea while making its own population into objects of total administration. All liberation depends on the consciousness of servitude, and the emergence of this consciousness is always hampered by the predominance of needs and satisfactions which, to a great extent, have become the individual's own. The process always replaces one system of preconditioning by another; the optimal goal is the replacement of false needs by true ones, the abandonment of repressive satisfaction.

The distinguishing feature of advanced industrial society is its effective suffocation of those needs which demand liberation—liberation also from that which is tolerable and rewarding and comfortable—while it sustains and absolves the destructive power and repressive function of the affluent society. Here, the social controls exact the overwhelming need for the production and consumption of waste; the need for stupefying work where it is no longer a real necessity; the need for modes of relaxation which soothe and prolong this stupefication; the need for maintaining such deceptive liberties as free competition at administered prices, a free press which censors itself, free choice between brands and gadgets.

Under the rule of a repressive whole, liberty can be made into a powerful instrument of domination. The range of choice open

[2] See p. 43.

to the individual is not the decisive factor in determining the degree of human freedom, but *what* can be chosen and what *is* chosen by the individual. The criterion for free choice can never be an absolute one, but neither is it entirely relative. Free election of masters does not abolish the masters or the slaves. Free choice among a wide variety of goods and services does not signify freedom if these goods and services sustain social controls over a life of toil and fear—that is, if they sustain alienation. And the spontaneous reproduction of superimposed needs by the individual does not establish autonomy; it only testifies to the efficacy of the controls.

Our insistence on the depth and efficacy of these controls is open to the objection that we overrate greatly the indoctrinating power of the "media," and that by themselves the people would feel and satisfy the needs which are now imposed upon them. The objection misses the point. The preconditioning does not start with the mass production of radio and television and with the centralization of their control. The people enter this stage as preconditioned receptacles of long standing; the decisive difference is in the flattening out of the contrast (or conflict) between the given and the possible, between the satisfied and the unsatisfied needs. Here, the so-called equalization of class distinctions reveals its ideological function. If the worker and his boss enjoy the same television program and visit the same resort places, if the typist is as attractively made up as the daughter of her employer, if the Negro owns a Cadillac, if they all read the same newspaper, then this assimilation indicates not the disappearance of classes, but the extent to which the needs and satisfactions that serve the preservation of the Establishment are shared by the underlying population.

Indeed, in the most highly developed areas of contemporary society, the transplantation of social into individual needs is so effective that the difference between them seems to be purely

theoretical. Can one really distinguish between the mass media as instruments of information and entertainment, and as agents of manipulation and indoctrination? Between the automobile as nuisance and as convenience? Between the horrors and the comforts of functional architecture? Between the work for national defense and the work for corporate gain? Between the private pleasure and the commercial and political utility involved in increasing the birth rate?

We are again confronted with one of the most vexing aspects of advanced industrial civilization: the rational character of its irrationality. Its productivity and efficiency, its capacity to increase and spread comforts, to turn waste into need, and destruction into construction, the extent to which this civilization transforms the object world into an extension of man's mind and body makes the very notion of alienation questionable. The people recognize themselves in their commodities; they find their soul in their automobile, hi-fi set, split-level home, kitchen equipment. The very mechanism which ties the individual to his society has changed, and social control is anchored in the new needs which it has produced.

The prevailing forms of social control are technological in a new sense. To be sure, the technical structure and efficacy of the productive and destructive apparatus has been a major instrumentality for subjecting the population to the established social division of labor throughout the modern period. Moreover, such integration has always been accompanied by more obvious forms of compulsion: loss of livelihood, the administration of justice, the police, the armed forces. It still is. But in the contemporary period, the technological controls appear to be the very embodiment of Reason for the benefit of all social groups and interests—to such an extent that all contradiction seems irrational and all counteraction impossible.

intrijection

No wonder then that, in the most advanced areas of this

civilization, the social controls have been introjected to the point where even individual protest is affected at its roots. The intellectual and emotional refusal "to go along" appears neurotic and impotent. This is the socio-psychological aspect of the political event that marks the contemporary period: the passing of the historical forces which, at the preceding stage of industrial society, seemed to represent the possibility of new forms of existence.

But the term "introjection" perhaps no longer describes the way in which the individual by himself reproduces and perpetuates the external controls exercised by his society. Introjection suggests a variety of relatively spontaneous processes by which a Self (Ego) transposes the "outer" into the "inner." Thus introjection implies the existence of an inner dimension distinguished from and even antagonistic to the external exigencies—an individual consciousness and an individual unconscious *apart from* public opinion and behavior.[3] The idea of "inner freedom" here has its reality: it designates the private space in which man may become and remain "himself."

Today this private space has been invaded and whittled down by technological reality. Mass production and mass distribution claim the *entire* individual, and industrial psychology has long since ceased to be confined to the factory. The manifold processes of introjection seem to be ossified in almost mechanical reactions. The result is, not adjustment but *mimesis*: an immediate identification of the individual with his society and, through it, with the society as a whole.

itrojection -> mimesis

This immediate, automatic identification (which may have been characteristic of primitive forms of association) reappears in high industrial civilization; its new "immediacy," however, is the product of a sophisticated, scientific management and

[3] The change in the function of the family here plays a decisive role: its "socializing" functions are increasingly taken over by outside groups and media. See my Eros and Civilization (Boston: Beacon Press, 1955), p. 96ff.

organization. In this process, the "inner" dimension of the mind in which opposition to the status quo can take root is whittled down. The loss of this dimension, in which the power of negative thinking—the critical power of Reason—is at home, is the ideological counterpart to the very material process in which advanced industrial society silences and reconciles the opposition. The impact of progress turns Reason into submission to the facts of life, and to the dynamic capability of producing more and bigger facts of the same sort of life. The efficiency of the system blunts the individuals' recognition that it contains no facts which do not communicate the repressive power of the whole. If the individuals find themselves in the things which shape their life, they do so, not by giving, but by accepting the law of things—not the law of physics but the law of their society.

identification & alienation

I have just suggested that the concept of alienation seems to become questionable when the individuals identify themselves with the existence which is imposed upon them and have in it their own development and satisfaction. This identification is not illusion but reality. However, the reality constitutes a more progressive stage of alienation. The latter has become entirely objective; the subject which is alienated is swallowed up by its alienated existence. There is only one dimension, and it is everywhere and in all forms. The achievements of progress defy ideological indictment as well as justification; before their tribunal, the "false consciousness" of their rationality becomes the true consciousness.

ideology

This absorption of ideology into reality does not, however, signify the "end of ideology." On the contrary, in a specific sense advanced industrial culture is more ideological than its predecessor, inasmuch as today the ideology is in the process of production itself.[4] In a provocative form, this proposition reveals

[4] Theodor W. Adorno, Prismen. Kulturkritik und Gesellschaft. (Frankfurt: Suhrkamp, 1955), p. 24f.

the political aspects of the prevailing technological rationality. The productive apparatus and the goods and services which it produces "sell" or impose the social system as a whole. The means of mass transportation and communication, the commodities of lodging, food, and clothing, the irresistible output of the entertainment and information industry carry with them prescribed attitudes and habits, certain intellectual and emotional reactions which bind the consumers more or less pleasantly to the producers and, through the latter, to the whole. The products indoctrinate and manipulate; they promote a false consciousness which is immune against its falsehood. And as these beneficial products become available to more individuals in more social classes, the indoctrination they carry ceases to be publicity; it becomes a way of life. It is a good way of life—much better than before—and as a good way of life, it militates against qualitative change. Thus emerges a pattern of *one-dimensional thought and behavior* in which ideas, aspirations, and objectives that, by their content, transcend the established universe of discourse and action are either repelled or reduced to terms of this universe. They are redefined by the rationality of the given system and of its quantitative extension.

new scientific methods: behaviorism

The trend may be related to a development in scientific method: operationalism in the physical, behaviorism in the social sciences. The common feature is a total empiricism in the treatment of concepts; their meaning is restricted to the representation of particular operations and behavior. The operational point of view is well illustrated by P. W. Bridgman's analysis of the concept of length:[5]

[5] P. W. Bridgman, *The Logic of Modern Physics* (New York: Macmillan, 1928), p. 5. The operational doctrine has since been refined and qualified. Bridgman himself has extended the concept of "operation" to include the "paper-and-pencil" operations of the theorist (in Philipp J. Frank, *The Validation of Scientific*

> We evidently know what we mean by length if we can tell what the length of any and every object is, and for the physicist nothing more is required. To find the length of an object, we have to perform certain physical operations. The concept of length is therefore fixed when the operations by which length is measured are fixed: that is, the concept of length involves as much and nothing more than the set of operations by which length is determined. In general, we mean by any concept nothing more than a set of operations; *the concept is synonymous with the corresponding set of operations.*

Bridgman has seen the wide implications of this mode of thought for the society at large:[6]

> To adopt the operational point of view involves much more than a mere restriction of the sense in which we understand 'concept,' but means a far-reaching change in all our habits of thought, in that we shall no longer permit ourselves to use as tools in our thinking concepts of which we cannot give an adequate account in terms of operations.

Bridgman's prediction has come true. The new mode of thought is today the predominant tendency in philosophy, psychology, sociology, and other fields. Many of the most seriously troublesome concepts are being "eliminated" by showing that no adequate account of them in terms of operations or behavior can be given. The radical empiricist onslaught (I shall subsequently, in chapters VII and VIII, examine its claim to be empiricist) thus provides the methodological justification for the debunking of

Theories [Boston: Beacon Press, 1954], Chap. II). The main impetus remains the same: it is "desirable" that the paper-and-pencil operations "be capable of eventual contact, although perhaps indirectly, with instrumental operations."

[6] P. W. Bridgman, *The Logic of Modern Physics*, *loc. cit.*, p. 31.

the mind by the intellectuals—a positivism which, in its denial of the transcending elements of Reason, forms the academic counterpart of the socially required behavior.

Outside the academic establishment, the "far-reaching change in all our habits of thought" is more serious. It serves to coordinate ideas and goals with those exacted by the prevailing system, to enclose them in the system, and to repel those which are irreconcilable with the system. The reign of such a one-dimensional reality does not mean that meterialism rules, and that the spiritual, metaphysical, and bohemian occupations are petering out. On the contrary, there is a great deal of "Worship together this week," "Why not try God," Zen, existentialism, and beat ways of life, etc. But such modes of protest and transcendence are no longer contradictory to the status quo and no longer negative. They are rather the ceremonial part of practical behaviorism, its harmless negation, and are quickly digested by the status quo as part of its healthy diet.

One-dimensional thought is systematically promoted by the makers of politics and their purveyors of mass information. Their universe of discourse is populated by self-validating hypotheses which, incessantly and monopolistically repeated, become hypnotic definitions or dictations. For example, "free" are the institutions which operate (and are operated on) in the countries of the Free World; other transcending modes of freedom are by definition either anarchism, communism, or propaganda. "Socialistic" are all encroachments on private enterprises not undertaken by private enterprise itself (or by government contracts), such as universal and comprehensive health insurance, or the protection of nature from all too sweeping commercialization, or the establishment of public of services which may hurt private profit. This totalitarian logic of accomplished facts has its Eastern counterpart. There, freedom is the way of life instituted by a communist regime, and all other transcending

modes of freedom are either capitalistic, or revisionist, or leftist sectarianism. In both camps, non-operational ideas are non-behavioral and subversive. The movement of thought is stopped at barriers which appear as the limits of Reason itself.

Such limitation of thought is certainly not new. Ascending modern rationalism, in its speculative as well as empirical form, shows a striking contrast between extreme critical radicalism in scientific and philosophic method on the one hand, and an uncritical quietism in the attitude toward established and functioning social institutions. Thus Descartes' *ego cogitans* was to leave the "great public bodies" untouched, and Hobbes held that "the present ought always to be preferred, maintained, and accounted best." Kant agreed with Locke in justifying revolution *if and when* it has succeeded in organizing the whole and in preventing subversion.

However, these accommodating concepts of Reason were always contradicted by the evident misery and injustice of the "great public bodies" and the effective, more or less conscious rebellion against them. Societal conditions existed which provoked and permitted real dissociation from the established state of affairs; a private as well as political dimension was present in which dissociation could develop into effective opposition, testing its strength and the validity of its objectives.

With the gradual closing of this dimension by the society, the self-limitation of thought assumes a larger significance. The interrelation between scientific-philosophical and societal processes, between theoretical and practical Reason, asserts itself "behind the back" of the scientists and philosophers. The society bars a whole type of oppositional operations and behavior; consequently, the concepts pertaining to them are rendered illusory or meaningless. Historical transcendence appears as metaphysical transcendence, not acceptable to science and scientific thought. The operational and behavioral point of view, practiced as a "habit of thought" at large, becomes the view of the

established universe of discourse and action, needs and aspirations. The "cunning of Reason" works, as it so often did, in the interest of the powers that be. The insistence on operational and behavioral concepts turns against the efforts to free thought and behavior from the given reality and for the suppressed alternatives. Theoretical and practical Reason, academic and social behaviorism meet on common ground: that of an advanced society which makes scientific and technical progress into an instrument of domination.

Progress

"Progress" is not a neutral term; it moves toward specific ends, and these ends are defined by the possibilities of ameliorating the human condition. Advanced industrial society is approaching the stage where continued progress would demand the radical subversion of the prevailing direction and organization of progress. This stage would be reached when material production (including the necessary services) becomes automated to the extent that all vital needs can be satisfied while necessary labor time is reduced to marginal time. From this point on, technical progress would transcend the realm of necessity, where it served as the instrument of domination and exploitation which thereby limited its rationality; technology would become subject to the free play of faculties in the struggle for the pacification of nature and of society.

pacification of existence

Such a state is envisioned in Marx's notion of the "abolition of labor." The term "pacification of existence" seems better suited to designate the historical alternative of a world which—through an international conflict which transforms and suspends the contradictions within the established societies—advances on the brink of a global war. "Pacification of existence" means the development of man's struggle with man and with nature, under conditions where the competing needs, desires, and aspirations are no longer organized by vested interests in domination and scarcity—an organization which perpetuates the destructive forms of this struggle.

Today's fight against this historical alternative finds a firm mass basis in the underlying population, and finds its ideology in the rigid orientation of thought and behavior to the given universe of facts. Validated by the accomplishments of science and technology, justified by its growing productivity, the status quo defies all transcendence. Faced with the possibility of pacification on the grounds of its technical and intellectual achievements, the mature industrial society closes itself against this alternative. Operationalism, in theory and practice, becomes the theory and practice of containment. Underneath its obvious dynamics, this society is a thoroughly static system of life: self-propelling in its oppressive productivity and in its beneficial coordination. Containment of technical progress goes hand in hand with its growth in the established direction. In spite of the political fetters imposed by the status quo, the more technology appears capable of creating the conditions for pacification, the more are the minds and bodies of man organized against this alternative.

The most advanced areas of industrial society exhibit throughout these two features: a trend toward consummation of technological rationality, and intensive efforts to contain this trend within the established institutions. Here is the internal contradiction of this civilization: the irrational element in its rationality. It is the token of its achievements. The industrial society which makes technology and science its own is organized for the ever-more-effective utilization of its resources. It becomes irrational when the success of these efforts opens new dimensions of human realization. Organization for peace is different from organization for war; the institutions which served the struggle for existence cannot serve the pacification of existence. Life as an end is qualitatively different from life as a means.

a)
b)

Such a qualitatively new mode of existence can never be envisaged as the mere by-product of economic and political changes, as the more or less spontaneous effect of the new

institutions which constitute the necessary prerequisite. Qualitative change also involves a change in the technical basis on which this society rests—one which sustains the economic and political institutions through which the "second nature" of man as an aggressive object of administration is stabilized. The techniques of industrialization are political techniques; as such, they prejudge the possibilities of Reason and Freedom.

To be sure, labor must precede the reduction of labor, and industrialization must precede the development of human needs and satisfactions. But as all freedom depends on the conquest of alien necessity, the realization of freedom depends on the techniques of this conquest. The highest productivity of labor can be used for the perpetuation of labor, and the most efficient industrialization can serve the restriction and manipulation of needs.

When this point is reached, domination—in the guise of affluence and liberty—extends to all spheres of private and public existence, integrates all authentic opposition, absorbs all alternatives. Technological rationality reveals its political character as it becomes the great vehicle of better domination, creating a truly totalitarian universe in which society and nature, mind and body are kept in a state of permanent mobilization for the defense of this universe.

9

THE CATASTROPHE OF LIBERATION

Positive thinking and its neo-positivist philosophy counteract the historical content of rationality. This content is never an extraneous factor or meaning which can or cannot be included in the analysis; it enters into conceptual thought as constitutive factor and determines the validity of its concepts. To the degree to which the established society is irrational, the analysis in terms of historical rationality introduces into the concept the negative element—critique, contradiction, and transcendence.

This element cannot be assimilated with the positive. It changes the concept in its entirety, in its intent and validity. Thus, in the analysis of an economy, capitalist or not, which operates as an "independent" power over and above the individuals, the negative features (overproduction, unemployment, insecurity, waste, repression) are not comprehended as long as they appear merely as more or less inevitable by-products, as "the other side" of the story of growth and progress.

True, a totalitarian administration may promote the efficient

exploitation of resources; the nuclear-military establishment may provide millions of jobs through enormous purchasing power; toil and ulcers may be the by-product of the acquisition of wealth and responsibility; deadly blunders and crimes on the part of the leaders may be merely the way of life. One is willing to admit economic and political madness—and one buys it. But this sort of knowledge of "the other side" is part and parcel of the solidification of the state of affairs, of the grand unification of opposites which counteracts qualitative change, because it pertains to a thoroughly hopeless or thoroughly preconditioned existence that has made its home in a world where even the irrational is Reason.

The tolerance of positive thinking is enforced tolerance—enforced not by any terroristic agency but by the overwhelming, anonymous power and efficiency of the technological society. As such it permeates the general consciousness—and the consciousness of the critic. The absorption of the negative by the positive is validated in the daily experience, which obfuscates the distinction between rational appearance and irrational reality. Here are some banal examples of this harmonization:

(1) I ride in a new automobile. I experience its beauty, shininess, power, convenience—but then I become aware of the fact that in a relatively short time it will deteriorate and need repair; that its beauty and surface are cheap, its power unnecessary, its size idiotic; and that I will not find a parking place. I come to think of my car as a product of one of the Big Three automobile corporations. The latter determine the appearance of my car and make its beauty as well as its cheapness, its power as well as its shakiness, its working as well as its obsolescence. In a way, I feel cheated. I believe that the car is not what it could be, that better cars could be made for less money. But the other guy has to live, too. Wages and taxes are too high; turnover is necessary; we have it much

better than before. The tension between appearance and reality melts away and both merge in one rather pleasant feeling.

(2) I take a walk in the country. Everything is as it should be: Nature at its best. Birds, sun, soft grass, a view through the trees of the mountains, nobody around, no radio, no smell of gasoline. Then the path turns and ends on the highway. I am back among the billboards, service stations, motels, and roadhouses. I was in a National Park, and I now know that this was not reality. It was a "reservation," something that is being preserved like a species dying out. If it were not for the government, the billboards, hot dog stands, and motels would long since have invaded that piece of Nature. I am grateful to the government; we have it much better than before . . .

(3) The subway during evening rush hour. What I see of the people are tired faces and limbs, hatred and anger. I feel someone might at any moment draw a knife—just so. They read, or rather they are soaked in their newspaper or magazine or paperback. And yet, a couple of hours later, the same people, deodorized, washed, dressed-up or down, may be happy and tender, really smile, and forget (or remember). But most of them will probably have some awful togetherness or aloneness at home.

These examples may illustrate the happy marriage of the positive and the negative—the *objective* ambiguity which adheres to the data of experience. It is objective ambiguity because the shift in my sensations and reflections responds to the manner in which the experienced facts are actually interrelated. But this interrelation, if comprehended, shatters the harmonizing consciousness and its false realism. Critical thought strives to define the irrational character of the established rationality (which becomes increasingly obvious) and to define the tendencies

which cause this rationality to generate its own transformation. "Its own" because, as historical totality, it has developed forces and capabilities which themselves become projects beyond the established totality. They are possibilities of the advancing technological rationality and, as such, they involve the whole of society. The technological transformation is at the same time political transformation, but the political change would turn into qualitative social change only to the degree to which it would alter the direction of technical progress—that is, develop a new technology. For the established technology has become an instrument of destructive politics.

Such qualitative change would be transition to a higher stage of civilization if technics were designed and utilized for the pacification of the struggle for existence. In order to indicate the disturbing implications of this statement, I submit that such a new direction of technical progress would be the catastrophe of the established direction, not merely the quantitative evolution of the prevailing (scientific and technological) rationality but rather its catastrophic transformation, the emergence of a new idea of Reason, theoretical and practical.

The new idea of Reason is expressed in Whitehead's proposition: "The function of Reason is to promote the art of life."[1] In view of this end, Reason is the "direction of the attack on the environment" which derives from the "threefold urge: (1) to live, (2) to live well, (3) to live better."[2]

Whitehead's propositions seem to describe the actual development of Reason as well as its failure. Or rather they seem to suggest that Reason is still to be discovered, recognized, the realized, for hitherto the historical function of Reason has also been to repress and even destroy the urge to live, to live well, and

[1] A. N. Whitehead, *The Function of Reason* (Boston: Beacon Press, 1959), p. 5.
[2] Ibid., p. 8.

to live better—or to postpone and put an exorbitantly high price on the fulfillment of this urge.

In Whitehead's definition of the function of Reason, the term "art" connotes the element of determinate negation. Reason, in its application to society, has thus far been opposed to art, while art was granted the privilege of being rather irrational—not subject to scientific, technological, and operational Reason. The rationality of domination has separated the Reason of science and the Reason of art, or, it has falsified the Reason of art by integrating art into the universe of domination. It was a separation because, from the beginning, science contained the aesthetic Reason, the free play and even the folly of imagination, the fantasy of transformation; science indulged in the rationalization of possibilities. However, this free play retained the commitment to the prevailing unfreedom in which it was born and from which it abstracted; the possibilities with which science played were also those liberation—of a higher truth.

Here is the original link (within the universe of domination and scarcity) between science, art, and philosophy. It is the consciousness of the discrepancy between the real and the possible, between the apparent and the authentic truth, and the effort to comprehend and to master this discrepancy. One of the primary forms in which this discrepancy found expression was the distinction between gods and men, finiteness and infinity, change and permanence.[3] Something of this mythological interrelation between the real and the possible survived in scientific thought, and it continued to be directed toward a more rational and true reality. Mathematics was held to be real and "good" in the same sense as Plato's metaphysical Ideas. How then did the development of the former become *science*, while that of the latter remained metaphysics?

[3] See chapter 5.

The most obvious answer is that, to a great extent, the *scientific* abstractions entered and proved their truth in the actual conquest and transformation of nature, while the *philosophic* abstractions did not—and could not. For the conquest and transformation of nature occurred within a law and order of life which philosophy transcended, subordinating it to the "good life" of different law and order. And this other order, which presupposed a high degree of freedom from toil, ignorance, and poverty, was *unreal*, at the origins of philosophic thought and throughout its development, while scientific thought continued to be applicable to an increasingly powerful and universal *reality*. The final philosophic concepts remained indeed metaphysical; they were not and could not be verified in terms of the established universe of discourse and action.

But if this is the situation, then the case of metaphysics, and especially of the meaningfulness and truth of metaphysical propositions, is a historical case. That is, historical rather than purely epistemological conditions determine the truth, the cognitive value of such propositions. Like all propositions that claim truth, they must be verifiable; they must stay within the universe of possible experience. This universe is never co-extensive with the established one but extends to the limits of the world which can be created by transforming the established one, with the means which the latter has provided or withheld. The range of verifiability in this sense grows in the course of history. Thus, the speculations about the Good Life, the Good Society, Permanent Peace obtain an increasingly realistic content; on technological grounds, the metaphysical tends to become physical.

Moreover, if the truth of metaphysical propositions is determined by their historical content (i.e., by the degree to which they define historical possibilities), then the relation between metaphysics and science is strictly historical. In our own culture, at least, that part of Saint-Simon's Law of the Three Stages is still taken for granted which stipulates that the metaphysical *precedes*

the scientific stage of civilization. But is this sequence a final one? Or does the scientific transformation of the world contain its own metaphysical transcendence?

At the advanced stage of industrial civilization, scientific rationality, translated into political power, appears to be the decisive factor in the development of historical alternatives. The question then arises: does this power tend toward its own negation—that is, toward the promotion of the "art of life"? Within the established societies, the continued application of scientific rationality would have reached a terminal point with the mechanization of all socially necessary but individually repressive labor ("socially necessary" here includes all performances which can be exercised more effectively by machines, even if these performances produce luxuries and waste rather than necessities). But this stage would also be the end and limit of the scientific rationality in its established structure and direction. Further progress would mean the *break*, the turn of quantity into quality. It would open the possibility of an essentially new human reality —namely, existence in free time on the basis of fulfilled vital needs. Under such conditions, the scientific project itself would be free for trans-utilitarian ends, and free for the "art of living" beyond the necessities and luxuries of domination. In other words, the completion of the technological reality would be not only the prerequisite, but also the rationale for *transcending* the technological reality.

This would mean reversal of the traditional relationship between science and metaphysics. The ideas defining reality in terms other than those of the exact or behavioral sciences would lose their metaphysical or emotive character as a result of the scientific transformation of the world; the scientific concepts could project and define the possible realities of a free and pacified existence. The elaboration of such concepts would mean more than the evolution of the prevailing sciences. It would involve the scientific rationality as a whole, which has thus far

been committed to an unfree existence and would mean a new idea of science, of Reason.

If the completion of the technological project involves a break with the prevailing technological rationality, the break in turn depends on the continued existence of the technical base itself. For it is this base which has rendered possible the satisfaction of needs and the reduction of toil—it remains the very base of all forms of human freedom. The qualitative change rather lies in the reconstruction of this base—that is, in its development with a view of different ends.

I have stressed that this does not mean the revival of "values," spiritual or other, which are to supplement the scientific and technological transformation of man and nature.[4] On the contrary, the historical achievement of science and technology has rendered possible the *translation of values into technical tasks*—the materialization of values. Consequently, what is at stake is the redefinition of values in *technical terms*, as elements in the technological process. The new ends, as technical ends, would then operate in the project and in the construction of the machinery, and not only in its utilization. Moreover, the new ends might assert themselves even in the construction of scientific hypotheses—in pure scientific theory. From the quantification of secondary qualities, science would proceed to the quantification of values.

For example, what is calculable is the minimum of labor with which, and the extent to which, the vital needs of all members of a society could be satisfied—provided the available resources were used for this end, without being restricted by other interest, and without impeding the accumulation of capital necessary for the dcevelopment of the respective society. In other words; quantifiable is the available range of freedom from want. Or, calculable is the degree to which, under the same conditions,

[4] See chapter 1, esp. p. 20.

care could be provided for the ill, the infirm, and the aged—that is, quantifiable is the possible reduction of anxiety, the possible freedom from fear.

The obstacles that stand in the way of materialization are definable political obstacles. Industrial civilization has reached the point where, with respect to the aspirations of man for a human existence, the scientific abstraction from final causes becomes obsolete in science's own terms. Science itself has rendered it possible to make final causes the proper domain of science. Society,

> "par une élévation et un élargissement du domaine technique, doit remette à leur place, *comme techniques*, les problèmes de finalité, considérés à tort comme éthiques et parfois comme religieux. L'*inachèvement* des techniques sacralise les problèmes de finalité et asservit l'homme au respect de fins qu'il se représente comme des absolus".[5]

Under this aspect, "neutral" scientific method and technology become the science and technology of a historical phase which is being surpassed by its own achievements—which has reached its determinate negation. Instead of being separated from science and scientific method, and left to subjective preference and irrational, transcendental sanction, formerly metaphysical ideas of liberation may become the proper object of science. But this development confronts science with the unpleasant task of becoming *politica*—of recognizing scientific consciousness as political consciousness, and the scientific enterprise as political enterprise. For the transformation of

[5] "through a raising and enlarging of the technical sphere, must treat *as technical* problems, questions of finality considered wrongly as ethical and sometimes religious. The *incompleteness* of technics makes a fetish of problems of finality and enslaves man to ends which he thinks of as absolutes." Gilbert Simondon, *loc. cit.* p. 151; my italics.

values into needs, of final causes into technical possibilities is a new stage in the conquest of oppressive, unmastered forces in society as well as in nature. It is an act of *liberation*:

> "L'homme se libère de sa situation d'être assevi par la finalité du tout en apprenant à faire de la finalité, à organiser un tout finalisé qu'il juge et apprécie, pour n'avoir pas à subir passivement une intégration de fait." ... "L'homme dépasse l'asservissement en organisant consciemment la finalité . . ."[6]

However, in constituting themselves *methodically* as political enterprise, science and technology would *pass beyond* the stage at which they were, because of their neutrality, *subjected* to politics and against their intent functioning as political instrumentalities. For the technological redefinition and the technical mastery of final causes *is* the construction, development, and utilization of resources (material and intellectual) *freed* from all *particular* interests which impede the satisfaction of human needs and the evolution of human faculties. In other words, it is the rational enterprise of man as man, of mankind. Technology thus may provide the historical correction of the premature identification of Reason and Freedom, according to which man can become and remain free in the progress of self-perpetuating productivity on the basis of oppression. To the extent to which technology has developed on this basis, the correction can never be the result of technical progress per se. It involves a political reversal.

Industrial society possesses the instrumentalities for transforming the metaphysical into the physical, the inner into the

[6] "Man liberates himself from his situation of being subjected to the finality of everything by learning to create finality, to organise a "finalised" whole, which he judges and evaluates. Man overcomes enslavement by organising consciously finality." *Ibid.*, p. 103.

outer, the adventures of the mind into adventures of technology. The terrible phrases (and realities of) "engineers of the soul," "head shrinkers," "scientific management," "science of consumption," epitomize (in a miserable form) the progressing rationalization of the irrational, of the "spiritual"—the denial of the idealistic culture. But the consummation of technological rationality, while translating ideology into reality, would also transcend the materialistic antithesis to this culture. For the translation of values into needs is the twofold process of (1) material satisfaction (materialization of freedom) and (2) the free development of needs on the basis of satisfaction (nonrepressive sublimation). In this process, the relation between the material and intellectual faculties and needs undergoes a fundamental change. The free play of thought and imagination assumes a rational and directing function in the realization of a pacified existence of man and nature. And the ideas of justice, freedom, and humanity then obtain their truth and good conscience on the sole ground on which they could ever have truth and good conscience—the satisfaction of man's material needs, the rational organization of the realm of necessity.

"Pacified existence." The phrase conveys poorly enough the intent to sum up, in one guiding idea, the tabooed and ridiculed *end* of technology, the repressed final cause behind the scientific enterprise. If this final cause were to materialize and become effective, the Logos of technics would open a universe of qualitatively different relations between man and man, and man and nature.

But at this point, a strong caveat must be stated—a warning against all technological fetishism. Such festishism has recently been exhibited mainly among Marxist critics of contemporary industrial society—ideas of the future omnipotence of technological man, of a "technological Eros," etc. The hard kernel of truth in these ideas demands an emphatic denunciation of the

mystification which they express. Technics, as a universe of instrumentalities, may increase the weakness as well as the power of man. At the present stage, he is perhaps more powerless over his own apparatus than he ever was before.

The mystification is not removed by transferring technological omnipotence from particular groups to the new state and the central plan. Technology retains throughout its dependence on other than technological ends. The more technological rationality, freed from its exploitative features, determines social production, the more will it become dependent on political direction—on the collective effort to attain a pacified existence, with the goals which the free individuals may set for themselves.

"Pacification of existence" does not suggest an accumulation of power but rather the opposite. Peace and power, freedom and power, Eros and power may well be contraries! I shall presently try to show that the reconstruction of the material base of society with a view to pacification may involve a qualitative as well as quantitative *reduction* of power, in order to create the space and time for the development of productivity under self-determined incentives. The notion of such a reversal of power is a strong motive in dialectical theory.

To the degree to which the goal of pacification determines the Logos of technics, it alters the relation between technology and its primary object, Nature. Pacification presupposes mastery of Nature, which is and remains the object opposed to the developing subject. But there are two kinds of mastery: a repressive and a liberating one. The latter involves the reduction of misery, violence, and cruelty. In Nature as well as in History, the struggle for existence is the token of scarcity, suffering, and want. They are the qualities of blind matter, of the realm of immediacy in which life passively suffers its existence. This realm is gradually mediated in the course of the historical transformation of Nature; it becomes part of the human world, and to this extent,

the qualities of Nature are historical qualities. In the process of civilization, Nature ceases to be mere Nature to the degree to which the struggle of blind forces is comprehended and mastered in the light of freedom.[7]

History is the negation of Nature. What is only natural is overcome and recreated by the power of Reason. The metaphysical notion that Nature comes to itself in history points to the unconquered limits of Reason. It claims them as historical limits—as a task yet to be accomplished, or rather yet to be undertaken. If Nature is in itself a rational, legitimate object of science, then it is the legitimate object not only of Reason as power but also of Reason as freedom; not only of domination but also of liberation. With the emergence of man as the *animal rationale*—capable of transforming Nature in accordance with the faculties of the mind and the capacities of matter—the merely natural, as the sub-rational, assumes negative status. It becomes a realm to be comprehended and organized by Reason.

And to the degree to which Reason succeeds in subjecting matter to rational standards and aims, all sub-rational existence appears to be want and privation, and their reduction becomes the historical task. Suffering, violence, and destruction are categories of the natural as well as human reality, of a helpless and heartless universe. The terrible notion that the sub-rational life of nature is destined to remain forever such a universe, is neither a philosophic nor a scientific one; it was pronounced by a different authority:

[7] Hegel's concept of freedom presupposes consciousness throughout (in Hegel's terminology: self-consciousness). Consequently, the "realization" of Nature is not, and never can be Nature's own work. But inasmuch as Nature is in itself negative (i.e., wanting in its own existence), the historical transformation of Nature by Man is, as the overcoming of this negativity, the liberation of Nature. Or, in Hegel's words, Nature is in its essence non-natural—"Geist".

> "When the Society for the Prevention of Cruelty to Animals asked the Pope for his support, he refused it, on the ground that human beings owe no duty to lower animals, and that ill-treating animals is not sinful. This is because animals have no souls."[8]

Materialism, which is not tainted by such ideological abuse of the soul, has a more universal and realistic concept of salvation. It admits the reality of Hell only at one definite place, here on earth, and asserts that this Hell was created by Man (and by Nature). Part of this Hell is the ill-treatment of animals—the work of a human society whose rationality is still the irrational.

All joy and all happiness derive from the ability to transcend Nature—a transcendence in which the mastery of Nature is itself subordinated to liberation and pacification of existence. All tranquillity, all delight is the result of conscious *mediation*, of autonomy and contradiction. Glorification of the natural is part of the ideology which protects an unnatural society in its struggle against liberation. The defamation of birth control is a striking example. In some backward areas of the world, it is also "natural" that black races are inferior to white, and that the dogs get the hindmost, and that business must be. It is also natural that big fish eat little fish—though it may not seem natural to the little fish. Civilization produces the means for freeing Nature from its own brutality, its own insufficiency, its own blindness, by virtue of the cognitive and transforming power of Reason. And Reason can fulfill this function only as post-technological rationality, in which technics is itself the instrumentality of pacification, organon of the "art of life." The function of Reason then converges with the function of *Art*.

The Greek notion of the affinity between art and technics may

[8] Quoted in: Bertrand Russell, *Unpopular Essays* (New York: Simon and Schuster, 1950) p. 76.

serve as a preliminary illustration. The artist possesses the ideas which, as final causes, guide the construction of certain things—just as the engineer possesses the ideas which guide, as final causes, the construction of a machine. For example, the idea of an abode for human beings determines the architect's construction of a house; the idea of wholesale nuclear explosion determines the construction of the apparatus which is to serve this purpose. Emphasis on the essential relation between art and technics points up the specific *rationality* of art.

Art and reality

Like technology, art creates another universe of thought and practice against and within the existing one. But in contrast to the technical universe, the artistic universe is one of illusion, semblance, *Schein*. However, this semblance is resemblance to a reality which exists as the threat and promise of the established one.[9] In various forms of mask and silence, the artistic universe is organized by the images of a life without fear—in mask and silence because art is without power to bring about this life, and even without power to represent it adequately. Still, the powerless, illusory truth of art (which has never been more powerless and more illusory than today, when it has become an omnipresent ingredient of the administered society) testifies to the validity of its images. The more blatantly irrational the society becomes, the greater the rationality of the artistic universe.

Technological civilization establishes a specific relation between art and technics. I mentioned above the notion of a reversal of the Law of the Three Stages and of a "revalidation" of metaphysics *on the basis* of the scientific and technological transformation of the world. The same notion may now be extended to the relation between science-technology and art. The rationality of art, its ability to "project" existence, to define yet unrealized possibilities could then be envisaged as *validated by*

[9] See chapter 3.

and functioning in the scientific-technological transformation of the world. Rather than being the handmaiden of the established apparatus, beautifying its business and its misery, art would become a technique for destroying this business and this misery.

The technological rationality of art seems to be characterized by an aesthetic "reduction":

> "Art is able to reduce the apparatus which the external appearance requires in order to preserve itself—reduction to the limits in which the external may become the manifestation of spirit and freedom."[10]

According to Hegel, art reduces the immediate contingency in which an object (or a totality of objects) exists, to a state in which the object takes on the form and quality of freedom. Such transformation is reduction because the contingent situation suffers requirements which are external, and which stand in the way of its free realization. These requirements constitute an "apparatus" inasmuch as they are not merely natural but rather subject to free, rational change and development. Thus, the artistic transformation violates the natural object, but the violated is itself oppressive; thus the aesthetic transformation is liberation.

The aesthetic reduction appears in the technological transformation of Nature where and if it succeeds in linking mastery and liberation, directing mastery toward liberation. In this case, the conquest of Nature reduces the blindness, ferocity, and fertility of Nature—which implies reducing the ferocity of man against Nature. Cultivation of the soil is qualitatively different from destruction of the soil, extraction of natural resources from

[10] Hegel, *Vorlesungen über die Aesthetik*, in: *Sämtliche Werke*, ed. H. Glockner (Stuttgart, Frommann, 1929), vol. XII, p. 217f. See also Osmaston's translation, in Hegel, *The Philosophy of Fine Art* (London, Bell and Sons, 1920), vol. I, p. 214.

wasteful exploitation, clearing of forests from wholesale deforestation. Poverty, disease, and cancerous growth are natural as well as human ills—their reduction and removal is liberation of life. Civilization has achieved this "other," liberating transformation in its gardens and parks and reservations. But outside these small, protected areas, it has treated Nature as it has treated man—as an instrument of destructive productivity.

Work & play

In the technology of pacification, aesthetic categories would enter to the degree to which the productive machinery is constructed with a view of the free play of faculties. But against all "technological Eros" and similar misconceptions, "labor cannot become play . . ." Marx's statement precludes rigidly all romantic interpretation of the "abolition of labor." The idea of such a millenium is as ideological in advanced industrial civilization as it was in the Middle Ages, and perhaps even more so. For man's struggle with Nature is increasingly a struggle with his society, whose powers over the individual become more "rational" and therefore more necessary than ever before. However, while the realm of necessity continues, its organization with a view of qualitatively different ends would change not only the mode, but also the extent of socially necessary production. And this change in turn would affect the human agents of production and their needs:

> "free time transforms its possessor into a different Subject, and as different Subject he enters the process of immediate production."[11]

I have recurrently emphasized the historical character of human needs. Above the animal level even the necessities of life

[11] Marx, *Grundrisse der Kritik der politischen Oekonomie*, loc. cit., p. 559. (My translation).

in a free and rational society will be other than those produced in and for an irrational and unfree society. Again, it is the concept of "reduction" which may illustrate the difference.

In the contemporary era, the conquest of scarcity is still confined to small areas of advanced industrial society. Their prosperity covers up the Inferno inside and outside their borders; it also spreads a repressive productivity and "false needs." It is repressive precisely to the degree to which it promotes the satisfaction of needs which require continuing the rat race of catching up with one's peers and with planned obsolescence, enjoying freedom from using the brain, working with and for the means of destruction. The obvious comforts generated by this sort of productivity, and even more, the support which it gives to a system of profitable domination, facilitate its importation in less advanced areas of the world where the introduction of such a system still means tremendous progress in technical and human terms.

However, the close interrelation between technical and political-manipulative know-how, between profitable productivity and domination, lends to the conquest of scarcity the weapons for containing liberation. To a great extent, it is the sheer *quantity* of goods, services, work, and recreation in the overdeveloped countries which effectuates this containment. Consequently, qualitative change seems to presuppose a *quantitative change* in the advanced standard of living, namely, *reduction of overdevelopment*.

The standard of living attained in the most advanced industrial areas is not a suitable model of development if the aim is pacification. In view of what this standard has made of Man and Nature, the question must again be asked whether it is worth the sacrifices and the victims made in its defense. The question has ceased to be irresponsible since the "affluent society" has

become a society of permanent mobilization against the risk of annihilation, and since the sale of its goods has been accompanied by moronization, the perpetuation of toil, and the promotion of frustration.

Under these circumstances, liberation from the affluent society does not mean return to healthy and robust poverty, moral cleanliness, and simplicity. On the contrary, the elimination of profitable waste would increase the social wealth available for distribution, and the end of permanent mobilization would reduce the social need for the denial of satisfactions that are the individual's own—denials which now find their compensation in the cult of fitness, strength, and regularity.

Today, in the prosperous warfare and welfare state, the human qualities of a pacified existence seem asocial and unpatriotic—qualities such as the refusal of all toughness, togetherness, and brutality; disobedience to the tyranny of the majority; profession of fear and weakness (the most rational reaction to this society!); a sensitive intelligence sickened by that which is being perpetrated; the commitment to the feeble and ridiculed actions of protest and refusal. These expressions of humanity, too, will be marred by necessary compromise—by the need to cover oneself, to be capable of cheating the cheaters, and to live and think in spite of them. In the totalitarian society, the human attitudes tend to become escapist attitudes, to follow Samuel Beckett's advice: "Don't wait to be hunted to hide. . . ."

Even such personal withdrawal of mental and physical energy from socially required activities and attitudes is today possible only for a few; it is only an inconsequential aspect of the redirection of energy which must precede pacification. Beyond the personal realm, self-determination presupposes free available energy which is not expended in superimposed material and intellectual labor. It must be free energy also in the sense that it is not channeled into the handling of goods and services which satisfy the individual, while rendering him incapable of

achieving an existence of his own, unable to grasp the possibilities which are repelled by his satisfaction. Comfort, business, and job security in a society which prepares itself for and against nuclear destruction may serve as a universal example of enslaving contentment. Liberation of energy from the performances required to sustain destructive prosperity means decreasing the high standard of servitude in order to enable the individuals to develop that rationality which may render possible a pacified existence.

On overpopulation

A new standard of living, adapted to the pacification of existence, also presupposes reduction in the future population. It is understandable, even reasonable, that industrial civilization considers legitimate the slaughter of millions of people in war, and the daily sacrifices of all those who have no adequate care and protection, but discovers its moral and religious scruples if it is the question of avoiding the production of more life in a society which is still geared to the planned annihilation of life in the National Interest, and to the unplanned deprivation of life on behalf of private interests. These moral scruples are understandable and reasonable because such a society needs an ever-increasing number of customers and supporters; the constantly regenerated excess capacity must be managed.

However, the requirements of profitable mass production are not necessarily identical with those of mankind. The problem is not only (and perhaps not even primarily) that of adequately feeding and caring for the growing population—it is first a problem of number, of mere quantity. There is more than poetic license in the indictment which Stefan George pronounced half a century ago: "Schon eure Zahl ist Frevel!"

The crime is that of a society in which the growing population aggravates the struggle for existence in the face of its possible alleviation. The drive for more "living space" operates not only in international aggressiveness but also *within* the nation.

Here, expansion has, in all forms of team-work, community life, and fun, invaded the inner space of privacy and practically eliminated the possibility of that isolation in which the individual, thrown back on himself alone, can think and question and find. This sort of privacy—the sole condition that, on the basis of satisfied vital needs, can give meaning to freedom and independence of thought—has long since become the most expensive commodity, available only to the very rich (who don't use it). In this respect, too, "culture" reveals its feudal origins and limitations. It can become democratic only through the abolition of mass democracy, i.e., if society has succeeded in restoring the prerogatives of privacy by granting them to all and protecting them for each.

To the denial of freedom, even of the possibility of freedom, corresponds the granting of liberties where they strengthen the repression. The degree to which the population is allowed to break the peace wherever there still is peace and silence, to be ugly and to uglify things, to ooze familiarity, to offend against good form is frightening. It is frightening because it expresses the lawful and even organized effort to reject the Other in his own right, to prevent autonomy even in a small, reserved sphere of existence. In the overdeveloped countries, an ever-larger part of the population becomes one huge captive audience—captured not by a totalitarian regime but by the liberties of the citizens whose media of amusement and elevation compel the Other to partake of their sounds, sights, and smells.

Can a society which is incapable of protecting individual privacy even within one's four walls rightfully claim that it respects the individual and that it is a free society? To be sure, a free society is defined by more, and by more fundamental achievements, than private autonomy. And yet, the absence of the latter vitiates even the most conspicuous institutions of economic and political freedom—by denying freedom at its hidden roots.

Massive socialization begins at home and arrests the development of consciousness and conscience. The attainment of autonomy demands conditions in which the repressed dimensions of experience can come to life again; their liberation demands repression of the heteronomous needs and satisfactions which organize life in this society. The more they have become the individual's own needs and satisfactions, the more would their repression appear to be an all but fatal deprivation. But precisely by virtue of this fatal character, it may create the primary subjective prerequisite for qualitative change—namely, *the redefinition of needs.*

To take an (unfortunately fantastic) example: the mere absence of all advertising and of all indoctrinating media of information and entertainment would plunge the individual into a traumatic void where he would have the chance to wonder and to think, to know himself (or rather the negative of himself) and his society. Deprived of his false fathers, leaders, friends, and representatives, he would have to learn his ABC's again. But the words and sentences which he would form might come out very differently, and so might his aspirations and fears.

To be sure, such a situation would be an unbearable nightmare. While the people can support the continuous creation of nuclear weapons, radioactive fallout, and questionable foodstuffs, they cannot (for this very reason!) tolerate being deprived of the entertainment and education which make them capable of reproducing the arrangements for their defense and/or destruction. The non-functioning of television and the allied media might thus begin to achieve what the inherent contradictions of capitalism did not achieve—the disintegration of the system. The creation of repressive needs has long since become part of socially necessary labor—necessary in the sense that without it, the established mode of production could not be sustained. Neither problems of psychology nor of aesthetics are at stake, but the material base of domination.