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THE INDUSTRIALIZATION OF FETISHISM OR THE FETISHISM OF INDUSTRIALIZATION: A CRITIQUE OF IVAN ILLICH

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Abstract—This article critically assesses the ideology of industrialism in light of Ivan Illich's *Medical Nemesis*. The paper is divided in three sections. The first section is a description of the main features of that ideology, the most prevalent and influential one used in sociological literature to explain the state both of Western societies and of our health services. Also in this section, it is shown how these features appear in Illich's analysis of our societies, of our health services and of the different clinical, social and structural iatrogeneses that health services create. The second section examines the assumptions underlying Illich's analysis and discusses their validity to explain the nature and function of our Western health services and their iatrogenic effects. Where Illich's explanations are considered invalid, alternative explanations are presented. Among them, it is postulated that it is not industrialism, but the assumedly transcended category of capitalism that is the cause of the social and structural iatrogeneses. The third section discusses the political implications of Illich's analysis, in a moment when our Western societies are supposedly in crisis.

According to the media and other organs of popularization, our Western developed societies are in crisis. Thus, the number of analysts and synthesizers providing remedies to this crisis is proliferating. One of them is Ivan Illich, Director of the Centre for Intercultural Documentation (CIDOC) in Cuernavaca, Mexico. Widely quoted and debated, he has been variously defined as the genius who provides the focus for our doubts [1], a revolutionary who gives the best prescription for change [2], and a *petit réactionaire* who is nostalgically looking for Bucolia [3]. But whatever characterization may best apply to Illich, he is an articulate theoretician and one of the more recent in a long roster of builders of what I consider to be the most prevalent and influential ideology used to explain our societies, i.e. industrialism. As such, his work merits serious response.

Assuming that the best way to understand an author's analysis of our reality is by first comprehending the ideological framework on which that analysis is based, let me begin by summarizing very briefly the main characteristics of the ideology of industrialism of which Illich's writings are part and parcel. I will then describe how those characteristics appear both in his analysis of our Western developed societies and of our health services as well as in his normative synthesis, i.e. the basis for his strategy for change. In both cases the main, but not only, point of reference will be Illich's most recent book, *Medical Nemesis* [4]. In the second part of this article I will discuss the assumptions underlying Illich's ideology and will analyze the degree to which they provide valid explanations of the actual situation in our Western developed countries and in our health services. Where the explanations are found to be invalid, I will present alternate explanations of the social problematique of our countries. And in the third part, in light of those alternative explanations, I will discuss the extent to which Illich's recommendations for change are relevant to the solution of our problems.

SECTION I

Industrialism as ideology

Industrialism is the most prevalent ideology used to explain the nature and form of our Western developed societies. Grounded largely in technological determinism it owes much to Max Weber and it suggests that the industrial nature of technology defines social organizations in their entirety [5].

Among the primary characteristics of that ideology is that the production requirements of the technological process, and *pari passu* of industrial organizations, are the most important determinants of the nature and form of our Western developed societies, i.e. industrialized societies. In a fatalistic and almost deterministic way the former—the technological process—leads inevitably to the latter—the industrialization of society. Moreover, according to the theorists of industrialism, that industrialization has transcended and made irrelevant and *passé* the categories of property, ownership and social class. Indeed, ownership loses its meaning as legitimization of power. And control, now assumed to be divorced from ownership, has passed from the owners of capital—the capitalists—to the managers of that capital and from there to the technocrats, those who have the skills and knowledge needed to operate the major social edifices of industrialism, the bureaucracies. The new elite, then, are the bureaucrats, who have supplanted the capitalists. Within this evolution, a new social order based on bureaucracy has transcended the capitalist order. Capitalist societies have thus become industrial, post industrial and mixed-economies societies. As Frankenberg has indicated, words such as capitalism, social class and related ones rarely pass through

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these theoreticians' typewriter keys, except in an introductory note of dismissal [6].

Also, according to the theoreticians of this ideology, in this evolutionary process of industrialization, there is a disintegration of the old preindustrial order, assumed to be integrated, self-sufficient and communal. In the words of Illich, because of industrial growth "social arrangements allowing such autonomy (of community members) have practically disappeared" [7]. And in the industrial order that replaces it only the values that are functional for the "formal rationality" of the system are sustained and replicated; productivity, efficiency, progress and modernization are the components of the intellectual–philosophical construct of the ideological building of industrialism. Basic requirements of that construct are the need for hierarchy and dependency within those hierarchies. At the top of that hierarchy is the expert, the bureaucrat; at the bottom is the subject of that bureaucracy, the receiver or consumer of the goods, commodities, or services administered by that bureaucracy. Within this hierarchy the former manipulates the latter, in theory for the benefit of both, in practice for the benefit of the former more than the latter.

A final characteristic of industrialism is that it claims to be a universal process. In other words, all societies, regardless of their political structure, will evolve according to the dictates of industrialization. Indeed, according to a key component of that ideology, *the theory of convergence*, all societies will progress toward the urban–industrial model of the future. Thus, socialism and capitalism are usually seen as two convergent roads to the same destination, "the industrial model." In the words of one of its most successful popularizers:

> Such reflection on the future would also emphasize the convergent tendencies of industrial societies, however different their *popular or ideological billing* (emphasis mine), the convergence being to a roughly similar design for organization and planning... Convergence begins with modern large-scale production, with heavy requirements of capital, sophisticated technology, and, as a prime consequence, elaborate organization [8].

The ideologists of industrialism then, including Illich, predict the inevitable development of societies of a unitary type, leading to an urban–industrialized model. In that respect, the history of the human race is the history of the different stages of development toward that model [9]. Accordingly, the degree of development of any country is measured by the extent to which it approximates that model, with the U.S. being held as the most developed country, i.e. closest to that model [10].

Viewed in this way, the social problems of society —the U.S.—become not the problems of capitalism (an altogether *passé* category), but the problems of industrialization. And I tend to suspect that the great prevalence of that ideology throughout our society, including academia, can be explained partially by its self-flattering interpretation of our problems, i.e. the social problems we face result from our pioneering the great search for modernization, and from being ahead in our industrialization. Ours, in summary, is the burden of the leaders. In the words of an influential popularizer in the U.S., "We have to pay the social investment of being the first. Others will learn from our failures and successes" [11].

If one accepts this ideology, it then makes sense to study and analyze the social problematique of the already industrialized societies, primarily of the U.S., to see how much other less developed countries can learn both from their successes and failings. Ivan Illich, director of one academic center physically situated in a developing country, Mexico, focuses the attention of all of his writings on the industrialized societies, with greatest emphasis on the U.S. Consequently, he draws most of his references from and bases most of his categories on Western developed countries.

If there is general agreement among the theoreticians of industrialism, at least on the main assumptions summarized above, there is far less agreement on the conclusions they draw. Indeed, while some like Daniel Bell and Walt Rostow rejoice over the fruits of industrialization [12], others like Raymond Aron seem to have second thoughts [13] and others still, such as Illich, despair and try to rebel [14]. Unless we reverse industrialization, writes Illich, ours will be a "compulsory survival in a planned and engineered Hell" [15]. Not surprisingly then their suggestions for change differ widely. But an approach increasingly heard and one that Illich seems to share can be defined as that of Jeffersonian republicanism which recommends (1) the debureaucratization of our society, (2) the reversal of industrialization and growth with the breaking down of professional and other monopolies toward a return to the free market of goods and services, and (3) a renewed emphasis on the self-reliance and autonomy of the individual, with enlightened self-interest as the prime mover in his relationships of exchange.

Industrialism in Illich's writings

The ideology of industrialism, placing the credit and in Illich's case the blame for our social development and its problematique with the inevitable process of industrialization, underlies the theoretical constructs used by most analysts of our Western society, including its critics, such as Illich.

Indeed, Illich believes that industrialism is the main force shaping our societies and that unavoidable "rising irreparable damage accompanies industrial expansion in all sections" [16], including medicine [17], education [18], and so on. For example, the industrialization of medicine leads to the creation of a corps of engineers—the medical profession—comparable to the technocrats of the main social formation of industrialized societies, the bureaucracy. Thus, the industrialization of medicine means its professionalization and bureaucratization. Moreover, and reflecting the assumed universality claimed by the ideology of industrialism, Illich believes that all societies, either capitalist or socialist, converge toward the same model, following a similar evolutionary process. Indeed, "the frustrations (due to industrialization) which have become manifest from private-enterprise systems and from socialized care have come to resemble each other frighteningly" [19]. The same problematique that appears in Houston is likely to appear in Moscow; in Bogotá to appear in Havana; and in

Taiwan to appear in People's China as well. The differences in the expression of that problematique are more quantitative, depending on the level of industrialization and stage of development of those countries, than qualitative. Capitalism and socialism are indeed *passé* concepts, since they are basically converging toward the same path of industrialization that overwhelms and directs their social formations.

In this interpretation, then, the class conflict has been replaced by the conflict between those at the top, the managers of the bureaucracies, indispensable to the running of an industrialized society, and those at the bottom, the consumers of the products—goods and services—administered by those bureaucracies. As applied specifically to medicine, that conflict is the one between the medical bureaucracy, primarily the medical profession and the medical care system, and the consumers, the patients. This antagonistic conflict appears as iatrogenesis (damage done by the provider) and it is

> *clinical*, when pain, sickness and death result from the provision of medical care; it is *social*, when health policies reinforce an industrial organization which generates dependency and ill health; and it is *structural*, when medically sponsored behaviour and delusions restrict the vital autonomy of people by undermining their competence in growing up, caring for each other and aging [20].

The first and most documented type of iatrogenesis is the *clinical* one, damage done by the physicians and providers of services and is caused primarily by their engineering approach to medicine in which the individual is seen as a machine, an aggregate of different pieces that have to be put right through therapeutic intervention. Adding to that cause, there is also much injury that is due simply to much arrogance, sheer incompetence, and misunderstanding of what health is about [21].

Social iatrogenesis is the addictive dependency of the populace on the medical care institutions. Indeed,

> public (demand and) support for a nationwide addiction to therapeutic relationships is pathogenic on a much deeper level, but this is usually not recognized. More health damages are caused by the belief of people that they cannot cope with illness without modern medicines than by doctors who foist their ministrations on patients [22].

In that respect,

> the proliferation of medical institutions, no matter how safe and well engineered, unleashes a social pathogenic process. Over-medicalization changes adaptive ability into passive medical consumer discipline [23].

According to Illich, the cause for that addiction is the manipulative behavior of the medical bureaucracy that perpetuates and encourages that passive and addictive consumer behavior. In this scheme of things the power of that bureaucracy is its exclusive and monopolistic power of definition of what is health and what method of care may be publically funded [24].

Last but certainly not least, *structural iatrogenesis* is the loss of autonomy of the patient and the creation of his dependency. In this iatrogenesis, the medical bureaucracy goes further than creating addiction and destroys "the potential of people to deal with their human weakness, vulnerability and uniqueness in a personal and autonomous way" [25]. According to Illich, the responsibility for health and care is taken away—expropriated—from the individual by the medical industry. Moreover, this structural iatrogenesis is assumed to be intrinsic in the values and *modus operandi* of the medical industry and civilization. Thus the intervention of the medical industry has the same effect as that of any other industry, i.e. it breaks with those social values and cultures, such as acceptance of death, disease, and pain, assumed to be in existence in the preindustrial societies and that are capable of providing the self-realization of the individual [26].

Illich's strategies for change: the debureaucratization and deindustrialization of society and medicine

How can we avoid and correct these iatrogeneses, the extensive damage done by the industrialization of medicine? Before stating his own solutions, Illich briefly considers several other alternatives presently debated in the political scene. In discussing solutions for *clinical* and *social iatrogeneses*, he especially rejects the "socialization alternative," that he attributes to the "equalizing rhetoric" of the misleadingly called progressive forces among which he includes liberals and Marxists. According to his normative conclusion, the redistribution of medical care implied in the socialization alternative would make matters even worse since it would tend to further medicalize our population and create further dependencies on medical care [27]. Indeed, "less access to the present health system would, contrary to political rhetoric, benefit the poor" [28]. In that respect, Illich finds the creation of the National Health Service in Britain as a regressive, not progressive, step.

Instead of socialization and its implied redistribution, Illich recommends the following solutions for clinical and social iatrogeneses:

(1) The mode of production in medicine should be changed via its deprofessionalization and debureaucratization to break down the barriers that allow the "disbursement of any such public funds under the prescription and control of guild members" [29]. In that respect he suggests what Friedman [30] and Kessel [31] have proposed in this country, that licensing and regulation of healers should disappear and the concerns of where, when, how and from whom to receive care should be left to the choice of the individual.

(2) Collective responsibility for that care should be reduced and individual responsibility should be maximized. Self-discipline, self-interest, and self-care should be the guiding principles for the individual in maintaining his health. In summary each one should be made responsible for his own health. Indeed, Illich's dictum in health sounds very close to the dictum of another theoretician of the virtue of self-reliance, Ex-President Nixon's "don't ask what the state can do for you, but what can you do for yourself" [32].

As to structural iatrogenesis, the most important of the three, and the one that Illich especially attributes to industrialism, he again dismisses the alternative of the socialization and public control of the process of industrialization, recommending instead the

reversal of that process, i.e. breaking down the centralization of industry and returning to the market model. According to Illich, "only the inversion of society's overall growth rate in marketed goods and services can permit a reversal" [33]. And within this competitive market model, the motivations for social interaction will be those of enlightened self-interest and a desire for survival [34]. The essence of his strategy for correcting structural iatrogenesis, then, is an anti-trust approach with strong doses not of Marx, or even Keynes, but of Friedman.

SECTION II: A CRITIQUE OF ILLICH AND AN EXPLORATION OF ALTERNATIVES

Clinical iatrogenesis: the illusion of doctors' effectiveness

Perhaps not surprisingly, most of the debate on Illich's writings on medicine has focused on his postulate that individual clinical intervention may be doing more harm than good (clinical iatrogenesis). Actually, not only medical journals such as *The Lancet* in Britain, but popular magazines like *Le Nouvel Observateur* in France have focused primarily on Illich's skepticism about the therapeutic value of medical intervention. In this skepticism he follows the by now well established and known tradition of non-medical writers such as Montesquieu, Tolstoy, Bernard Shaw and many others who had questioned the effectiveness of the professionals' tasks throughout the passing of decades. Unfortunately, the medical profession has dismissed too frequently and too uncritically those questions as being too perverse and frivolous to merit serious consideration. And the inquiring minds within the profession that kept asking the same questions and providing evidence to support such skepticisms were and still are equally dismissed or boycotted as unwelcome prophets of an unwelcome change [35].

Illich in a short but meaningful review of what he defines as the effectiveness of medical care [36], summarizes the available information on the effectiveness of some therapeutic interventions and thus provides evidence on the limitations of those interventions. Not unexpectedly, he is more pessimistic about the value of those interventions than most clinicians would be, but paradoxically is far more optimistic about the effectiveness of some of those interventions, e.g. for skin cancer treatment or early surgical intervention for cervical cancer [37], than most health care researchers would be [38].

Still, he adds his iconoclastic voice (a welcome voice, I might add) to an increasing chorus of doubters of the effectiveness of medical tasks. A major weakness of his evaluation, however, is that he takes as an indicator of the effectiveness of medical *care*, indicators of *cure*. Indeed, he seems to confuse care with cure. And in evaluating the effectiveness of medical care he does what most clinicians—Illich's engineers in the medical system—do; he analyzes the degree to which medical intervention has reduced mortality and morbidity, i.e. the effectiveness of health care intervention in *curing* disease and avoiding mortality. But, at a time when the most important type of morbidity in our Western developed societies is chronic, a much better indicator of the effectiveness of the medical *care* intervention would be the way that care is provided in that intervention, i.e. the degree to which the system provides supportive and attentive care to those in need. And the limited evidence available does seem to indicate that medical *care* may make a difference, i.e. it may reduce disability and discomfort in people's lives [39]. But for that taking *care* to occur, our medical care system would have to change very profoundly to better enable the system to provide that care.

Still, since Illich seems to see an inevitable progress towards the present cure-oriented system, he does not seem to accept or even welcome the possibility of creating another system in which the priorities would be opposite to those of the present ones, with emphasis given to care as opposed to cure services. Actually, Illich would not welcome such a care-oriented system since it would increase the dependency of the individual on the physician and on the system of medical care, preventing the much-needed self-reliance and autonomy. Indeed, according to Illich, whatever good medical cure or care may do is certainly outbalanced by the damage that it creates. And he finds the greatest damage to be the dependency that medical care creates in the population, i.e. social iatrogenesis.

Social iatrogenesis: addiction to medical care institutions, cause or symptom?

Illich considers social iatrogenesis, the addictive behavior of the population to medical care, to be the result of manipulation by the medical bureaucracy —the medical care system. It is a manipulation that aims at creating dependency and consumption. Indeed, Illich postulates that the consumer behavior of our citizenry is primarily determined by its manipulation by the bureaucracies created as a result of industrialization. Allow me to focus on this postulate and to discuss the consumer behavior of our citizenry, not only in the health sector of our economy but all others as well. Disagreeing with Illich, I find that manipulation of addiction and consumption by bureaucracies (including the medical care bureaucracy) is not the cause, as he postulates, but the symptom of the basic needs of the economic and social institutions of what he calls industrialized societies, but what I would call industrialized capitalist societies [40]. Actually, I consider those bureaucracies, be they trade, services, or "whatever," to be the mere socialization instruments of those needs, i.e. they reinforce and capitalize on what is *already* there—*the need for consumption*, consumption that reflects a dependency of the individual on something that can be bought, either a pill, a drug, a prescription, a car, or the "prepackaged moon." Indeed, the overall quantum of citizens' dependency is far more than the mere aggregate of dependencies of those citizens on the bureaucracies of our societies. Actually, those dependencies are mere symptoms of a more profound dependency that has been created in our citizenry not by industrialization, but by the capitalist mode of production and consumption—a mode of production that results in the majority of men and women in our societies having no control over the product of their work and a mode of consumption in which the citizenry is directed and manipulated in their consumption of the products of that work [41]. As Marcuse has indicated, that system makes people aspire to more when this more

must always be inaccessible [42]. This dependency on consumption—this commodity fetishism—is intrinsically necessary for the survival of a system that is based on commodity production. It is then necessary for the owners and controllers of the means of production of that system to stimulate dissatisfaction and dependency in the sphere of consumption. Thus, those owners and controllers must provoke continual artificial dissatisfactions and dependencies in human beings that direct them toward further consumption because without them the system would collapse. And as I will try to show later, Illich's bureaucracies, including the medical bureaucracies, are not the generators, but the administrators of those dependencies, consumptions, and dissatisfactions. Indeed, those bureaucracies are not the owners nor the controllers, but the administrators of that system.

In summary, in this alternate explanation, addiction and dependency on consumption—either of goods or services—is not due primarily to the manipulative behavior of bureaucracies, but is the result of the basic needs of an economic system that requires for its survival (1) the creation of wants, however artificial or absurd they may be; (2) the existence of a passive and "massified" population of consumers; and (3) the replication of consumer ideology whereby the citizen is judged not by what he *does* (his work) but by what he *has* (his consumption). Within that system, the citizen, the consumer, is made to believe that his fulfillment depends in large degree on his consumption, be it of drugs, pills, prescriptions, cosmetics and whatever may be required for his fitness, well-being and pursuit of happiness. Within this scheme of things, to consider that need for consumption, that addictive behavior, to be the result of bureaucratic manipulation is (1) to underestimate the needs of the economic system and (2) to far overestimate the role of those bureaucracies. Theirs is, again, the task of administering and reinforcing that dependency on consumption that is *already there*.

Let me underline here that I do not deny the powerful effect that Illich's bureaucracies, such as the medical and related bureaucracies, e.g. drug advertising, have on administering and reinforcing (but not creating) a harmful demand for their goods and services. But I don't believe that the disappearance of those bureaucracies (if it were at all possible) from our capitalist societies would mean the disappearance of that addictive demand. Indeed, Illich's focus on the world of consumption and his theories of manipulation ignore the main determinants of people's behavior, which are not in the sphere of consumption, but in the world of production [43]. Indeed, in our capitalist system what the individual might have (defined in the area of consumption) depends on what he might do (defined in the world of production). Indeed, whatever he can buy depends very much on how much money he makes. And for the great majority of our citizens, the amount of money they make depends primarily on what type of work they do and how much they are paid for it. Thus, to understand the *sphere of consumption* we have to understand the *world of production*, or who does what, who controls that work and how that control takes place. And an analysis of that world of production shows (1) that the great majority of producers—the workers—do not have much control over the nature and product of their work. What they do in the work place and how they do it is, in the great majority of cases, outside the control of the workers and within the control of the employer; and (2) that work is for the majority of producers primarily not a means of self-expression, where creativity is the goal, but a means to get income to be able to buy the services and goods necessary to satisfy their needs. The most important components in one's life, creativity and worthiness, are not realized in one's daily work. In other words, the worker must spend time at work to get freedom and capacity for development outside the sphere of production and work. Ironically, this hope for fulfillment during leisure time turns out to be an illusion, an illusion that has to be satisfied with the always unsatisfied and never-ending consumption. In summary, denied of his self-realization at his place of work, the world of production, the worker then has to look for that realization in the sphere of consumption. The alienation of the producer from his work—his dissatisfaction—leads to the fetishism of consumption [44].

Actually, the whole concept of worker alienation had been discussed in the 1960s as irrelevant to the actual conditions and perceptions of the working class. Moreover, the ubiquitous Gallup Polls showing that the majority of workers were satisfied with their work seemed to confirm that perception. As Wright and others have shown, however, those results represented more the biases of the researchers than the views of the interviewees. When the questions were phrased differently it appeared that the feelings of helplessness, withdrawal, alienation, malaise and pessimism were not minority but majority sentiments among substantial sections of the working class, primarily among the young workers, to such a degree as to become an industrial problem [45]. As Walter Dance, Vice President of General Electric, indicated

> We see a potential problem of vast significance to all industrial companies... This involves the slowly rising feeling of frustration, irritation and alienation of the blue collar worker, the "hard hats," if you will, but not just the activists in big cities [46].

Subsequent studies such as the report on *Worker Alienation, 1972* of the Committee on Labor and Public Welfare of the 92nd United States Congress shows that that alienation is prevalent, not only among blue, but also white collar workers [47]. And, as the report of a special task force to the U.S. Secretary of Health, Education and Welfare, entitled *Work in America* indicates, a main reason for those producers' alienation is the limiting effect of the nature of their work and their powerlessness to change it [48].

The response to that situation—the limiting effect of work—varies depending on the degree of awareness and consciousness of the individual to that situation. And one increasingly important response is the expression of that dissatisfaction in labor conflicts. Actually, the number of working days lost in the U.S. due to labor strikes concerning issues of working conditions—the nature of work—exceeds those concerning the size of the paycheck or the amount of fringe benefits [49, 50].

Another reaction to that alienation is, as Dreitzel has pointed out, its internalization, appearing as a major cause of psychosomatic illness, the type of problem most frequently presented to the medical care system. Indeed,

> doctors from various industrialized countries unanimously report that at least 50 per cent of their patients suffer from "functional disturbances," i.e. illness without any establishable organic cause [51].

Thus, in the medical care system we also find that (1) the alienation of the individual in his world of production leads him to the sphere of consumption, the consumption of health services; and that (2) the medical care bureaucracy is just administering those disturbances created by the nature of work and the alienating nature of our system of production. Actually, the increasing awareness of this phenomenon explains the choice by the American Public Health Association of *Work and Health in the U.S.* as the main theme for its 1975 Annual Meeting. As an editorial of the journal of that Association indicates, work is the keynote, not only to the restoration of health, but to the maintenance of health in our society [52]. Actually, that editorial repeats what Albert Camus somewhat more elegantly wrote, "Without work all life goes rotten. But when work is soulless, life stifles and dies" [53].

In summary, Illich's focus on consumption leads him to believe that the loss of autonomy (including the expropriation of his health) and subsequent dependency of the individual are due to the manipulation and effect of the bureaucracies in the individual's sphere of consumption. Disagreeing with him, I believe that the loss of autonomy and the creation of dependency start in the producer's loss of control over the nature, conditions and product of his work—the expropriation of his work. Indeed, according to my postulate, the loss of autonomy of the citizen does not start in the sphere of consumption but in the world of production.

Bureaucratization of work: a product of industrialization or of class control?

Another consequence of focusing on the world of consumption and not on the area of production and its class relations is that it leads Illich to misunderstand the nature of bureaucracy and bureaucratization of work in our societies. He just assumes that technological knowledge and the all-pervasive industrialization determine a division of labor that explains the appearance of production, trade and services bureaucracies. But this explanation begs the questions of (1) why that technological knowledge is distributed in the way that it is, and (2) why that technology is frequently a vehicle of human oppression and not of liberation. Indeed, I would postulate that technology is not an independent force that fatalistically determines all relations, including social ones, but rather the reverse is true, i.e. the social relations (who controls what, and how this control takes place) determine the type of organization to be chosen and the type of technology to be used. As Braverman has shown (1) a historical review of "what preceded what" shows that the managerial revolution —Taylorism—and the bureaucratic form of organization that it created preceded the scientific revolution and not vice versa; and (2) that bureaucratic form of organization was and is created by the need of the employer—the manager—to structure and control the process of work [54]. Indeed, that control is a major power of the employer. And characteristics of that structure and control are that (1) decision-making has to be organized from the highest levels downwards, according to a vertical order of hierarchy in which the only ones who have complete control and a "complete picture" of the process of production are the controllers of that process; (2) technologies employed must (a) enable, be compatible with, and replicate that hierarchical division of labor and (b) fragment the nature of work, making every producer an expert of a small part—but not the whole—of the process; and (3) the distribution of technologies, skills, and knowledge must, within the constraints of (1) and (2), be compatible with the minimization of costs and the maximization of profits [55].

Within that process of production, technology and its requirements does not determine the hierarchical division of labor, but the hierarchical division of labor determines the type of technology used in that process. Technology, then, reinforces the already existing hierarchical and fragmentary division of labor. Indeed, that hierarchicalization is already there and is determined primarily by the class and sex roles existent in our societies. Let me illustrate this with an analysis of the responsibility that the members of the health team have. Within that health team, we find a well-defined hierarchical order with the physician, most often a man of upper middle class extraction, at the top; below him, the supportive nurses, most often women with lower middle class backgrounds; and at the bottom, under both of them, we find the attendants and auxiliaries, the service workers, who most frequently are women of working class backgrounds [56]. According to Illich and other industrialist theorists, what primarily explains that hierarchy is the different degrees of control over the technological knowledge necessary for the provision of industrialized medicine. But past and present experience shows that (1) the responsibilities that the different members of the team have are primarily due to their class backgrounds and sex roles, and only secondarily, very secondarily indeed, to their technological knowledge [57]; and (2) this technological knowledge, far from causing that cleavage and hierarchy among these members, merely reinforces that hierarchy. In that respect the acquisition of that knowledge—education and training—is the mere legitimation of that class and sex hierarchical distribution of power and responsibilities [58]. Indeed, although the degree of technological knowledge developed in medicine has changed dramatically since the Flexner report of 1910 to the present, the class composition of the members of the health team has not changed significantly from that time [59]. Actually, the Flexnerian "revolution" in medicine and the creation of scientific medicine further strengthened but did not create that class distribution of responsibilities within the health sector that already existed. Indeed, to assume, as Illich does, that the distribution of responsibilities in medicine is due to its industrialization is to confuse symptoms with causes. It is *primarily* the class structure and the

class relations of our society that determine that distribution. And, one could further postulate that this class structure and hierarchy militates against the provision of comprehensive medical care. For example, while most of the needs of the patients in our populations are those of care, most of the strategies within the health team and the health sector are directed by the "expert" in cure, the physician. The strategy for care within that team, however, would require, (1) not the authoritarian (vertical), but the collaborative (horizontal) distribution of responsibilities, and (2) not a change from experts in cure to experts in care, but rather, giving the team—including *all* its members as well as the patient—responsibility for both care and cure. However, the joint provision of the care, by the patient himself, his family, and all members of the team is seriously handicapped in our class-structured society, where roles and functions are not distributed according to the need for them, but primarily according to the hierarchical order prevalent in our society, dictated by its class structure and class relations.

Structural iatrogenesis: industrialism or capitalism?

Illich, by dismissing from the very beginning the categories of capitalism, class structure and class relations, is seriously limited in finding the causes of his structural iatrogenesis. Indeed, while he attributes clinical iatrogenesis to the physicians, and social iatrogenesis to the medical care system, he finds structural iatrogenesis to be due to the culture of industrialization. Structural iatrogenesis, Illich writes, "is spawned by a cancerous delusion about life and manifests itself when this delusion has pervaded a culture" [60]. And the creation of that culture that pervades "medical industry and civilization" is the symptom of the overall and pervasive process of industrialization. His solution for that iatrogenesis includes (1) reversing industrialization and its growth rate [61], (2) breaking down industrial bureaucracies, starting with the medical one [62], and (3) returning to self-reliance and enlightened self-interest. And in this struggle against industrialization and bureaucratization it is of paramount importance to start with medicine,

> since medicine is a sacred cow, its slaughter would have a "vibration effect": people who can face suffering and death without need for magicians and mystagogues are free to rebel against other forms of expropriation now practiced by teachers, engineers, lawyers, priests and party officials [63].

But, by focusing on the medical bureaucracy as the "enemy," Illich misses the point because those bureaucracies are the servants of a higher category of power that I would define as the dominant class. Indeed, the empirical analysis of the health industry shows that contrary to what Illich believes, that industry is administered but not controlled by the medical profession. The analysis of power in the health sector in most Western developed societies shows that that power is primarily one of class not of professional control. Indeed, those who have the first and final voice in the most important "corridors of power" in the health sector are the same corporate groups (composed mainly of the upper, corporate, or capitalist class) that control and/or have dominant influence in the organs—Illich's bureaucracies—of production, consumption, and legitimation in our societies. Indeed, as I have shown elsewhere [64], members of the corporate class (owners and managers of financial capital), the class that has a dominant influence in the most important spheres of the U.S. economy—the monopolistic sector—have a dominant influence as well in the funding and reproductive institutions of the health industry (commercial insurance agencies, foundations and teaching institutions). And members of the upper middle class (executive and corporate representatives of middle size enterprises and professionals, primarily corporate lawyers and financiers) have dominant influence in the delivery institutions. A similar situation appears with the executive and legislative branches of federal government that oversee and regulate the activities in the health sector. And in all these top agencies of power, the medical profession is represented to only a small degree. Indeed, the medical bureaucracy administers but does not control the health sector. And its power is delegated to it from the corporate and the upper middle classes. Those classes and the medical profession share similar but not identical corporate and class interests and if a conflict appears—and as I postulate elsewhere such conflict is bound to appear—then, it is quite clear who has dominant control in that situation [65], the same ones who have had that control from the *very beginning*, the corporate or dominant class. Indeed, one has to remember that the supporters and sponsors of "Flexnerian scientific medicine" were the Rockefeller and Carnegie foundations, the voices of the corporate class of that period.

We find then that the main conflict in the health sector replicates the conflict in the overall social system. And that conflict is primarily not between the providers and consumers, but between those that have a dominant influence in the health system (the corporate class and upper middle class) who represent less than 20% of our population and control most of the health institutions, and the majority of our population (lower middle class and working class) who represent 80% of our population and who have no control whatsoever over either the production or the consumption of those health services [66]. To focus then, as Illich and the majority of social critics do, on the conflict between consumers and medical providers as the most important conflict in the health sector, is to focus on a very limited and small part of the actual class conflict.

Actually, Illich's dismissal of the concept of social class as an irrelevant category for his analysis leads him to see the conflict in a compartmentalized way, i.e. as taking place among individual holders of skills and trades on the one hand, and the supposed benefactors of those skills and trades, the consumers, on the other. Thus he sees the *campagne de bataille* in the control and redefinition of those skills and trades. But here again the conflict seen in this way begs the questions of (1) why those skills and roles are distributed in the way they are to begin with; and (2) why those skills and roles are very frequently vehicles more of oppression than liberation.

Regarding the first, the distribution of skills and roles in the medical sector, Illich assumes that what

gives power to the medical profession is the exclusive control of those skills and trades, thus his suggestion of deprofessionalization. My answer however, is, as I have indicated, that those skills and trades reinforce and legitimate the power that is *already* there. The deprofessionalization of medicine and the dehierarchicalization of medicine, i.e. its democratization, are not possible within our class-structured society. The change of the latter is a prerequisite for the change of the former. The reverse, as Illich suggests, is unhistorical.

As to the frequently oppressive role of the medical bureaucracies, Illich considers that they fail and determine oppression because they generate a self-serving addiction. His unawareness of social class structures and relations as the most important conceptual framework for understanding our institutional behavior, including the medical institutions, prevents him from understanding that services bureaucracies—including medicine—are, far from failing, succeeding in what they are supposed to do. Indeed, had Illich's analysis been historical and dialectical, he would have understood that the functions of the health industry are primarily determined outside and not inside the health sector. As Susser has written, the concepts of health and of the types of health services have continuously changed and been redefined according to the needs of the capitalist mode and relations of production [67]. And in this process of redefinition, the ones that have the dominant voice in defining health and health services have not been the medical bureaucracies as Illich writes, but the dominant class—the capitalist or corporate class. For example, when the economic needs (productivity of the system) and political needs (quieting social unrest) of that class so required in Britain, that class supported and passed the national health insurance of Lloyd George's government in 1911 in spite of the opposition of the medical profession [68]. And today, as then, most of the changes in the definition of health and health services have occurred not because but in spite of the medical profession. A recent example has been the change of therapeutic practice in obstetrics with the provision of abortion on demand. That redefinition of health practice was due to the needs of the organs of legitimation—including the juridical organs—to respond to (1) an increasingly alienated and radicalized women's liberation movement and (2) the population policies of the time.

In all these cases the redefinition of values, or what Galbraith calls the convenient social virtues, followed the needs of the corporate class, not of the medical profession [69]. Indeed, as Galbraith has recently indicated, the convenient social virtues are the ones that are primarily convenient to the most powerful in our society. Actually, what Galbraith and others are increasingly saying was said quite clearly by Marx:

> The ideas of the ruling class are in every *epoch* the ruling ideas: i.e. the class which is the ruling *material* force of society, is at the same time its ruling *intellectual* force. The class which has the means of material production at its disposal, has control at the same time over the means of mental production [70].

And health values and ideas are not an exception. According to this explanation, then, the medical profession is a repository and guardian of the definition of those values, but not the ultimate definer. Reflecting the actual location of power, the profession has continuously lost its battle against that redefinition whenever its power had to be tested in a conflict with the corporate and dominant class.

In summary, and as I have shown elsewhere, one of the functions of the services bureaucracies—including the medical bureaucracy—is to legitimize and protect the system and its power relations [71]. One aspect of that protection is social control—the channeling of dissatisfaction—which Illich introduces as structural iatrogenesis. But, to believe that social control is due to the culture of medicine and the pervasiveness of industrialization is to ignore the basic question of who controls and most benefits from that control. An analysis of our societies shows that the services bureaucracies—including the medical ones—although willing accomplices in that control, are not the major benefactors. The ultimate benefactor of any social control intervention in any system is the dominant class in that system.

A final note on the convergence theory: the possible replication of class relations in socialist societies

As I have indicated, the main feature of the theory of convergence is that all societies, either capitalist or socialist, are converging toward similar social formations, i.e. industrialized societies. And these societies are held to be characterized by a similar process of industrialization that has determined the predominance of the bureaucracy as the primary social formation, with managers and technocrats having replaced the dominant classes in those societies. The supporters of that theory give the USSR and the Eastern European countries as examples of socialist societies which because of their high degree of industrial development also have full-fledged bureaucracies as the controllers of social and economic activity in each sector and thus increasingly resemble our own Western industrialized societies.

This analysis, however, is too much of a simplication. Indeed, an analysis of the Eastern European societies, including the USSR, shows that the bureaucracies—including the medical bureaucracies—are not the primary controllers of each social and economic activity, but are subservient to a larger authority, the political party. Indeed, the planning, regulatory and administrative responsibilities of the state bureaucracies are subject to the higher power of the upper echelons of the party. And these higher echelons of the party are the ones that have created the state bureaucracies, not vice versa. The power of the party is manifested and expressed through those bureaucracies. In this alternate explanation of bureaucratization of Eastern European societies, that bureaucratization was not the result of industrialization, but the result of the party's need to control the process of production and industrialization. And that party became a dominant class in itself when, (1) it began to use its control over the means of production, not to optimize the producers' control over the process and means of production, but rather to optimize the production itself, i.e. when the accumulation of capital became the primary goal of those societies; and, (2)

it used its political control over the production, trade and services bureaucracies, not to decentralize and democratize them but to optimize its control by increasing the centralization and hierarchicalization of those bureaucracies. As Sweezy has indicated, it was the belief of the political party in the 1920s, shared by both Stalinists and Trotskyites, that (1) democratization of the process of production was impossible in an underdeveloped society and that (2) the need for capital accumulation had to be the first priority in the 1930s and 1940s in preparing for and winning the Second World War. It was primarily these beliefs that led to the centralization of power that created bureaucratization and absence of institutional democratization [72]. As Sweezy and Bettelheim have indicated, the appearance of a dominant class—the party—and its servants—the bureaucracies—determined the replication of similar, although not identical, class relations between dominant and dominated classes to those in Western societies. In this process, the state bureaucracies were and are the administrative agencies of those relations, but did not generate those relations. Indeed, as Bettelheim says, "there cannot exist a 'state power of the bureaucracy,' because a bureaucracy is always in the service of a dominant class" [73].

In summary, in those Eastern European societies the bureaucracy is subject to and dependent on the political power of the party. And although there is considerable overlapping of membership among both, still, the bureaucrat and technocrat are both formally and informally dependent on the dominant class, the political party. The democratization of the former would require the democratization of the latter. Indeed, the struggle for institutional and industrial control that took place during the cultural revolution in China (which included a battle against elitism and bureaucratization in the medical sector) was part of a far wider and more important conflict, i.e. the conflict between large segments of the peasantry and the industrial working class and a sector of the political party that had ceased to be representative and had become instead an oppressive dominant force, a dominant class [74]. Similarly in Cuba, the fight against bureaucratization in the middle 1960s that Che Guevara stimulated was one component of a wider political conflict against a sector of the leadership of the Communist party—the Escalante group—that wanted to give priority to capital accumulation and to the efficiency of the system, over the democratization of the system [75].

And in still another example, in Chile, the conflict in the health sector between large segments of the population and the majority of Chilean medical professionals, led by the Chilean Medical Association, was part of a far larger conflict over the socialization and democratization of the society. And the opposition of the medical profession to Allende was not because Allende reduced the amount of technology available to it, as Illich seems to believe, but because, in encouraging the democratization of the health institutions, he was a threat to the perpetuation of its social class as well as professional privileges. Indeed, when Illich writes that

> by far the majority of Chilean doctors resisted the call of their President (to reduce the national pharmacopoeia); many of the minority who tried to translate his ideas into practical programmes were murdered within one week after the take-over by the junta on September 11, 1973 [76],

one has to realize that the savage assassination of the physicians and other health workers who supported Allende by the military junta (with the assistance of the majority of the Chilean medical profession), was an action far transcending the irritation over a reduction of technology. Illich's primary focus on technology, to the degree of making a fetish of it, seems to make him unaware of the fact that the fight in Chile was one, not primarily over technology, but over the class control of the health and all other institutions. Indeed, as I have indicated elsewhere, the majority of the medical profession in Chile reacted as much, if not more, against the curtailment of their class than of their professional privileges [77].

Actually, the experience in the socialist societies does not show, in my opinion, that capitalism and socialism converge, but that (1) the socialization of the means of production is a necessary but not sufficient condition for its democratization; (2) the class structure and class relations may reappear and be perpetuated in socialist societies, not because of industrialization, but because of the political centralization of power; (3) the conflict and struggle against bureaucratization and for democratic institutional control that occurred in China, Cuba and Chile were part of a far larger and more important one, i.e. the struggle for the disappearance of class structures and for the political and economic democratization of those societies; and (4) to the degree that class control of the health institutions changed, the product and nature of those institutions changed. Indeed, even the definition and meaning of health changed from one where health was seen as an individual effort motivated by enlightened self-interest, to one of community and collective effort.

SECTION III: FINAL COMMENTS ON THE POLITICAL RELEVANCE OF ILLICH

The industrialization of fetishism or the fetishism of industrialization

Having made a critique and review of Illich's writings, with primary focus on the area of health, and having postulated alternatives to both his explanations and his solutions, allow me to finish with some random thoughts about the political nature and relevancy of his two main suggestions for change: the reversal of industrialization and the importance of self-reliance. In other words, a final note on the political uses and misuses of Illich's main messages.

As to the reversal of industrialization, I find Illich's emphasis on the process of industrialization as the culprit of his pains (ioatrogeneses) quite a limiting one. Actually, by considering the industrialization and bureaucratization of our societies as the cause and not the symptom of our distribution of economic and political power, Illich seems to reduce all our political problems to managerial ones. In this way, he who

resents the industrialization of all fetishism—including medicine—ends by fetishizing the process of industrialization itself. This fetishizing of that process appears, for example, in his analysis of the most important public health problem in the world today: undernutrition. Here, once again, Illich assumes that industrialization is the major cause of the problem.

> Beyond a certain level of capital investment in the growing and processing of food, malnutrition must become pervasive... (and) what is happening in the sub-Saharan Sahel is only a dress rehearsal for the encroaching world famine. This is but the application of a general law. When more than a certain proportion of value is produced by the industrial mode, subsistence activities are paralysed, equity declines and the total satisfaction in that particular area diminishes. In other words, beyond a certain level of industrial hubris, Nemesis *must* set in [78].

Absent in this analysis is the consideration of the critical political factors of who controls those economies (land and capital) and the process of industrialization. By focusing on the process of industrialization *per se* and avoiding the economic and political conditions that determined underdevelopment and the type of industrialization that is used (the inter- and intra-country conditions of economic exploitation, the control of international trade and other factors), his analysis seems aseptic and almost neutral. But, an alternative explanation to that of Illich's for underdevelopment and malnutrition is that certain types of industrialization (e.g. the Green Revolution) ostensibly exported from capitalist countries have reinforced and capitalized upon, but not generated, the already existing maldistribution of economic and political power, both within and among nations, the actual causes of their underdevelopment. Actually, Cuba and China, two of the very few countries in the sphere of underdevelopment that have controlled and almost solved their malnutrition problem had to break with that maldistribution of power to allow them to use industrialization differently, not for the benefit of the few, but for the benefit of the many. The real problem the progressive forces in those countries faced in solving their malnutrition problem was not the process of centralized industrialization, but the centralization of economic and political power in the dominant oligarchies, allied with the corporate transnational interests, which determined that centralized industrialization. To change the latter they had to break with the former. Actually the priest Camilo Torres in Colombia, who was assassinated while trying to change those economic and political structures, understood the causes of underdevelopment and malnutrition in Latin America far better than the urbane, sophisticated Ivan Illich in Mexico.

Indeed, the experiences both in China and Cuba would seem to indicate that the type of industrialization that exists in developing countries is a symptom but not a cause of their problems [79]. In spite of these realities, endless interpretations of the political phenomena of underdevelopment are being advanced and sold, either under the pretense of the "population problem," or more recently, of the "problem of industrialization," that do not clarify but further obfuscate the actual economic and political causes of underdevelopment, whose reality and existence are increasingly clear for all to see.

The limitations of doing one's own thing

We are left then with Illich's second major suggestion for solving our problems: the self-reliance, self-care, independence and autonomy of the individual citizen. But what is the meaning of this self-care? This aspect of Illich's strategy for change appears to me to be close, if not identical, to the strategy of that segment of American youth that joined in the "Woodstock nation," a strategy that basically relies on "life style" solutions. And in that strategy, "doing one's own thing," or in Abbie Hoffman's words, "whatever the fuck we want" [80], is not only the goal, but also the means for change, i.e. freedom and liberty defined as the lack of social constraints.

I postulate that the popularity of this strategy in our U.S. social environment and its appeal to the organs of legitimation—primarily the media—is because, rather than weakening, it strengthens the basic ethical tenets of bourgeoisie individualism, the ethical construct of capitalism where one has to be free to do whatever one wants, free to buy and sell, to accumulate wealth or to live in poverty, to work or not, to be healthy or to be sick. Far from being a threat to the power structure, this life style politics complements and is easily cooptable by the controllers of the system, and it leaves the economic and political structures of our society unchanged. Moreover, the life-style approach to politics serves to channel out of existence any conflicting tendencies against those structures that may arise in our society.

Similarly, we find this life-style politics appearing increasingly in the health sector. Self-care and changes in life style are supposed to be the most important strategies to improve the health of our individual citizens. And behavioralists, psychologists, and "mood" analyzers are put to work to change the individual's behavior. In the words of one advocate of this approach,

> It is becoming increasingly evident that many health problems are related to individual behavior. In the absence of dramatic breakthroughs in medical science the greatest potential for improving health is through changes in what people do and do not do to and for themselves [81].

This strategy of self-care, however, assumes that the basic cause of his sickness or unhealth is the individual citizen himself and not the system, and therefore the solution has to be primarily his and not the structural change of the economic and social system and its health sector. Not surprisingly, this emphasis on the behavior of the individual, not of the economic system, is welcomed and even exploited by those forces that benefit from the lack of change within the system. Interestingly, here in the health sector we again find the same analysis and strategies for change that we found in the 1960s in the analysis of poverty in America. The sociological studies, for the most part, focused their analysis on the poor, not on the economic system that produced poverty. Thus, not paradoxically, most of the strategy for eradicating that poverty—the anti-poverty programs—was directed at the poor themselves, but not on the economic system that produced that poverty. Let me clarify that, today, we have even more poor people than we had before those programs started and the effect of those programs has been very limited indeed.

Similarly, in the health sector, a plethora of behavioral and sociological studies are devoted to analyzing the behavior of the individual, but very few studies exist that concern the behavior of the economic and political system that determines that behavior to start with. And most of the strategies for change are focused on changing the behavior of the individual and not the behavior of the system; thus, the appearance of self-care and health education strategies as possible and plausible strategies for change. But a far better strategy than self-care and changes in life style to improve the health of the individual would be to change the economic and social structure that, according to my postulate, conditioned and determined that unhealthy individual behavior to start with. Let me give a specific example: the problem of the unhealthy diet of our citizens. The strategy of the life-style politics for correcting the unhealthy diet of our population, by individually changing the food consumption patterns (diet) of individual persons, avoids the political question of why the individuals consume that diet in the way they do. Thus, it ignores the enormous power of the economic needs of specific corporate interests in (1) determining that consumption and (2) stimulating a certain type of production. Indeed, as Dr. Meyer, Professor of Nutrition from Harvard has indicated, a primary responsibility for the very poor diet of the U.S. citizens are the corporate practices of the food conglomerates [82, 83]. And these food conglomerates, as several studies have shown, are increasingly linked with the main sources of financial capital in this country, the most important sector of the corporate class and the one that has a dominant influence in most of the sectors of our economic system, a system, incidentally, that determines a set of priorities in which $2.5 billion dollars are annually being spent on pet food [84], while "26 million Americans cannot afford to purchase an adequate diet; and over 11.2 million of them receive no help whatever from any federal food program" [85].

In the light of this iatrogenic economic and political environment, and the overwhelming power and influence of those economic groups, to speak of changes in life style as the proper strategy sounds to me to be not only very limited and unrealistic, but naive and sheer escapism. Indeed, I would postulate that unless the pattern of ownership and control of the means of production and consumption of the food and all other industries and sectors change in our society, from the control by the few to the control by the many, we will continue to have as poor a diet as we have today and have had in the past. And, thus, contrary to what Illich and others postulate, I believe that the greatest potential for improving the health of our citizens is not primarily through changes in the behavior of individuals, but primarily through changes in the patterns of control, structures, and behavior of our economic and political system. The latter could lead to the former. But the reverse is not possible.

Actually, it is precisely because of the impossibility of the reverse and thus the lack of conflict between Illich's message and the basic tenets of our economic system, that his message, the life-style politics, is and increasingly will be presented by the organs of the media as the resolution of our crises and problems.

Indeed, Illich, radical in style but intrinsically conservative in message and substance, will be paraded as part of our solution. And at a time of increasing crises in our societies, the change in life styles, as opposed to political change, will be paraded as the solution. Indeed, I predict that powerful organs of value generation will be extremely sympathetic to Illich's emphasis on cultural as opposed to political change, stirring "new hopes in the hollow breast of at least one jaded revolutionary" [86]. Cultural revolution will indeed be used to further postpone political change. And meanwhile, I postulate that to the same degree that the cultural politics of the Woodstock nation proved easily cooptable and irrelevant to the solutions of our problems in the 1960s, this cultural revolution in our society will be similarly cooptable and equally irrelevant to the problems of our nation in the 1970s. History will tell.

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59. Let me clarify in this footnote, that I do believe there have been profound changes in the structure and composition of the labor force, including the labor force in the health sector. But most of these changes have taken place within each social class, not among social classes. For a further elaboration of this point, see Navarro V. Social Policy Issues, *op. cit.*
60. Illich I. *Medical Nemesis*, p. 160.
61. *Ibid.*
62. *Ibid.*
63. *Ibid.*, p. 161.
64. For a detailed presentation of the available evidence on the social class composition of the decision making bodies in the U.S. health sector, see Navarro V. Social Policy Issues, *op. cit.*
65. *Ibid.*
66. For an expansion of this point, see Navarro V. Social Policy Issues, *op. cit.*
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