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#### Abstract

An analysis is made of Illich's account of the structure of advanced industrial society and of his prediction concerning the resistance it will generate. Comparisons are made between the thought of Illich and selected themes of acknowledged post-industrial theorists. I conclude that Illich and the post-industrialists are in basic agreement regarding the structure of the power elite, the alienation of the people and the function of the education system. They agree too that the central dilemma of advanced societies lies outside the political domain. They also concur regarding the nature of the resistance the power elite will generate. However Illich's account of those likely to resist does not conform to that of other analysts although it is rarely in direct conflict with it. Therefore Illich, it is argued, is not to be viewed as a lone critic of advanced industrial society but as an exponent of the post-industrial perspective of social forecasting.

I argue on the basis of these similarities that Illich's social analysis stands and falls on the strengths and weaknesses of post-industrial theory. Post-industrial themes in Illich's work are extended to construct a defence of his writings against the Marxist critique. I suggest however, that the post-industrial themes render him vulnerable to criticisms that have been levelled at other post-industrial analyses of society. His analysis of the resistance movement is also questioned both from within post-industrialism and from without:

Finally it is argued that Illich's own analysis helps to protect post-industrial theory from the common criticism that it misrepresents the nature of service agencies in advanced societies.


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CHAPTER ONE

## INTRODUCTION

Illich's analysis of the problems of education and his call to 'deschool' society have attracted the attention of many contemporary writers on education. Their studies, however, are usually restricted to discussions of the merits of Illich's analysis of the existing schooling systems and to the practicability of his proposed alternative. These studies serve an important function, providing necessary critiques of these aspects of Illich's work but they only skim the surface of his writings. If further analysis is to do justice to Illich's work by thoroughly representing his thesis, another form of investigation appears vital: an investigation probing for a 'higher synthesis' which is recurrent within his writings.

It must be appreciated that to Illich the manipulative school system analyzed in Deschooling Society, is only a manifestation of the social structure which has conceived it. The same concept applies to the organisation of transport and utilization of energy (discussed in Energy and Equity) and the structuring of the medical system (analysed in Limits to Medicine). What is required, if we are to grasp Illich fully and criticize the very essence of his work, is an analysis of his conception of the social structure which gives rise to these manifestations. It is the discovery of
the 'higher synthesis' in his work which will enable us to conduct such analyses and propose related critiques.

The pursuit of a 'higher synthesis' is sadly lacking in the existing analyses of Illich's work which fail to distinguish between what he regards as the actual source of hyper-industrial society's problems and what he views as symptoms. As a result they fail to distinguish the solutions he prescribes for particular symptoms from those directed at the problem itself. For example, previous analysis has misinterpreted the act of 'deschooling society' as being the solution proposed by Illich to the cause, as opposed to the symptoms, of advanced society's problem. In this view manipulative school systems are misinterpreted as the source, rather than the symptoms, of social decay.

This work will endeavour to put Illich's writings into perspective by identifying what ho porccivos as the dilemma of advanced industrial society, what he regards as the problems which are the symptoms of that central dilemma, and the resistance he prescribes as a remedy for this malady.

To achieve this perspective it is necessary to find in Illich's work the 'higher synthesis' already mentioned. It is my argument in chapters two to five, that such a 'synthesis' does exist in his work and that its major themes take a form similar to those advanced in 'post-industrial theory'. Whether Illich regards his writings as 'postindustrial' is an entirely different matter. The concern of the earlier parts of this thesis is to illustrate how Illich's analysis of advanced industrial society is based on similar themes to those proposed by self-proclaimed and
academically acknowledged 'post-industrial' theorists.
I will show that Illich is not simply a lone critic of various institutional networks within advanced societies. His condemnation is levelled at the entire social structure of hyper-industrialized nations. His analysis of this developing social structure and the critiques he levels at it locate him securely within the ranks of the 'postindustrial' school of thought.

This analysis will not merely involve a description of the 'higher synthesis' in Illich's work, for once he is located within the 'post-industrial' framework further analysis of the implications of this placement is possible. Such an investigation is performed in two stages.

Firstly it will be illustrated how the themes in Illich's work which concur with 'post-industrial' theory can be used to formulate a rebuttal of the most cogent criticism of his writings, the Marxist critique presented by Herbert Gintis. Gintis argues that Illich's work lacks a 'higher synthesis' and therefore fails to identify the central dilemma of advanced society, and proposes illconceived and ineffective solutions. The argument in chapter six will suggest that Illich's work does in fact entail a 'higher synthesis' provided by his themes which concur with 'post-industrial theory' and which enable him both to identify the source of advanced society's problems and propose appropriate action against this central dilemma. As his 'higher synthesis' differs from the Marxists', different conclusions and plans of action are arrived at. This conflict will also be analysed in an attempt to show
how Illich's argument can validly withstand Gintis' critique. Chapter seven discusses the second implication of Illich's concurrence with 'post-industrial' analysis. 'Post-industrial' themes are seen to serve not only as a defence of his work but also as the source of a new critique. As Illich concurs with major themes of 'post-industrial' analysis he also inherits the existing criticisms of those themes and therefore his writings incur the doubts which have been cast upon them.

An analysis is made of three major problematic themes which have been levelled at 'post-industrial theory' and which appear, on a prima-facie analysis at least, applicable to Illich. His analysis of the power-structure, public welfare and service agencies, and resistance against the emerging social structure is considered in the light of criticisms directod at convontionally acknowlodged post-industrial forecasters. The purpose of such an analysis is to discern whether Illich's own personalized approach avoids these cogent criticisms which existing 'post-industrial' theorists have had to face. No attempt is made to show how Illich's main proposals ('deschooling' for example) are specifically post-industrial or to defend them specifically against the Marxist critique or to confront them, in particular, with the criticisms which have previously been levelled at post-industrialism. As has already been stated the school system as it now stands is, to Illich, merely a manifestation of the greater social structure. It is just one product of broader social trends. Therefore, to focus
on Illich's proposals for 'deschooling', viewing them from the 'post-industrial' perspective, would only be to deal with the manifestations of his social analysis rather than the analysis itself.

It is the intention of this thesis to attempt to draw Illich's major works together as a body of knowledge which has various pervading themes. Themes of this sort will demonstrate his concurrence with the 'post-industrial' perspective and will endow him with the 'higher synthesis' that previous analyses of his work have either failed to acknowledge or failed to discover, to their own detriment.

## CHAPTER TWO

## POST-INDUSTRIAL ANALYSIS

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In Western society we are in the midst of a vast historical change in which old social relations (which were property-bound), existing power structures (centred on narrow elites), and bourgeois culture (based on notions of restraint and delayed gratification) are being rapidly eroded. The sources of the upheaval are scientific and technological. But they are also cultural, since culture... has achieved autonomy in Western society.
Daniel Bell, The Coming of Post Industrial Society, p.37.
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Post-industrialism has been presented by a group of theorists as a "social forecast about a change in the social framework of western society."l Rather than taking the form of a well formulated empirical investigation it appears more predominantly as the product of what $C$. Wright Mills has tagged "the sociological imagination." This approach requires "the capacity to shift from one perspective to another" and "enables its possessor to understand the larger historical scene in terms of its meaning for the inner life and the external career of a variety of individuals." ${ }^{2}$

Post-industrial theorists contend that industrialized Western society is not the culmination of social development 'Pre-industrial society', based on farming, unskilled labour and the exploitation of raw materials has evolved into 'industrial society'. A social structure like this is founded upon engineering, skilled workmanship, and a
technology arising out of the need for energy. Its 'axial principle' is one of economic growth. The evolutionary process does not however stop here. It continues on towards the metamorphosis of industrial society into 'postindustrial society'.

The 'post-industrial society' has "a service rather than a producing economy". Its pivotal occupations are those involving professional and scientific workers. The society's technology revolves around information and the axial principle of the centrality and codification of theoretical knowledge. ${ }^{3}$ This principle specifies "the organizing framework around which the other institutions are draped." ${ }^{4}$ Theoretical knowledge is "the energizing principle that is a primary logic" ${ }^{5}$ for all other principles in the 'post-industrial society'; its cultivation and promotion are therefore paramount. Those who regulate and direct theoretical knowledge will also wield power over the social structure as it is central in decision-making which determines social policy, social change and therefore the social structure.

This section will outline the post-industrial theorists' proposals concerning the centrality of theoretical knowledge in the social structure of advancedindustrial society and how it determines who constitute the society's dominant class. An analysis will also be made of their propositions concerning how this group govern and what roles other social sectors are allotted in the power structure. A discussion will also be presented regarding the role the education system plays in developing the social
structure. Finally an investigation will be made into forecasts concerning the possibility of social conflict within post-industrial society, as resistance against the decision-makers grows.
(a) Bell's Components of Post-Industrial Society

Bell has outlined what he considers to be the components of post-industrial society; the areas in which the social structure is transformed past the industrial stage of development. ${ }^{6}$ These components have already been hinted at above but now require a bolder statement because although different post-industrial theorists stress different aspects of the developing social structure and do not agree in total with Bell's analysis, they do offer a creditable framework from which to commence this investigation.

Firstly, the economic sector of society - as mentioned earlier, is based not on the production of goods but rather on the provision of services. Its new character is based on such functions as banking, finance and insurance in the business sector, retail stores in the personal sector, transportation, communication and utilities, and health, education, research and government. Bell claims that it is growth in the last category "which is decisive for post-industrial society. And this is the category which represents the expansion of a new intelligentsia - in the universities, research organizations, professions and government." ${ }^{7}$

Secondly, there is the necessarily related and simultaneous move in the occupational distribution toward the "white collar" occupations. There is, therefore, an increase in professional and technical employment.

Thirdly, the post-industrial age, more than any other, will involve "the conscious, planned advance of technological change and therefore the redirection of indeterminancy about the economic future." ${ }^{8}$

All technological advances must be predetermined in an attempt to view all alternatives, distinguish and provide for undesired side-effects, and allow the decision-makers an opportunity to choose the course of development most appropriate in terms of their ideology. A social structure has been attained "in which an industrial society reaches the peak of its organizational integration." 9
planning in the post-industrial society will he more sweeping and complex than in any previous society. Due to this, algorithms must be substituted for the intuitive judgments previously utilized. "These algorithms may be embodied in an automatic machine or a computer programme or a set of instructions based on some statistical or mathematical formula; the statistical and logical techniques that are used in dealing with 'organized complexity' are efforts to formalize a set of decision rules." ${ }^{10}$ In the post-industrial society there are so many variables influencing a situation that simple intuitive decisions are inadequate. Decision-making procedures must therefore be increasingly formalized and rationalized. Finally, and related to this decision-making proccdure, it is claimed that theoretical knowledge becomes
central and decisive in the direction of social change. As science becomes the decisive factor in the growth of the productive forces of society, it also becomes "the leading variable in the national economy and the vital dimension in the growth of civilization."ll The impact of this development is that as a society attempts to plan its future and as technology and science play an increasingly important part in that society's future, theoretical knowledge of science and technology will be the basis upon which future policy is made. Those who regulate such knowledge will therefore wield great social power as in a technocracy "everything aspires to become purely technical, the subject of professional attention. The technocracy is therefore a regime of experts - or of those who car employ the experts." 12

Thosc lacking control of such knowledge will be in a subservient position to the "knowledge class" and the knowledge itself. As Bell puts it, "the concept of post-industrial society emphasizes the centrality of theoretical knowledge as the axis around which new technology, economic growth and the stratification of society will be organized."13 Theoretical knowledge will not only direct innovation and change in the economic and technological sectors, it will also create new social relationships within the society, between those with differing degrees of power and between those with and without power.

The centrality and importance of theoretical knowledge in post-industrial society also insures that
"universities, research organizations and intellectual institutions, where theoretical knowledge is codified and enriched, become the axial structures of the emergent society." ${ }^{14}$ These agencies will be in the paradoxical situation of providing and influencing the decision-makers but at the same time being controlled and manipulated by them.

## (b) The Decision-Makers

As decision-making is transformed from an intuitive affair to one that relies upon an extremely high level of scientific research and technical knowledge the group responsible also changes.

Firstly, the role of politicians in the decisionmaking process is greatly diminished. As Erich Fromm has noted, "today, government and the corporations are already so interwoven that it is difficult to say who controls whom." 15 There is, therefore, no direct political control over the private sector. Rather the capacity for autonomous activity by the political body is severely reduced as the corporations' ideologies, actions and employees influence and determine the alternatives available to the government. As Habermas states,

> the initiative has ... passed to scientific analysis and technical planning. The state [therefore] seems forced to abandon the substance of power in favour of an efficient way of applying techniques in the framework of strategies that are objectively called for.

The political body no longer generates the bases of social policy and action. Its actions are limited within the
framework constructed by the experts and decision makers in the corporations.

Control has, however, changed hands within the corporations. The old bourgeoisie and the individual, entrepreneurial capitalist have been replaced by the technocrats, the managers and administrators. ${ }^{17}$ Bell attributes this transformation, at least in part, to "the breakup of family capitalism." ${ }^{18}$ The managers have assumed the decision-making role as they control the necessary technological knowledge which is the central and vital factor of production. This has led not only to a new decision-making body within corporations but also to "a new impetus and new incentives." As they cannot "withdraw enormous sums of wealth from their corporations [as the entrepreneurial capitalist could] ... the chief status drives of the managers have been performance and growth."19 Their ideology therefore revolves around the concepts of efficiency, technological advance, increased rationalization, economization and organization rather than the previously held capitalist values of profit, wealth and consumption.

The decision makers' role in the post-industrial society is to plan the society's future around the means of production. Their decisions are based on technical knowledge, or knowledge that is at least accumulated through research methods which are technically advanced. The technocrats therefore ensure that all domains of social life - education, consumption, information etc. - become increasingly integrated into the production factors. ${ }^{20}$ They regard "society to be only the collection of the social means
to be used to achieve growth." 21
All aspects of social life will therefore be organized so as to promote growth of the type desired by the technocrats. Their decision-making will also ensure that the power structure remains unchanged by reinforcing them in their roles.

The technocrats, therefore, assume the role of managers and administrators in state bureaucracies and industrial enterprises. Their function is to manage the massive economic and political structures which direct development by generating and applying knowledge. They regard "society simply as the totality of the social means needed to mobilize the development" which they consider necessary. ${ }^{22}$ Due to this perception "they develop an ideology ... which preaches the union of economic and social progress." ${ }^{23}$ If economic and political development is to proceed in a certain direction then social development must necessarily accompany it.

The technocracy "is a dominant class because in proclaiming identification with development and social progress it identifies the interests of society with those of the great organizations which, vast and impressive as they are, are nonetheless for particular interests." ${ }^{24}$ The technocrats will make decisions and direct development by generating and applying knowledge in accordance with their value systems which are a function of their ideology." ${ }^{25}$ Any actions instigated by the technocrats will therefore be an attempt to achieve their interests, incorporated into which, is the extension of their own power. In that they can realize their own objective interests they are the
social class wielding power. ${ }^{26}$
Touraine considers the technocratic ideology as "service to the economy" and its ethics as "impersonal." 27 Regarding this as the basis of the technocrats' value system, their decision making will be founded on that which they consider is best for the economy, not what is best for the individuals of the society. Their decision to implement new techniques and technologies in the forces of production will be based on whether such changes make the production system more efficient, more technologically advanced, more rationalized, economized and organized. It does not rely on the outgrown capitalist value system embracing profit, wealth and consumption nor the liberal notion of what will best serve society's members. As a result the technocrats will "exert influence on the system of social relations in the name of their needs." ${ }^{28}$

## (c) Techniciens and Bureaucrats

After the technocrats have made their decisions concerning the course of social progress subservient estates within the power hierarchy play their part in the implementation of these policies. Bell identifies four professional estates. ${ }^{29}$

Firstly, there is the administrative estate which has the function of managing the organizations which implement the technocrats' policies. Touraine retitles them "bureaucrats". As the system of administration becomes increasingly complex it is important that the technocracy, if it is to retain its power and attain its goals, devotes
"an important part of its resources to the treatment of its internal problems." A bureaucracy develops when "internal functional demands [are] transformed into an autonomous system with its own rules and relationships." ${ }^{30}$ It will attempt to ensure that all the component parts of the system are functioning properly and interacting effectively regarding the implementation of technocratic policy. Examples of the administrative estate are easily found. The bureaucracies related to such services as health, education, transport, planning and selling, serve the functions of administering already existing policies. Next Bell distinguishes the 'scientific professionals who pursue the desired theoretical knowledge, and the 'technologists' who apply it to social and economic processes. The functions assumed by this group are within the limits of predetermined technocratic policy. The areas in which it is to be employed and the technologies it will utilize have already been decided by the managers and administrators.

Parallel to Bell's technological and scientific estates Touraine speaks of "experts" and "professionals". ${ }^{31}$ The "experts", "take part in the functioning of organizations without entirely belonging to them." They are for example, consulting engineers or educational theorists who offer their technical advice concerning "the external functions of the organization involved." These "experts", acting within' their particular domains of knowledge assist the technocracy by offering information required for social policy making. The "professionals", like the "experts", do not
necessarily belong to the technocratic organisations although they can support them. They offer them the services of their "scientific competency". They are for example, the teacher or the doctor whose "function is defined as service, not as production." By carrying out policies predetermined by the technocrats, their job involves no basic decision-making.

The French term technicien referring to "the trained expert in the applied sciences" ${ }^{32}$ appears to incorporate the "professionals" and "experts" in Touraine's analysis and the "scientific professionals" and "technologists" in Bell's. This term will be used throughout this work to refer to these groups.

The bureaucrats and the techniciens form a functioning network under the control of the managers. These estates therefore have no say in the nature or direction of their work. They do however perform vital functions (the supplying of theoretical information to the technocrats and the implementing of their policies) within the technocracy. Their roles, therefore, require skill but no basic authority or autonomy.

Bell's final professional estate is 'the cultural elite' who promote knowledge of a more humanistic nature, "the artistic and religious". This estate "is involved with the expressive symbolism (plastic or ideational) of forms and meanings." ${ }^{33}$ This form of knowledge is divorced from the theoretical, technical knowledge that is central to, and pervasive in the technocrat's value system, ideology and policy-making. This professional estate therefore
exerts little influence over the social structure of the post-industrial society. As the "cultural elite" produces no theoretical, technological knowledge which is of key importance in this society, it has little interaction with the technocrats and therefore little influence on their policy-making.

Bell points out, however, that it would be a mistake to view these professional estates as constituting a class. "While the estates as a whole, are bound by a common ethos, there is no intrinsic interest that binds one to the other." 34 There is in fact a wide difference between them. The difference is created by their holding different "situses" in society. The scientists will be located in the universities and research institutions, the technologists in government and corporations, and the administrators in government and industry. Consequenily $\mathfrak{y}$ different estates have different relationships to the knowledge they all deal in. They therefore have different interests at stake in that they hold "different economic relations to production." As a result they are not a united front within the social structure. Each group will attempt to preserve or achieve its own interests. The scientist maintains the right to investigate and produce basic knowledge, the technologist the right to apply the knowledge to social and economic processes, the administrator to manage the organization of knowledge, and the cultural elite to develop aesthetic forms of knowledge.

Different interests in relation to knowledge override the professional estates' "common ethos" of offering skilled,
specialized services to the managers. This results in their splintering into factions, inhibiting their development as a united social class, i.e. as a "knowledge class".

## (d) Post-Industrial Transcendence of Politics

The transformation from industrial to post-industrial society can be seen as an "axial change in the social structure (defined as the economy, the technology and the stratification system) of the society." ${ }^{35}$ Theoretical, technical knowledge is the most important resource for the power holders who seek to control the society's future in accordance with their ideology, embracing technological advancement and organized growth. As a result of the dependency on theoretical knowledge a "technical intelligentsia" develops whose research and findings on technical, scientific and economic matters are more directly brought into the political process. An expanding bureaucracy is also produced to organize, systematize, and enforce the research. ${ }^{36}$

It should not be thought however that his transformation to post-industrial society is restricted to the capitalist mode of production. As Touraine points out, "beneath their profound opposition there are common problems which demand a redefinition of the differences among industrial societies." ${ }^{37}$ By this he means that although socialist and capitalist industrial societies may be different in one sense they share industrialized social structures and their encumbent problems.

As post-industrial transition occurs in the social
structure of a society it may occur in highly industrialized capitalist or socialist nations as they have similar social structures. A change in the social structure of a society

> implies no specific determinism between a 'base' and a 'superstructure'. On the contrary the initiative in organizing a society these days comes largely from the political system... it is likely that the various societies that are entering a post-industrial phase will have different political and cultural configurations. 38

In both advanced capitalist and socialist societies the social forces of production have become industrial and the social relations bureaucratic. ${ }^{39}$ The political order, whether based on western democratic or socialist principles, will have a common emphasis on planning and controlling the society's future by utilizing theoretical technical knowledge. Attempts to implement this emphasis however will involve different methods, which complement the different political principles implied.

The social structure and the political aims predeterminant in post-industrialism are equally applicable and related to advanced socialist and capitalist nations. Post-industrialism therefore transcends political differences and will eventuate in any highly industrialized nation.
(e) The Populace

As mentioned in the previous sub-section the professional groups are dominated by the managing technocrats to the extent that they are able to carry out their specific roles and exercise their special talents only within the bounds of technocratic policy.

The decisions made by the technocrats determine in what research these estates are engaged or what policies they will implement.

However the professionals are not in a position of absolute subservience. Firstly as they are considered in many cases as "independents" they are not totally dependent upon the technocracy nor totally enveloped by it. Touraine views them as an estate which sometimes joins the technocrats and sometimes fights against them." He claims "they take part in the functioning of organizations without entirely belonging to them." ${ }^{40}$ For this reason the techniciens can opt out of the technocracy or oppose it and as such are not totally dominated by it. It should be noted, however, that the technocrats' influence is continuously encroaching upon the professional estates autonomy if nol checked; therefore they are being continuously enveloped and controlled by this group.

The second reason why the professionals are not in a position of absolute subservience in the social structure is because they occupy a middle position between the technocrats and the totally powerless populace. In this niche they are able to make decisions, within the bounds of technocratic policy, which transforms them into the immediate overlords of the powerless. It is the professional groups who implement the technocrat's policies in the social and economic processes of the society. Their decisions and actions in implementing these policies therefore directly affect the populace, placing them under the authority of the technocrats. In that the professionals are dominators
themselves, they are removed from the position of absolute subservience within post-industrial society.

However for the general populace there is no such escape. They are the victims of the technocrats' policies implemented by the professional estates. As those who dominate are "more directly defined by their relationship to change and the power to manage change" the dominated classes are "defined by consumption and the tasks they carry out, hence by dependence on the forms of organizations and culture worked out by the ruling groups, they are integrated and used."41

As technocrats' policies are based on increased production, technical development and maintenance of power, they are not necessarily related to what is good or useful for those they are serving, i.e. the masses. There exists therefore a "contradiction between the needs of these social systems and the needs of individuals." 42 Nevertheless in the view of the technocrats the needs of the social system are of paramount importance. Individuals are therefore not primarily catered for, although in some cases the betterment of their welfare is an incidental by-product resulting from catering for the social system. They become "alien[s] subjected to a decision-making system operated in the name of the collectivity."43

The individual therefore has to serve and fit into the social system rather than vice versa. He is
pressed into participating - not only in terms of his work but equally in terms of consumption and education - in the systems of social organization and power which further the aims of production...everyone has his place and his set roles within a regulated hierarchical community.

Touraine describes the situation people find themselves in as "dependent participation.". 45 They are seduced and manipulated into working within the social system, on behalf of the social system. This manipulation by the centres of power and decision-making is no longer restricted to the individual's occupational activities but also effects their social relationships, their style of consumption and the organization of their working lives. ${ }^{46}$ In all these areas a conformism is instituted towards mediocrity, which is most efficient and effective for the social system in that it is easy to rationalize and conducive to the retention of the status quo.

Through "dependent participation" the members of the dominated class become alienated. There arises a clash between individuals' personalities and their societal roles since "their only relationship to the social and cultural direction of [their] society is the one the ruling classes accords [them] as compatible with the maintenance of their own dominance." ${ }^{47}$ As they have no technical, theoretical knowledge they cannot participate in the decision-making or organizing of social policy; therefore they have no influence on the direction in which the society develops. They can only follow the policies of the leaders and in as much lose control of their destiny, personal independence and character. Touraine states that

> the alienated individual or group is not only the one left on the sideline, subject to control and deprived of influence; it also includes the one who loses his personal identity and is defined only by his role in the system of exchange and organization. 48

The masses are viewed by the technocrats as little more than tools to be used to attain their goals of increased, economized, efficient production and technological advancement. As such the attention they receive is little more than maintenance in order to ensure their continued performance of their roles in the production process. They need to be healthy and comfortable (but not comfortable enough to enable them to opt out of the system), educated enough to be useful (which does not necessarily mean well educated), and happy with their lot (often achieved through sedating them). Post-industrial society in its ultimate form decrees that the population shall be content and able to serve the technocrats, be impotent in the planning of their own future, and remain in a state of "dependent participation."

The attainment of this social situation is a matter of degree. It will vary from society to society depending on the efficiency of the technocrats and how deeply the society is emersed in the post-industrial phase. However the ruling class of a post-industrial society must necessarily attempt to manipulate the general population into this situation if it is to organize society in a fashion that is conducive to the attainment of its aims.

## (f) The Education System

The function of the education system in postindustrial society is in some ways comparable to its function in Plato's Republic. It serves to lead a small number of able citizens to attain what is necessary to rule and it
leads the rest of society to achieve what is necessary for the fulfilling of their subservient functions. However it is not presumed, as it was in The Republic, that the populace will be happy and content in filling these roles. While Plato believed the philosopher-Kings must attain the 'form of the good' in order to rule, the post-industrial theorists hold that for this end the technocrats must attain "the general methods of analysis." Education is seen as the access to knowledge in advanced society, it is therefore a means to power. As Touraine states
if property was the criterion of membership in the former dominant classes, the new dominant class is defined by knowledge and a certain level of education ... The more advanced levels within the education system become progressively more specialized - but only up to a point. Beyond that point, the tendency is reversed and education concentrates on the acquisition of̃ generaī methoãs of̃ anaiysis. 49

For the general working people education will be a generalized activity passing on to them a broad, unspecific body of knowledge. For the techniciens and bureaucrats education provides a specialized body of knowledge and techniques which will enable them to carry out their specialized functions efficiently. The technocrats' education is, however, geared to the promotion of the ability to analyse knowledge presented to them'and direct society's future. They must learn the skills necessary to direct the courses of scientific and technical research and to develop the policies techniciens must implement. In this fashion the highest level of a technocrat's education is not restricted to a specialized subject but involves the
promotion of the ability to decide upon and dictate future policy within the society, on analysing existing, presented information. Touraine claims that such an education is offered in his native France by the five Grand Ecoles which provide post-specialist education for top civil servants and diplomats in methods of coordinating the special functions of others.

Touraine also regards education for this group as "a mechanism of initiation into a particular social group." 50 Like the philosopher-Kings they are a ruling elite who have attained "a superior level of education with characteristics distinct from those of lower levels."5l This ruling elite is often symbolized by "attendance at a particular school or university." The education system is therefore a system of social stratification in post-industrial society, as it arguably âlwāys hás been. "In this way a new aristocracy is created along with a consciousness of the separation between it and the middle echelons of the hierarchy." 52

For the techniciens and bureaucrats education
emphasizes specialization, but it is specialization in areas that are considered vital in the technocrats' idelogy, i.e. technical subjects that will increase production, efficiency and technological development. Their research or implementation of technocratic policy and therefore their areas of specialization as well as their education come under the influence of general policy-making by the technocrats. The highest level of a techniciens' or bureaucrats' education is therefore determined and dictated by technocratic ideology and policy.

The emphasis in technocratic ideology on technological knowledge offers another analogy to Plato in that it serves to degrade the domains of humanistic and aesthetic knowledge. These domains are therefore emphasized and promoted to a lesser extent than the technical domains in the education system as they are not central to the production process.

The education of the people is also under the influence of the technocrats for they are needed to carry out the menial tasks. The education system therefore must equip them with the ability and aptitude to perform these activities. Little consideration is given to the happiness within their allocated roles or for their individual educational demands. Again the needs or the desires of the individual are forfeited to the needs and demands of technocratic policy. The technocrats will put into effect a system of education with content and methods appropriate to the fulfilment of their own needs. Education is therefore no longer in the hands of the teacher, "of the family or even of the school, [it cannot be] considered as an autonomous milieu." ${ }^{53}$ The school is nothing more than a front.for the technocrats, teachers are nothing more than their agents (professionals in Touraine's terminology), who carry out their policy, i.e. the syllabus. Inevitably the masses dependently participate. They need, in fact are obliged by law, to attend school but what they receive is predetermined by the technocrats.

Touraine refers to the increasing "dominance of 'the parallel school' where the influence of those at the center of society is felt most direct." 54 Teaching, like research,
in the post-industrial society cannot retain its autonomy; it must be kept consistent with the technocratic policy if the technocrats are to retain their power and attain their goals.

As mentioned earlier the technocrats are not so naive as to believe that the masses will be satisfied with their lot, which is to receive a little education and perform menial tasks. Unlike Plato they do not believe 'men of bronze' will be happy and satisfied in lower strata as befits them. The technocrats attempt to overcome any dissatisfaction this estate may have with their position in society by sedating them. In making available the entertainment media, spectator sports, gambling, social drugs etc., the technocrats relieve dissatisfaction and therefore possible tensions. The 'men of bronze' are lulled into unquestioning acceptance of their lot and fit their allocated societal roles.
(g) Resistance

Will technocratic power in reality go unchecked or will some reaction occur against it in its embryonic stages?

Most theorists have suggested that some defensive resistance will arise which will cause social conflict in society. A discussion of the proposed breadth of the conflict, the domains in which it may occur and the factions which different theorists have suggested will be involved is required.

The reaction is against "the hold of economic growth
and social change over every aspect of social and cultural life." ${ }^{55}$ It occurs between those in the position of dependent participation, or those threatened by it, and economic and political decision-making bodies. Social conflict in post-industrial society unlike in capitalist, industrial society "is no longer defined with a fundamental economic mechanism... the whole complex of social and cultural activities is involved." ${ }^{56}$ This is a result of technocratic power, influence and dominance breaking out of the limitations of labour and business which confined the private entrepreneurs of capitalist, industrial society. They now affect the entire social structure since "the hold of economic power over social life is more general than ever and reaches every aspect of personal life and collective activities." 57

Kesistance must ṫake the form of a sociai movement as the struggle must be general rather than particular. As Touraine claims,

> today, workers are not subjected to the law of profits but rather to what is too gently named the exigencies of change. The centres of power and decision-making no longer manipulate people only in their occupational activities but also in their social relationships, their styles of consumption, and the organization of their working lives. Opposition can no longer be exclusively economic: it is more diversified because those in power exercise control much more broadly. 58

This opposition is against the manipulation of the individual by the technocrats in the name of the power structure and for its benefit. It is an attempt to influence the direction of social development and defend and promote self determinism. ${ }^{5}$

But who will lead this battle against the technocrats in an attempt to take the future of society out of their control and proceed to defend the rights of the individual? Different writers have different opinions.

Bell considers several groups as possible sources of resistance. Firstly he holds that the cultural estate will clash with the technological and administrative estates. "Its concern with the self, is antinomian and anti institution, and thus hostile to the functional rationality which tends to dominate the application of knowledge by the technological and administrative estates." ${ }^{60}$ He suggests therefore that the cultural estate, i.e. the artistic and religious factions of society may offer resistance against the technocrats and their policies. They will press for more concern for the individual and choice rather than uniimited regarā for technological development, economizing and efficiency.

Bell has also suggested that technocratic development "will be overwhelmed from within by the declining social classes who, with greater urgency are seeking to protect their old positions." ${ }^{61}$ By 'declining social classes' he refers to the sectors of society whose roles and jobs are threatened or degraded by technological advancement, resulting from technocratic policies. This includes skilled and semi-skilled workers who are rendered redundant or less meritorious by increasing technology. As they decline in social status they may struggle against the technocrats in an attempt to retain their situation. There is a conflict therefore between "the orderly progress of knowledge
bringing with it increasing economic prosperity and social harmony and ... the atavistic culture and political forces that may rise up and destroy this process." ${ }^{62}$

This struggle is met by the technocrats who attempt to diffuse the dissent by social sedation. They also utilize the education system to promote new skills, to ensure that the next generation does not fall into these 'declining social classes'. The school is also used to cultivate a new value system to ensure that citizens appreciate rather than resent and resist technological development.

Bell also feels that the rise of post-industrial society may be overwhelmed "from without by the rising forces of the third and fourth and fifth worlds that find themselves economically disadvantaged in terms of trade." 63 Bell refers here to the economic pressures these nations may put on countries entering the post-industrial era. They possess the natural resources necessary for would-be post-industrial nations to continue production at an ever-expanding rate. If these third, fourth and fifth world nations move to boycott advanced societies in an attempt to increase their own status (for example the Arab oil boycott of 1973), the advanced nations' production growth rate could be severely impeded. The economic clock would be put back and their development into the post-industrial phase delayed. Touraine presents a deeper analysis of the possible dissident groups confronting the development of postindustrialism and technocratic power. His conclusion is substantially different to Bell's. Touraine argues that
opposition in the post-industrial society cannot be expected to come from the same social groups as it does in industrial society; with a new form of social dominance comes a new form of opposition.

In the post-industrial society the working class has lost the revolutionary potential it held in industrial society. It is no longer the radical opposition holding visionary, consummatory values as opposed to currently expressed instrumental values. Being alienated, members of the working-class depend on their social environment to the extent that they no longer see it as a controllable product of human action. Their struggle is therefore "limited to the defense of the material conditions of existence, and it is difficult to move them to the offensive." 64 The working-class and lower middle-class are exploited, manipulated and removed so far from the centres of decision-making that they accept the societal roles assigned them by the technocrats. In sensing the inevitability of their social situation they lose their revolutionary potential.

Touraine continues on to say that the responsibility for opposition to the technocrats is passed on to "the economically advantaged groups, the research agencies, the technicians with skills but no authority and ... the university community." These groups provide "the most radical and creative movements" in post-industrial society. ${ }^{65}$ There are many reasons why these groups will constitute the avant-garde of resistance to the technocrats. Firstly they are in a position in society, where they see
technocratic policies in action, often administering them to the public themselves. ${ }^{66}$ They experience the consequences and the inadequacies and are therefore in a position conducive to the development of dissatisfaction with the technocrats, their value system and the related decisionmaking processes.

For example, teachers are in Touraine's terms 'professionals' executing the technocrats' educational policies. In their classroom experiences they are in a position to determine that the policies are inadequate, unfair or inhumane. They will see that they do not offer an adequate choice, that they do not develop the individual to his or her full potential, that they are orientated to the needs of the production system rather than to those of the child. A feeling of dissatisfaction may emerge within this group which will manifest itself in resistance, primarily to the educational policies of the technocrats. This radicalism will however broaden as they realise that the cause of the educational problems lies outside of the education domain and is the source of most social maladies. This also applies to clerks, business accountants, computer operators, linguists, electrical engineers and other occupational groups working within the technocracy, who have the opportunity to witness the inequities of technocratic power and policies.

The second reason why Touraine believes individuals from this group are likely to lead the resistance, is that they are in a position where the "contradictions between organizational interests and personal autonomy - the opacity
created by technocracy - is more directly manifested." 67 Put another way techniciens and bureaucrats are in a position where they have skill, talent and specialized knowledge but no power as the technocrats decide how their abilities will be utilized. This group therefore have diminishing control over the use of its own skills. In an attempt to "defend ... the autonomy of their working conditions and careers [they] set the internal exigencies of their professional group against the pressures exerted by the systems of organization and decision-making." ${ }^{68}$ In an attempt to create a social situation in which they determine the use of their own skills, techniciens and bureaucrats will be the first to resist the technocracy.

They are also thought to be the avant-garde of the resistance because they have not only the motive for but also the means of resisting. Unlike the working-class thoy are not forced to spend all their efforts struggling for survival. They are "intellectuals or skilled workers with a higher standard of living or education or a strong position in the labour market." ${ }^{69}$ They are therefore in a position of social and economic security and can afford to turn their attentions, energies and time toward resisting the technocratic takeover.

As mentioned earlier the techniciens and bureaucrats are somewhat removed from the technocracy and function autonomously. Touraine states "they take part in the functioning of organizations without entirely belonging to them," 70 in that they independxntly offer the technocrats a service, keeping themselves exempt from organizational
involvement.
Because of this existing autonomy they are not necessarily involved in the relationship of dependent participation and therefore by Touraine's definition they are not alienated. Due to this they do not have such a strong feeling of inevitability as the working-class and do not assume themselves to be ineffective. They hold radical view orientations which clearly show their belief in the viability and possibility of social change. Unlike the working-class they will therefore try to instigate such change.

Touraine believes that this estate has a good chance of succeeding in such an attempt. They are the skilled and intellectual members of a society which revolves around a production process dependent upon skilled and intellectual individuals. They therefore hold a strong baryaining position. They can, "in their opposition to those who hold power, use the instruments of production which their opponents claim to control." ${ }^{71}$ The technocrats need the techniciens and bureaucrats and therefore in a case of conflict must compromise their position. The techniciens and bureaucrats "are able to force them to liberate themselves from their internal problems and to adapt better to society as a whole." 72 They are in a position to "constantly remind the organisations in which they are involved of their external functions" ${ }^{73}$ as they are central to the mechanisms of economic progress. "Their strength is felt to the degree that economic circumstances and the supply of technicians or the market give this group considerable power at the
bargaining table." 74
Not all techniciens and bureaucrats will constitute this avant-garde of resistance. As there are several reasons why an individual will be in the avant-garde only those techniciens and bureaucrats who fulfil all the necessary criteria will constitute it. There will be some techniciens and bureaucrats who will not experience or not react to the inadequacies of technocratic policies. There will be some who will be preoccupied or too complacent. There will be others who are in a relationship of "dependent participation" with the technocrats having already lost their autonomy to the encroaching technocracy. But in cases where techniciens do witness the inadequacies of technocratic social policy and are autonomous, critical and powerful enough to resist they will be the prime-movers in the reaction against the technocracy.

This is Touraine's point of view. It is somehow a strange irony that Bell, who so carefully outlined the rise and importance of the professional groups in post-industrial society, never realised what a potentially powerful role they would have in the movement resisting the emergence of this social structure. He does not acknowledge that it will be their value system, calling for greater concern for aesthetics and the rights of the individual, which will produce the consensual base of resistance against the predominant concern with materialism and technological growth.

Their concern for individual rights relates to demands for increased education, freedom, autonomy, choice, tolerance
and equality. Their stress is on the right of the individual to be treated in relation to his or her needs, abilities and aptitudes.

The aesthetic issues which concern them are related to the necessity of maintaining or attaining a healthy balance between increasing technological development and social and environmental well-being. It involves a concern for the environment and its conservation. It includes a concern for the arts and humanities in order to complement the concern for scientific, economic and technological progress. It requires a demand for the socially responsible utilization of the social structure, its agencies and the production processes. This includes not only the actual factories and offices themselves but also the media and other similar tools and processes utilized by the decisionmakers. Overall they atcempl lo ensure that the dechnocrats do not use their power to achieve their own aims at any costs to the social structure, environment in general or the individuals of society.

Along with the techniciens and bureaucrats Touraine also assigns to the avant-garde of resistance the university student population. There are several reasons for their inclusion. Firstly, they are in a position to resist as they are partially removed from technocratic influence. As they are not yet employed in occupations they are "not yet involved in the network of obligations created by massive organisations and the pressures to maintain living standards."75 As students are still young and unattached they have no economic interest to jeopardize by critical
action. Therefore they are not restrained from doing so by the complexities and constraints of highly structured organizations. In fact the university environment is one in which the expression of dissatisfaction and resistance is quite easily manifested.

Students will also be in a position to resist as they possess the theoretical knowledge that is so vital in postindustrial society. In the course of their education they have attained a level or sphere of knowledge that will incite them and in fact equip them to resist. Touraine however claims that the students who will actually react will be restricted mainly to the social sciences, humanities, and liberal arts. These spheres of knowledge are viewed as more conducive to reaction than those such as science, engineering, commerce and law.

The underlying reason for this claim is that the humanities constitute forms of knowledge which not only broaden the individual's social consciousness but also attract people who either already have or desire such a consciousness. The humanities and their students consider alternative forms of though and social organization. The student will be therefore more receptive to different, perhaps less socially determined, value patterns and ideological orientations. In identifying alternatives to the existing social order and recognisjing their merits the humanities student is in a position to oppose and resist the technocrats.

On the other hand science, engineering, law and commerce students are "in the most professional
disciplines." 76 It is thought that these subjects not only initiate the student into a narrow social consciousness located within the technocratic perception of social
development but they also appeal to individuals who are less interested in acquiring a broad social consciousness. These subjects are extremely specialized and career orientated. In taking on such a course of study the individual is opting for a "professional discipline" leading to a "professional career" in the technocracy. They are assured of social and economic security. The students, in pursuing these subjects, are not in a milieu or state of mind which will incite them to oppose the technocracy or equip them with the knowledge necessary for such an offensive.

Touraine illustrates this by claiming that in France "it is mostly students of sociology, philosophy, architecture and urban studies who questioned the social order" ${ }^{77}$ by taking part in the massive resistance to the government in the demonstrations of the late 1960s. This is, he claims, a common characteristic in other western developed countries.

It is interesting to note however, that when the students in the 'professional disciplines' are no longer students but techniciens or bureaucrats they will be in a position, as outlined earlier, that will be conducive to the experiencing of dissatisfaction with and opposition to technocratic policies. The universities therefore become the breeding-ground for dissent. Whilst at the institutions and after they leave, the students of humanities are incited to rebel. After a university education and entry into a
"professional occupation" the science, engineering, law and commerce student may come to oppose the social system on experiencing its inadequacies.

It should be pointed out that Touraine does not hold that all humanities students will join the avant-garde of resistance. As in the professionals estate, involvement in resistance is a nexus of time and place and a state of mind. There will be some humanities students who will not respond to their disciplines and will remain unmoved. On the other hand there will be some students of the "professional disciplines" who will go beyond their discipline for social or ideological reasons, realising the inadequacies of the social system and partaking in opposition to it.

So far only the avant-garde of the resistance has been discussed. It is also pertinent to comment on how resistance is expected to expand.

A function of the avant-garde is to awaken in the 'men of bronze' a dissatisfaction with their lot. Touraine claims that they must "mobilize those communities which are in a state of decline," 78 those who have lost or are losing their autonomy in organizing their own life styles. The "militant elite" must encounter the groups which are "experiencing most directly and are most vulnerable to the effects of managed social change and which as a result feel their collective identity most threatened." ${ }^{79}$

In this encounter the "militant elite" must reduce the feelings of alienation and inevitability which exist in the 'men of bronze'. They have to be brought to realise their potential power, that they can resist the social order
and retain or re-attain their personal autonomy and their influence in social policy making. This struggle against "dependent participation" is required in all manipulative aspects of social life. The populace must be encouraged to, and attempt to, "reject their assigned role, become conscious of their dependency and begin to act with their sights focused on themselves and their self-determinism." 80 Finally it should be pointed out that opposition to the technocratic hold on the social structure does not necessarily involve the total rejection of the social structure or its component elements. The radicals for example may reject the way the political system is used to suppress them and serve the means of production rather than the good of the people but they may still wish to retain the system. They may reject the school system as a means of enslaving them by the technocratic viewpoint and structure but they may still accept the concept that society should retain a school system. Their rebellion is therefore not against the social structure per se but against the way it is used to ensure "their appropriation to serve the special interests of the ruling class." 81 This is the nature of resistance to technocratic power in the post-industrial society.

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## CHAPTER THREE

## DESCHOOLING WHICH SOCIETY?

> ... beyond a certain level of G.N.P., the cost of social control must rise faster than total output and become the major institutional activity within an economy. Therapy administered by educators, psychiatrists and social workers must converge with the designs of planners, managers and salesmen and complement the services of security agencies, the military and the police... increased affluence requires increased control over personnel... Ivan Illich, Energy and Equity, p. l8.

Illich has proclaimed that society must be
"deschooled". He perceives such an action not only as a necessary educational move but also as one aspect of a solution to a more extensive social problem. He has declared that a comprehensive "institutional revolution" is needed if man is to break out of the "present system", "live change" and commence the "race to maturity".

This section outlines and illustrates the social, economic and political structure of this "present system" which Illich claims we are enveloped in.

## (a) Agencies and Ideologies

Illich identifies in the society needing institutional revolution "multinational corporations" and rising "supernationally planned service agencies" which dominate, or will come to dominate the economy.

These enterprises are "internationallystandardized, redefining the value of their services periodically and everywhere at approximately the same rhythm." ${ }^{2}$

The products or services they offer are presented in such a way that the public feels a duty to utilize them. These corporations and agencies are not restricted to manufacturing concerns such as food processors or the producers of cars, clothing or cosmetics. Illich also includes the "bureaucratic agencies of the corporate state" ${ }^{3}$ in this category of enterprises which dominate the society's economy, effect social relationships and manipulate individuals towards their standardized, predetermined goals. The education, transport and medical systems of a society serve as examples of these "bureaucratic agencies".

Underlying all corporations and agencies of this nature, whether they provide services or products, is a common ideology that places "economic growth first". ${ }^{4}$ The needs and values of the industrial and service sectors are therefore respected above those of individuals or society as an organic body. The major objective, therefore, in this society is the efficient attainment of the productive aims of large enterprises. This ensures the "unqualified identification of scientific advancement with the replacement of human initiative by programmed tools." 5 A "bias towards technological progress and centralization is reflected" ${ }^{6}$ in social policy making. Science and associated research are the tools of the decision-makers. Illich, therefore, emphasizes the centrality of theoretical knowledge in the social structure and in the social policy-
making process where the aim is to maximize efficiency in all agencies. Efficiency is viewed as involving the reduction of human initiative and the increase of programming to ensure that everything is planned, predetermined and running appropriate to decision-makers' expectations.
"Our present system", Illich claims, "forces us to develop and accept any improvement in machinery, equipment, materials and supplies which will increase production and lower costs." ${ }^{7}$ This ideology when accepted uncritically becomes self-justified and self-evident. The 'advancement' achieved by previous scientific research or past action executed in the name of this ideology is used as evidence for the further execution of such a policy.
(b) The Power Structure

Who is it that makes the final decisions on action in the society described by Illich? Who is it that holds this ideology of "economic growth first" and makes policy decisions which affect the entire social structure of that society?

Power of this sort is in the hands of a small elite.

Most of the power tools now in use favour
centralization of control. Industrial plants
with their highly specialized tools give neither the worker nor most engineers a choice over what use will be made of the energy they manage. 8

This choice is passed into the hands of a small elite. "The managers of our major tools - nations, corporations, parties, structured movements, professions - hold power. This power is vested in the maintenance of the growth
orientated structure which they manipulate." ${ }^{9}$
Here Illich is quite clear on the nature of the power held. He is, however, vague in identifying the character of these "managers". The closest he gets is to say that "today's managers form a new class of men, selected for their character, competence and interest which enable them to both expand the production society and promote the further operant conditioning of their clients." 10 But what their "character, competence and interest" are specifically is only hinted at.

Firstly, in line with post-industrial theory, the power-holders in an enterprise are not necessarily the owners of that enterprise. "They hold and manage power no matter who lives in the illusion that he owns the tools."ll

Seconāiy "speciaīized workers", 12 "professions" ${ }^{13}$ and "bureaucrats" 14 all appear to have positions of increasing importance in society. They however appear to possess vital skills but little power as they remain subservient to the estate which makes the final decisions. These "bureaucrats", "professionals" and "specialized workers" will be the groups which offer the decision makers necessary information (for example economists, computer technicians, lawyers etc.) or execute their policies (for example teachers, doctors, engineers etc.) They fulfil the same roles as the techniciens and bureaucrats referred to by Touraine and Bell.

It therefore remains unclear as to who the powerholders precisely are in Illich's society. From what he
has said they appear similar to those described by Touraine in his synopsis of post-industrial society. They are those who are capable of, and in a situation suited to, the analysis of all 'relevant' and called for data. They are also versed in the 'relevant' ideological principles on which they base their decisions and policies. But, as with Touraine, the specific qualifications and characteristics necessary are left somewhat vague. We are however given a clear indication of the function and perhaps through this the character of Illich's decision-makers when he claims,
technological growth has been confused with technocratic growth. For the technocrat the value of an environment increases as more contacts between each man and his milieu can be programmed. In this world the choices which are manageable for the observer or planner converge with the choices possible for the observed so called beneficiary. Freedom is reduced to a selection among packaged commodities. 15

It is now important to analyse the impact of this power-structure and its ideology on the social structure of the community.
(c) Social Relations
"Over industrialization ... imposes its technical characteristics on social relations." ${ }^{16}$ This imposition is mainly summed up in the two terms, "radical monopolization" and "the institutionalization of values".

By "radical monopoly" Illich does not simply refer to an agency being the sole supplier of a product or service but that the enterprise has acquired the "ability to create and shape the need which it alone can satisfy."17

No longer will the public be able to consume in a personalized fashion; they will instead be forced to avail themselves of the service or product the radical monopolizer is offering. The individual is caught in a trap of "compulsory consumption ... which restricts the conditions for enjoying an abundant use value."l8

The radical monopolization of learning by schools, of transit by motorized transport, or of health by medicare are offered by Illich as evidence. They also serve to illustrate his point, that such monopolization is not limited to the production of units (for example cars, cans of food, tubes of toothpaste) but also includes the production of information (for example education, engineering, computer technology and medicine). ${ }^{19}$

Closely linked to this social phenomenon is Illich's concept of "the institutionaiization of values". This concept refers to the fact that in developing a 'radical monopoly' a large enterprise not only controls the supply of goods or services but also dictates and incites the demand for such a product or service in the first place. This again is not limited solely to the manufacturing of products. It also includes the welfare bureaucracies which "claim a professional, political and financial monopoly over the social imagination, setting standards of what is valuable and what is feasible." ${ }^{20}$ Included in this sector are the decision makers in the areas of education, transport and medicine. We are told that at least ten years schooling is good for us ("you will be thankful in the future"). We are told what entertainment we do, or should, prefer ("we have a
great line-up for you folks at home tonight"). Or we are told that a motorway into the heart of the city is the most feasible transport system available ("it will get you there and back quicker"). Etc., etc., etc.

The impact of this "institutionalization of values"
is that "health, learning, dignity, independence and creative endeavour are defined as little more than the performance of the institutions which claim to serve these ends, and their improvement is made to depend on allocating more resources to the management of hospitals, schools and other agencies in question." 21 Autonomous action in these areas not only becomes impossible (because of radical monopolization) it also becomes unwanted as "members of modern society believe that the good life consists in having institutions which define the values that both they and their society beileve they need. in ? 2

A further result of this institutionalization of values is that diversity is reduced to a minimum as all aspects of life are standardized. To ensure this there is an increase in the "therapeutic service sector of the economy" which includes social workers, medical services, the school system and psychiatrists. As a result an "increasing proportion of all people come to be perceived as deviating from some desirable norm and therefore as clients who can now ... be submitted to therapy to bring them closer to the established standard." ${ }^{23 \text {. The increase }}$ of such conformity will reduce interference with the efficiency of technocratic planning.

It is necessary at this stage to outline what Illich
perceives as the effects of these social phenomena on the society's populace.
(d) The Populace

A radical monopoly is established "not only over resources and tools but also over the imagination and motivational structure of people." ${ }^{24}$ The population in general is therefore "reduced to an indefinitely malleable resource of the corporate state." ${ }^{25}$
"Reification" plays an important part in the appropriation of individuals' imaginations and motivational structures. Bureaucratic organizations dominate the mechanisms in the individual and harden their perceptions of primary human needs, changing them into "demands for mass manufactured products." ${ }^{26}$ Individuals, for example, no longer just travel; they now desire a fast car. They no longer just ask for an elementary education; they now desire advanced schooling and certification.

The reification of real individual needs results in individuals forfeiting "their natural abilities to do what they can do for themselves and for each other ... the standard package [is substituted] for the personal response." ${ }^{27}$ For example, rather than utilize their own potential "to deal with their human weaknesses, vulnerability and uniqueness in a personal and autonomous way ... people accept health management designed on the engineering model ..., as if it were a commodity ... called 'better health'."28 This surrender results in the loss of both self respect and the feeling of personal responsibility and
autonomy as individuals turn to large institutions for 'salvation' rather than to themselves or each other. As a result, Illich claims, "what he [the individual] wants is not more liberty as a citizen but better service as a client ... He wants a better product rather than freedom from servitude to it." 29 To use a medical illustration again, "sick care and health care become commodities which one pays for rather than things one does." 30

The arrangement of society in this way, "in favour of managed commodity production has two ultimately destructive aspects: people are trained for consumption rather than for action, and at the same time their range of actions is narrowed."3l Incorporated in this notion is not only the idea that the individual is becoming incapable of relping him or herself, but also that the individual feels incieasingly ingapable of such action. illich calls inis state "psychological impotence." 32

Attempts to sidestep the system are continuously thwarted with the result that at first individuals are coerced into using, and finally come to prefer, the product or service offered and approved by "the system". The result is social or psychological "addiction" to these products and services. 33 Individuals lose "their incentive to grow in independence, they no longer find relatedness attractive, and close themselves off to the surprises which life offers when it is not predetermined by institutional definition." 34

These symptoms indicate the presence of the social malady, "alienation": a sensation of having no control, or desire to have control, over their lives infiltrates
individuals' consciousness. But alienation in Illich's society is not in the "traditional scheme", its influence is felt more broadly. Like the post-industrial theorists, he claims that the new social structure encourages the breaking out of alienation from the previous limitations of the 'wage-labour' employment scheme and its pervasion of the entire social structure. He observes that "schools make alienation preparatory to life ... School prepares for the alienating institutionalization of life by teaching the need to be taught." ${ }^{35}$ Alienation is no longer reserved for the place and means of employment, it is prevalent in all aspects of the social structure, from entertainment (for example television programming), to transport (roading systems), to politics (environmental policy making), to social welfare (education and medicine). In all these domains the individuale must be "ready to fit into a routine prepared for them." 36

With alienation comes frustration. Individuals will continue to desire to do some things for themselves. They will wish to sidestep the system and use their own initiative but will be unable to do so. One of several situations may eventuate. Either the feeling of frustration will simply continue and no progress will be made to alleviate it, or the anxiety may cease as the individual surrenders to the inevitability of 'the system'. Thirdly 'the system' may institute "policies aimed to ease this frustration [which] may easily distract attention from the general nature of the monopoly at its roots." ${ }^{37}$ This idea is Illich's equivalent of the post-industrial theorists' idea of "sedation".

A final possible result of frustration is that individuals may independently or as a united front offer some form of resistance to the system in an attempt to alleviate their anxiety by solving the essential problems. An analysis of the possibility of such resistance will constitute a substantial part of later sections of this work.

Two final points on Illich's views of increasing technocracy's-impact on individuals. One, is the notion that poverty levels will rise. This results as 'industrial staples are turned into basic necessities and have a unit cost beyond what a majority could ever pay." ${ }^{38}$ As individuals no longer satisfy their own personal needs they become "disablingly dependent" upon the standardized packages provided. Those who cannot afford to consume them are deemed poor and may well perceive themselves as being so, even though in 'real' terms they are quite secure. Poverty levels are therefore "modernized". ${ }^{39}$

Secondly, any society dedicated to the principle of "economic growth first" must risk the destruction of the natural environment. This fact has been abundantly analysed elsewhere and requires no deep coverage here, except to say that such a threat faces the individuals of the society Illich forecasts, if no steps to redirect social progress are made.

The impact of technocracy on the individuals of a society is different from the impact any previous social structure has had on its members. Its influence is much more extensively and deeply felt as it interferes in the
personal, social, occupational and recreational aspects of all citizens. The very fact that it does affect all individuals is another distinguishing feature of its impact. Technocratic influence is not limited to the poor. "The typical victims of the depersonalization of values are the powerless in a milieu made for the industrially enriched. Among the powerless may be people who are relatively affluent." ${ }^{40}$ The breadth of the powerless sector increases as the

> overgrowth of tools threatens persons in ways which are profoundly new ... because their perpetrators and victims are the same people: both operators and clients of inexorably destructive tools. Though some may cash in on the game at first, ultimately all lose everything they have. 41
(e) Social Control and Education

It has already been stated that schools in the society envisaged by Illich serve to "prealienate" individuals and prepare them for a life of acceptance of the large enterprises. In such a centralized and specialized society "highly programmed operators and clients" are necessary. The result of this requirement is that "more of what each man must know is due to what another man has designed and has the power to force on him. ${ }^{42}$ The school is one of the major agencies through which this power is imposed. It serves as "the locus of the ritual which reproduces and veils the disparities between myth and reality ... the ritual which demands tolerance of the fundamental contradictions between myth and institution [and] still goes largely unchallenged."43

They are not alone in this task. They are assisted by "the hidden curriculum of family life, draft, health care, so called professionalism, or of the media ... in the institutional manipulation of man's world-vision, language and demands." 44 Teachers and schools are therefore part of the system, serving the interests of the decision-makers, often unwittingly and in some cases unwillingly, but nonetheless effectively.

The school is set several objectives in this domain of social control and manipulation. It must both allocate people to social roles compatible with the dominant ideology and also persuade them to respect and support that ideology. The former task requires the grading of people for jobs and social positions, the latter their upgrading for consumption. 45

The education system acts as an efficient agent for the allocation of social roles. Its objectives are closely linked to the job requirements set by the managers. The result is that the curriculum is restricted to what is desired in the eyes of the power-holders. Individual variations in content or methodology are quashed. In the rush for certification to insure social advancement, individuals are channelled in a direction designed and directed by the power-holders. The end product is once again like Plato's Republic. The major difference is however that those determining the social structure have no necessary prerequisite of grasping 'the form of the good', only of their own dubious ideologies. The resultant social order is therefore equally dubious.

Within this certification process exists the selection system inherent in any schooling. The system ensures that the powerholders "select for each successive level those who have, at earlier stages in the game, proved themselves good risks for the established order." ${ }^{46}$ To progress at school and obtain all the benefits that go with such advancement, the individual must work within the rules determined by the decision-makers. These rules ensure that they have the power to allocate the populace to positions, whether they be in the top bureaucratic positions or in the menial, industrial roles. "Graded promotion in order to obtain diplomas fit the student for a place on the ... international pyramid of qualified manpower" ${ }^{47}$ whether it be in the select elite or the unidentifiable mass.

Such selection is inherent in the schooling system. The major difference in Illich's society is that the criteria by which advancement is gauged are those set by the managers. They are related to their ideology and therefore associated with technical knowledge which is utilized to attain their goals. The criteria prevalent in industrial society of social class and status of school are outmoded.

The education system also acts as an effective agent to ensure that the ideology of the powerholders is respected and retained by the individuals of a society. Illich draws the distinction between "informing" the public about action taken and "convincing" them that these moves are "desirable". 48 In schools, for example, details of social policy and action are not simply passed on in a descriptive
fashion; they are transmitted in a manner suited to persuading the public that such actions are necessary for the continuation or attainment of the good life.

The school system therefore serves as an agency of social control, in that it trains people in the skills necessary for their economic roles in society. They also foster the notion that individuals ought to, or want to, adopt these positions. Illich says, referring to the increasing importance of specialization, science and technology in industrial production, that schools "are part and parcel of a society in which a minority is on the way to becoming so productive that the majority must be schooled into disciplined consumption." 49 The decision-makers use the schools not only to influence the economic aspects of an individual's life but to shape their entire world view. Citizens are "schooled to their places:" 50

The long-term impact of this policy is that people adopt a perspective on life consistent with the technocratic social structure.

Once a man or woman has accepted the need for schools, he or she is easy prey for other institutions. Once young people have allowed their imaginations to be formed by curriculum instructions, they are conditioned to 51 institutional planning of every sort. ${ }^{1}$

The stage is set for the retention of the status quo. "Schools have the effect of tempering the subversive potential of education in an alienated society." 52 Illich comprehensively sums up this belief when he states,
people learn that they acquire more value in the market if they spend more hours in class. They learn to value progressive consumption of curriculum. They learn that whatever a major institution produces has value, even invisible things such as education or health. They learn to value graded achievement, passive submission and even the standard misbehaviour that teachers like to interpret as a sign of creativity. They learn disciplined competition for the favour of the bureaucrat who presides over their daily sessions, who is their teacher as long as they are in class and their boss when they go to work. They learn to define themselves as holders of knowledge stock in the speciality in which they have made investments of their time. They learn to accept their place in society precisely in the class and career corresponding to the level at which they leave school and to the field of their academic specialization. 53
(f) The Transcendence of Politics

One important characteristic of post-industrial forecasting, as has been stated, is that it does not fit into the trađitionai iefit and righi wing poiiticai dichoíomy. It is argued that advanced societies at either end of the spectrum may become post-industrial and face the related problems. There are aspects of Illich's work that suggest that he too holds this point of view.

He claims that "every country tends to select those production processes which are more capital-intensive and promise greater cost-benefit ratios. " 54 The result of this action is that every country's "social relations must be dictated by technocracy and will be equally distasteful whether labelled capitalist or socialist." ${ }^{55}$ The fact that an advanced country's means of production are controlled by the state or by capitalists does not make any significant difference to the character of these enterprises. They will
be structured, controlled and used in the same way. Their effect on social relations and individuals will be the same. As Illich points out,
the issue at hand is not the judicial ownership of tools but rather the discovery of the character of some tools, which make it impossible to 'own' them. The concept of ownership cannot be applied to a tool that cannot be controlled. The issue at hand therefore is what can be controlled in the public interest.....................

Certain tools are destructive no matter who owns them... Destructive tools must inevitably increase regimentation, dependence, exploitation or impotence and rob not only the rich but also the poor of conviviality. 56

The nature of tools employed is therefore the crucial point in Illich's theory, and ownership of tools is a secondary issue. As a result it is a "myth" to believe that "with political change society would return to a state of original health." ${ }^{57}$ Political restructuring of hyperindustrial society does not constitute a solution to its problems. What is required is a cultural restructuring of the social order.

## Footnotes

1. Ivan Illich, Celebration of Awareness. A Call for Institutional Revolution (Great Britain: Penguin, 1973), pp. 17-19.
2. Ivan Illich, Deschooling Society (London: Calder and Boyars, 1971), p. 48.
3. Ibid., 2.
4. Ibid., 67.
5. Ivan Illich, Tools for Conviviality (London: Calder and Boyars, 1973), pp. 33-34.
6. Ivan Illich, Limits to Medicine. Medical Nemesis: The Expropriation of Health (Great Britain: Penguin, 1977), p. 67.
7. Illich, Celebration of Awareness, pp. 17-18.
8. Illich, Tools for Conviviality, p. 42.
9. Ibid., 16.
10. Ibid.
11. Ibid.
12. Ibid., 34.
13. Ibid., 42.
14. Illich, Deschooling Society, p. 150.
15. Ibid., 70.
16. Illich, Energy and Equity (Great Britain: Calder and Boyars, 1974), p. 86.
17. Ibid., 59.
18. Ibid., 57.
19. Ibid.
20. Illich, Deschooling Society, p. 3.
21. Ibid., 1.
22. Ibid., 113.
23. Illich, Limits to Medicine, p. 130 .
24. Illich, Tools for Conviviality, p. 89.
25. Ibid., 77.
26. Illich, Celebration of Awareness, p. 136.
27. Illich, Tools for Conviviality, p. 54.
28. Illich, Limits to Medicine, p. 42.
29. Illich, Energy and Equity, p. 38.
30. Illich, Limits to Medicine, p. 97.
31. Ibid., 219.
32. Illich, Deschooling Society, p. 3.
33. Ibid., 55.
34. Ibid., 46-47.
35. Ibid., 47.
36. Ibid., 22 .
37. Illich, Tools for Conviviality, p. 56.
38. Ibid., 69.
39. Illich, Limits to Medicine, p. 220 .
40. Ibid.
41. Illich, Tools for Conviviality, p. 47.
42. Ibid., 58.
43. Illich, Deschooling Society, pp. 37-38.
44. Ibid., 47.
45. Illich, Tools for Conviviality, p. 62.
46. Illich, Deschooling Society, p. 34.
47. Ibid., 48.
48. Illich, Celebration of Awareness, p. 18.
49. Ibid., 98.
50. Ibid., 97.
51. Illich, Deschooling Society, p. 39.
52. Illich, Celebration of Awareness, p. 96.
53. Illich, Tools for Conviviality, p. 62.
54. Ibid., 42.
55. Illich, Energy and Equity, p. 16.
56. Illich, Tools for Conviviality, pp. 25-26.
57. Illich, Limits to Medicine, p. 161.

## CHAPTER FOUR

## ILLICH AS THE RADICAL


#### Abstract

The emerging counter culture reaffirms the values of semantic content above the efficiency of increased and more rigid syntax. It values the wealth of connotation above the power of syntax to produce wealth. It values the unpredictable outcome of self chosen personal encounter above the certified quality of professional instruction. This reorientation toward personal surprise rather than institutionally engineered values will be disruptive of the established order until we dissociate the increasing availability of technological tools which facilitate encounter from the increasing control of the technocrat of what happens when people meet.

Ivan Illich, Deschooling Society, pp. 70-71.


Illich does not simply adopt the role of a forecaster describing the character of evolving hyper-industrial society. He also proposes strategies by which society can avoid such a technocratic takeover. His most renowned proposal for resistance is expressed in Deschooling Society. It must be acknowledged however that 'deschooling' is just one aspect of a wider programme. The purpose of this section is to outline Illich's themes concerning resistance, as expressed in his major works. Rather than concentrate on Illich's plans to 'deschool' society the emphasis must be on his broader proposals concerning how society can avoid the "hyper-industrial Armageddon." 1
(a) Resist What?

Illich claims that, "any attempt to reform the university without attending to the system to which it is an integral part is pointless." ${ }^{2}$ This illustrates his proposal that resistance must tackle the social system as a whole, not just its individual components. He also argues that the "revolution" required is not necessarily political or economic but must be "social". ${ }^{3}$ In favourable political and economic conditions a social revolution will be sufficient to cause the transformation in the value orientations of society which is essential for Illich's proposed reforms. ${ }^{4}$ However in a political or economic climate which obstructs such a transformation a social revolution must be allied with political or economic reform. Such reforms in themselves however will not necessitate a modification of values. Admittedly they may involve change in value orientations but there is no necessary connection.

The "fundamental social change" Illich calls for
"must begin with a change of consciousness about
institutions." ${ }^{5}$ There must be a recognition that regardless of the political system the existing social problems will persist as long as the power of the state or private enterprise is executed through "manipulative institutions". What is required is a "disenchantment with and detachment from the central social ritual." A process of "demythologizing" is required as the first step towards reform. ${ }^{6}$ Social revolution cannot commence until the present social structure is disturbed and the actual framework itself questioned. The major tool which can be
implemented with the onset of disenchantment is "counterfoil research".

The problems of a hyper-industrial society cannot be solved by applying more of the same. More schooling will not solve the problem of schooling. Increasing bureaucratization will not solve the problems of bureaucratization. Increasing numbers of cars and super highways will not solve the problems of this form of transportation. Alternatives and the willingness to experiment are required if the problems of the existing structure are to be surmounted. This calls for the channelling of finance from the existing institutions to the fostering of new attitudes which will encourage the search for new schemes and solutions. ${ }^{7}$
"Counterfoil research" is not simply an activity. It is a specific attiture; similar to Descartes' "universal doubt". Everything is to be questioned, especially that which is assumed by "the overarching consensus". ${ }^{8}$ This attitude will enable the researcher to escape the existing framework which now determines the style of research implemented and the type of alternative thought appropriate.

An essential element of a transformation of this nature is a new understanding of the proposals concerning social organization offered by the emerging counterculture. ${ }^{9}$ There is a potential Renaissance, in the counter-culture, offering the possibility of new thought, alternatives and actions as solutions to the problems inherent in the existing structure.

If science were based on these new ideas and ideals
could be applied for precisely the opposite purpose [it is used for now]. Advanced or "high" technology could become identified with labour-sparing, work intensive decentralized productivity. Natural or social science can be used for the creation of tools, utilities and rules available to everyone, permitting individuals and transient associations to constantly recreate their mutual relationships and their environment with unenvisaged freedom and self expression. 10

Illich stresses that research and scientific experimentation can be the answer to hyper-industrial society's problems. They will however fail to provide the necessary solution unless they are liberated from the bonds which attach them to the existing power system. At present they serve to perpetuate the existence of this structure and its problems rather than surmount them, which on $a$ first glance at least, would appear to be their function. Counter-foil research, based on counter-culture principles, will investigate the possibility of creating "institutions which serve personal, creative and autonomous interaction and the emergence of values which cannot be substantively controlled by technocrats."ll

Illich points out that there is a necessity to "persuade those who have the power of decision to act against their own short-run interests or bring pressure on them to do so."l2 Such 'persuasion' can take two forms:
(i) the power holders can be pressurized to adopt counter-foil research methodology or (ii) the findings of counter research which has been executed independent of the ruling structure can be utilized.

A final specification by Illich is that the counter researcher "must survive as an individual [in] a world he is attempting to change fundamentally so that his fellows among the privileged minority see him as a destroyer of the very ground on which all of us stand."13 This is a reflection, vague as it is, on the required character of counterfoil researchers. They must be willing to support their principles and actions against the powerful existing structure which will resent their attack and plot their extirpation.

The two themes of "participatory democracy" and "deprofessionalization" recur throughout Illich's work. ${ }^{14}$ They serve as guiding principles for critics of the existing structure and for counterfoil researchers in their examination of alternatives.

The two themes arc interconnectcd. Dy permitting the lay person to become involved in the functioning of institutions, the professional's role is ređuced. Encouraging participatory democracy is "the only strategy by which a political process can be utilized to set limits on the power of even the most modernized bureaucrats."15 Until such participation is insured through legislation, no individual will have the "right to the creative use of his or her energy." Decisions concerning the utilization of this energy will continue to be made by the managers of the manipulative institutions. ${ }^{16}$ Whilst the managers of state and private enterprise agencies wield power of this nature, the populace will continue to be alienated, frustrated and enveloped by radical monopolization.

Illich suggests that alternative mechanisms to the manipulative institutions must give more opportunities for "participation by the non-professional, such as mediation, conciliation and arbitration."17 These institutions will permit all who are interested or involved in their functioning the right to participate in the planning and implementation of their policies. Illich tags them "convivial". There is a need for "a set of criteria which will permit us to recognize those institutions which support personal growth."18 Any which do not foster such growth must either be reformed or rejected. Institutions must therefore stress action on the individual's part above production. ${ }^{19}$ They must guarantee that the individual will not simply labour or operate but will have the opportunity to perform "satisfying, imaginative and independent work." ${ }^{20}$

Such opportunities exist within the "formally defined limits [of an institution] while the client remains a free agent." Appropriate institutions "tend to be networks which facilitate client-initiated communications or cooperation... [they] tend to be self-limiting unlike production processes which identify satisfaction with the mere act of consumption, these networks serve a purpose beyond their own repeated use." 21 Convivial institutions therefore function to serve the individual who requires their service. Unlike the manipulative institutions they do not attempt to seduce the individual into consuming their product or service.

Another distinguishing characteristic of the
convivial institution is that its service or product is not offered in a fashion which determines how the consumer
utilizes it. This decision is the sole right of the consumer. The example Illich uses of a convivial tool is the telephone. This tool offers a service that permits the consumer to decide when to use it and for what purpose. This illustrates the very nature of convivial institutions and tools. They "give each person who uses them the greatest opportunity to enrich the environment with the fruits of his or her vision." Manipulative tools and institutions, on the other hand, "deny this possibility to those who use them and they allow their designers to determine the meaning and expectations of others." ${ }^{22}$

Convivial institutions are often "self-employed persons who have institutionalized services but not their publicity. They acquire clients through their personal touch and the comparative quality of their services." ${ }^{23}$ These institutions succeed and persist by providing the consumers with what they need rather than by creating a false demand for their dubious wares. Unlike the manipulative institution they do not give their consumers imperatives concerning consumption.

It is evident from this description of the type of change necessary in institutions that Illich is neither advocating the abandonment of institutions nor the industrial-service economy that harbours them. As he states "convivial reconstruction demands the disruption of the present monopoly of industry but not the abolition of all industrial production." 24 Illich's plea is for the liberation of individuals from subservience to uncontrollable or uncontrolled tools and institutions.

This does not necessitate the abandonment of service and manufacturing agencies but rather their transformation. Illich warns "by reducing our expectations of machines ... we must guard against falling into the equally damaging rejection of all machines as if they were works of the devil." 25

What we must strive for is an optimum level of productive efficiency based on counter-culture research principles, concerning the rights "of individuals and of communities to choose their own style of life."26

As Illich claims,

Beyond under equipment and over industrialization there is a place for the world of post-industrial effectiveness, where the industrial mode production complements other autonomous forms of production. There is a place in other words, for a world of technological maturity. 27
(b) How to Resist

How is such a transformation to "technological maturity" likely to happen? How is this "institutional revolution" to occur? One method Illich emphatically rules out as an efficient means of reform is violence. He rejects such a revolutionary programme for a variety of reasons.

Firstly he argues that although "angry and turbulent rejection of alienating symbols" may be based on "healthy" motives it can be "exploited and will harden into hatred and crime." 28 The suggestion here is that a violent revolution may well turn into a pointless, undirected blood-bath, based on prejudice or greed. This would by no
means necessitate a solution to the initial problem. In fact it might perhaps result in more dramatic chaos. As Erich Fromme has argued; special change via violence in a hyper-industrial society "would lead to the breakdown of the whole system and violence and brutal dictatorship as a result." 29 The outcome would therefore be far removed from the liberating effect desired.

A second objection against violent reaction to the existing structure is that even when carefully directed it still fails to eliminate the cause of the problem, i.e. the technocratic decision-makers. "This class of powerholders must be eliminated, but this cannot be done by mass slaughter and replacement. The new elite would only claim more legitimacy in the manipulation of the inherited structural power." ${ }^{30}$

What does Illioh offer then as an alternative? "Management", he claims; (and its appurtenant problems we might add), "can be done away with only by eliminating the machinery that makes it necessary." ${ }^{31}$ One major approach to eliminating this machinery is by "rethinking the alienated aspects of the most highly valued institution the school." 32

Illich presents the school as the focal point of the assault on the existing system for several reasons. Firstly the school is vulnerable and therefore ripe for the taking. This is because the school system "is not yet organized for self protection as effectively as a nationstate or even a large corporation." ${ }^{33}$ It is seen as a chink in the system's armour through which the first blow can be struck.

Secondly, it is thought that such a blow would be a critical, perhaps crippling, one. As outlined earlier the school system is a vj.tal mechanism in the hyper-industrial society. It is the agency which retains the status quo by supplying individuals with the skills of production and consumption necessary for the social structure to function efficiently in terms of technocratic policy. Schooling is "both purveyor of opium and the work bench during an increasing number of years of an individual's lifetime. Deschooling is therefore at the root of any movement for human liberation." ${ }^{34}$ As schooling is central to the oppressive system, its elimination will serve to modify that system and its inherent problems. Illich claims

> the stakes for society are much higher if a significant minority loses its faith in schooling. This would endanger the survival not only of the economic order built on the coproduction of goods and demands but equally of the political order built on the nation state into which students are delivered by the school. 35

In eliminating schooling the technocrats' major status quo retaining-agency is neutralized. Society will be ripe for a radical transformation.

A third reason why the schooling system is a desirable place to commence a social revolution is that it would maximize the potential for change not only in the social structure but also in the individual. An assault of this kind would not only be a blow to the existing system but would also foster in the individual the desire and ability to bring about further change.

A liberation movement which starts in schools and yet is grounded in the awareness of teachers and pupils as simultaneously exploiters and exploited, could foreshadow the revolutiorary strategies of the future; for a radical programme of deschooling could train youth in the new style of revolution needed to challenge a social system featuring obligatory "health", "wealth" and "security". 36

Participating in deschooling and learning in a deschooled society would equip the individual with the necessary attitudes and circumstances to continue the liberating process.

Attitudes and circumstances emphasizing self-help, independence and cooperation emerge in a deschooled society, as a system of educating and learning is established which asks "first what people need if they want to learn and provide[s] these tools for them." 37 The effects of participating in the deschooling and deschooled experiences are manifold. The individual would realise what she can do for herself; institutions like the school, are unnecessary; that reform is needed to liberate individuals from the shackles of other institutions as it was needed to rescue them from the shadow schooling and that they are capable of this reform. Deschooling would be a major step in 'demythologizing' society. Individuals would be brought to an appreciation of their full potential and the barricades which obstruct its fulfilment. Their revolutionary potential would be aroused and maximized.

It still remains unclear however as to how such a social revolution is to take place. It has been said that it cannot be through violent means and that it requires the realization by the individual of his unfilled potential.

But what can actually be done to ensure that such reform does occur?

Illich places his faith in the passive persuasion of government and other powerful institutions to substantially reform legislation or their policies. He holds that the necessary steps to reduce social manipulation must come through "recourse to judicial and, above all, to political process." ${ }^{38}$ Initially the political mechanisms of the society must be utilized to pass legislation which promotes 'demythologizing', 'deinstitutionalization of values' and 'conviviality'.

This step however is only a 'provisional' one. It is presumed that such legislation will stimulate the individual to act in a convivial fashion. This notion is similar to the Rousseauian concept of an individual acting in a morally desirable manner if surrounded by a suitably incorrupt environment. In circumstances like these people will autonomously act in this way, not requiring legislative regulation.

Although the nature of this prescribed political action is quite clear Illich's description of the political mechanism which ought to execute appropriate legislation is the source of some significant inconsistency in his work.

At one point he claims that "the adoption of a. convivial mode of production does not of itself mean that one specific form of government would be more fitting than another." ${ }^{39}$ Here he extends his argument - that the problems with hyper-industrial societies transcend the political domain - by claiming that the solution to these
problems also lies outside of the left wing - right wing polemic.

However he later argues that the "politics for convivial reconstruction "involve" public ownership of resources and of the means of production and public control over the market and over the transfer of power." 40 Even considering his additional claim that such a political stance must be "complemented by a public determination of the tolerable basic structure of modern tools," it would be hard to deny that Illich's interpretation here is in the Marxist tradition. He is advocating the necessity of "one specific form of government" to ensure successful "convivial recqnstruction". In doing this the debate returns to the leftist-rightist dilemma. His solution to the problems of hyper-industrialization, in this instance, does not appear to transcent the political realm.

The impact of this inconsistency on Illich's thesis will be discussed later in this work. For the time being it is only necessary to note it.

Whether Illich chooses the stronger or weaker stance concerning the type of political order necessary for convivial reform, he still sums up the role of the political mechanism when he claims that it should "limit the scope of tools as demanded by the protection of three values: survival, justice and self-determined work."41 The emphasis of political debate and procedure must be aimed at the just protection of the individual's self-determination and the survival of society and the human race. Such protection can only initially be offered by the "passage of laws
setting upper limits to productivity, privilege, professional monopoly or efficiency." ${ }^{42}$

The mechanism for action already existing, only the coverage and determination to use them are required for appropriage legislation to be passed.

> The formal structure of law still offers a process by which the ordinary citizen can present to society his own practical interest in conflict with the interest of a corporation, even when this corporation is an agency of the state and even if this interest favours or opposes any functioning or proposed programe. 43

It is through this existing mechanism that substantial steps towards conviviality can be made.
(c) Who Resists?

Having the mechanism through which change can be instigated is not enough to insure reform. There must be an actor to implement such change. Having the opportunity for revolution does not necessitate its occurrence, there must be someone with access to that opportunity who is willing to seize the possibility. Who, in Illich's view, is that person?

Firstly let us determine who the reformers are not. They are not the "professionals who are experts in the corrupt use of language or of law." ${ }^{44}$ In other words the advocates and beneficiaries of the present system cannot be expected to 'rock the boat' as they either have too much to lose or are able to see no alternative to the present system.

These individuals are too entrenched in the existing structure. They are often "well trained men and women who
have learned to bow to prevailing professional judgement and procedure, even though they know (or could and should know) what damage they do." ${ }^{45}$ There are however possible exceptions to this rule. ${ }^{46}$ Illich holds that "finally teachers, doctors and social workers", the professionals in Touraine's terms, "realize that their distinct professional ministrations have one aspect - at least - in common. They create further demands for the institutional treatments they provide faster than they can provide service institutions."47 When such awareness "finally" occurs, when the problems are too obvious to miss or ignore, these professionals will join the reform movement.

Illich makes sweeping statements as to who will constitute the revolutionary group. He claims that a "growing minority" are becoming aware that there is "something structurally wrong" with their society. These people come from

> all classes, incomes, faiths and civilizations. They have become wary of the myths of the majority: of scientific utopias, of ideological diabolism, and of the expectations of the distribution of goods and services with some degree of equality. 48

It would appear that reformers are drawn from the entire society. Nothing more characterizes them than an awareness of, and dissatisfaction with, the social "myths".

There is an emphasis on the individual becoming self-aware and self-liberated. For example "the discovery that most learning requires no teaching can be neither manipulated nor planned. Each of us is personally responsible for his or her own deschooling and only we have
the power to do it." 49 Without this willingness to control ones own 'deinstitutionalization' one remains shackled and unable to assist in the broader social changes required. Along with his emphasis on the breadth of social discontent and personal responsibility, Illich also acknowledges that some institutions assist or foster this sort of awakening. People involved in these institutions may therefore be more likely to recognise the social "myths" and join or create the revolution.

In his early work Illich emphasized the church as one such institution. Although the "church does not orient change or teach how to react to it" it does open "a new dimension of specific faith to an ecumenical experience of transcendent humanism." 50 Such an experience would enable the individual to recognise the inadequacies of the present system and would encourage him or her to call for its reform. The church can therefore act as a radicatizing agent. Illich is quick to point out, however, that the church "when it is threatened by real change ... withdraws rather than permit social awareness to spread like wildfire." 51 The church itself is a political power; it has too much to lose by radical reform. This is why Illich, convinced of the revolutionary power of Christian faith, calls for " 'radical' secularization for priests who leave the church in order to pioneer the church of the future." ${ }^{52}$ It is important to note however that in his major works since Celebration of Awareness the church has not been emphasized as a radicalizing mechanism.

In Deschooling Society, however, he endowed the
university with this propensity to radicalize. Universities have the ability to increase social awareness of the inadequacies of the present system. "The students and faculty who question the legitimacy of the university ... add new strength to the argument that the existence of the university is necessary to guarantee continued social criticism." The university can adopt this role as "it provides time, mobility, access to peers and information and a certain impunity - privileges not equally available to other segments of the population."53

Once again, however, Illich is quick to point out the limitations of this institution as a radicalizing force. The "university provides this freedom only to those who have already been deeply initiated into the consumer society." 54 Those graced with such an opportunity have been closely checked, scrutinized and selested, They are the individuals who are less likely to rebel, as they have been highly "initiated" into the existing social philosophy. They, therefore, have the most to gain by adhering to it and the most to lose by pressing for radical reform. The full revolutionary potential of the university is therefore stifled.

In conclusion, Illich is vague in identifying those who will instigate resistance to increased technocratic control over society. He observes some institutions as having the potential to revolutionize but recognises that ' they cannot fully achieve this potential as they are impeded by the power structure. He has faith that individuals from all walks of life will become aware of the inadequacies of
the existing structure. From this enlightenment will emerge "new elites which can provide an interpretive framework for new - and hitherto unexpected - alignments of interest."55 As the size of this united front of dissatisfaction grows, the prevailing power's control will be weakened. They will be forced to enter arbitration with the reformers, and "must seek new allies" within this dissenting group. ${ }^{56}$ It is at this point that the power of bargaining which the dissident group holds by sheer weight of numbers, insures the achievement of the radical reforms necessary.

## Footnotes

1. Illich, Energy and Equity, p. 20.
2. Illich, Deschooling Society, p. 39.
3. Ibid., 46 .
4. John Ohliger and Colleen McCarthy, Lifelong Learning or Lifelong Schooling? A Tentative View of the Ideas of Ivan Illich with a Quotational Bibliography (New York: Syracuse University Publications in Continuing Education, 1971), p. 23, quoting "An Interview with Ivan Illich", Christianity and Crisis, Vol. XXIX, n. 14 .
5. Illich, Deschooling Society, p. 61.
6. Ibid., 38-39.
7. Ibid., 4.
8. Illich, Energy and Equity, p. 68.
9. Illich, Deschooling Society, p. 70.
10. Illich, Tools for Conviviality, p. 34.
11. Illich, Deschooling Society, p. 2.
12. Illich, Celebration of Awareness, p. 142.
13. Ibid.
14. Illich, Tools for Conviviality, p. 5.
15. Illich, Energy and Equity, p. 17.
16. Illich, Tools for Conviviality, p. 12.
17. Ibid., 93.
18. Illich, Deschooling Society, p. 52.
19. Ibid., 64.
20. Illich, Tools for Conviviality, p. 32.
21. Illich, Deschooling Society, pp. 55-56.
22. Illich, Tools for Conviviality, p. 21.
23. Illich, Deschooling Society, p. 56.
24. Illich, Tools for Conviviality, p. 73.
25. Ibid., 20 .
26. Ibid., 73.
27. Illich, Energy and Equity, p. 86.
28. Illich, Celebration of Awareness, pp. 26-27.
29. Fromme, The Revolution of Hope, p. 94.
30. Illich, Tools for Conviviality, p. 16.
31. Ibid.
32. Ohliger and McCarthy, Lifelong Learning or Lifelong Schooling?, p. 42, quoting Ivan Illich, Yesterday I Could Not Sleep Because Yesterday I wrote My Name, C.S.D.I. Audio-tape.
33. Illich, Deschooling Society, p. 47.
34. Ibid.
35. Ibid., 49.
36. Ibid., 48-49.
37. Illich, Tools for Conviviality, p. 65.
38. Illich, Energy and Equity, p. 59.
39. Illich, Tools for Conviviality, p. 17.
40. Ibid., 43.
41. Ibid., 13.
42. Ibid., 95.
43. Ibid., 97.
44. Ibid.
45. Illich, Limits to Medicine, p. 40.
46. Illich, Tools for Conviviality, p. 98.
47. Illich, Deschooling Society, p. 112.
48. Ibid., 114.
49. Ibid., 47.
50. Illich, Celebration of Awareness, p. 85.
51. Ibid., 52.
52. Ibid., 69.
53. Illich, Deschooling Society, p. 37.
54. Ibid.
55. Illich, Tools for Conviviality, pp. 102-103.
56. Ibid., 105.

## CHAPTER FIVE

ILLICH'S CONCURRENCE WITH POST-INDUSTRIAL THEORY

> The movement of our society from the present - in which all institutions gravitate towards post-industrial bureaucracy - to a future of post-industrial conviviality - in which the intensity of action would prevail over production - must begin with a renewal of style in the service institutions...

Illich, Deschooling Society, p. 64.

In the preceding chapters the views of Illich and the post-industrial theorists regarding the social structure and the problems of hyper-industrial society have been set out along with a description of the resistance this developing structure can expect to engender. In this chapter the views of Illich will be compared with those of post-industrial theorists to see whether he can be viewed as operating within the framework of the post-industrial perspective. Comparisons will be made between Illich and the postindustrial theorists, within the five major component parts of their works - The Power Elite, The Populace, The Education System, The Transcendance of Politics and Resistance.
(a) The Power Elite

Both Illich and post-industrial theorists recognise the increasing size and influence of the service sector in hyper-industrial society. They also acknowledge
increasing bureaucratization and planning of social life, which is associated with the predominant ideological stance of "economic growth first": In implementing this ideology the emphasis is placed on programmed tools rather than human initiative, demoting the needs of the individual to second place. Touraine could be speaking for Illich when he states that the power holders view society "simply as the totality of the social means needed to mobilize the development [which they regard as necessary]. ${ }^{2}$

Illich appears to be in sympathy with the postindustrialists when he stresses the increasing centralization of power in the hands of the managers rather than those of the owners of tools and institutions. Like the postindustrialists he observes that the old bourgeousie and the entreprenurial capitalists no longer control the means of production. Such power now rests with the technocrats who manage the operations for the owners who are now content to take a back seat and reap the profits.

As in post-industrial theory Illich emphasizes the increasing importance in production and service agencies of "specialized workers", ${ }^{3}$ "professionals" 4 and "bureaucrats". 5 He is somewhat vague as to the functions they serve in the social structure and how they interrelated within the system. However it might be suggested that they fulfil similar roles to the "researchers", "bureaucrats", "scientific professionals", "techniciens" and experts identified by Bell and Touraine. These estates occupy the central roles of seeking necessary knowledge and applying it to the social structure in accordance with technocratic ideology.

Therefore Illich and the post-industrial theorists commonly emphasize the vital function that theoretical knowledge plays in advanced-industrial society and the power it bestows upon those who control it.

At this point Illich's conception of the power elite is very similar to that of the post-industrialists. There are the common notions of centralized power, increased managerial control, the ideology of maximum efficiency and economic growth, and the rise of professionalism, theoretical knowledge and planning. . The differences which exist appear to stem from the indistinct nature of Illich's thesis rather than from a conflict of views.

Although Illich offers no explanation for the rise of such a power elite, there is no reason to believe that his analysis would be any different from the one offered by the post-industrial theorists. In fact considering the parallels already drawn between Illich and these forecasters, it is most likely that their explanations would coincide. It is extremely plausible that post-industrial theory satisfies this weakness in Illich's thesis rather than offers opposition to it.

Secondly, Illich does not mention the "cultural elite"; the estate in the professional domain which Bell endows with knowledge of a humanistic nature. ${ }^{6}$ Perhaps Illich places no importance on this estate in the social context. If so he again aligns with post-industrialists who regard the "cultural elite" as having no influence in the social structure, as they possess knowledge unrelated to the dominant technocratic ideology. This estate is,
however, important in the resistance movement outlined by post-industrial theorists. Illich's neglect of this group's radical potential will be discussed later in this section.

Finally, Illich fails to recognise that the professional estates cannot be considered as a class. Bell claims that as different estates in the ruling elite occupy different "situses" ${ }^{7}$ in the social structure, they have different interests and therefore do not constitute a united front. One might add that this allows for the possibility of a split within the ruling elite, rendering it more vulnerable to opposition and therefore less powerful.

By not acknowledging this Illich may have demarcated the power elite too sharply, giving it a cohesion it does not possess. The post-inaustrialists do not endow this group with such cohesion. Although they do not argue that the existing diffusion may weaken the power structure their analysis does not discount such a possibility, as Illich's does.

It is only on this last issue that Illich differs significantly from the post-industrialist's perception of the power elite. There are other minor differences which do not reveal post-industrialism and Illich to be antagonistic to one another but which are created by the indistinct nature of Illich's analysis of certain topics. Overall it would appear that there is a distinct ideological similarity between Illich and post-industrial theory regarding the character of the power elite of advanced industrial society.
(b) The Populace

With the increase of planning and programming in "hyper-industrial society" initiative and self determined action on the part of the populace are rendered impossible. Such restriction is not limited to the work place but expands into the social relations of the community members. Programming is no longer limited to the production line but envelops the entire social structure. The actions of the individual in any domain are restrained within the programme determined by the technocrats.

This notion is evident in Illich's writings. He refers to the "radical monopolization" of society in which the manufacturers or service agencies create needs which they alone can satisfy. ${ }^{8}$ Individuals are therefore seduced into consuming what is offered, rather than encouraged to independently determine their own needs and actions. This coincides with Touraine's notion of "dependent participation" ${ }^{9}$ in which the individual is manipulated into working, consuming and participating in social relations within the limits of the prescribed social order.

As a result, according to both Illich and postindustrialists, the situation of the populace is one of alienation and frustration. They have lost control of their jobs, social lives and patterns of consumption. All that remains for them is to play the game by the rules delineated by the power elite. They no longer determine the use of their energies nor the style and direction their lives take.

It is important here to point out that only do Illich and the post-industrialists accentuate alienation as the
psychological and sociological end product for the populace but they also agree on its causes. This not only makes Illich the ally of the post-industrial school of thought but also distinguishes his view in a crucial way from Marxist theory, with which he has previously been associated on a fringe level.

To the Marxist, alienation is the product of the free enterprise property system. In this system the capitalist exploits the labourer by appropriating his or her surplus value. Workers are therefore exploited and alienated as they lose control of the process of work and the product of their labour to the capitalist. ${ }^{10}$ This alienation takes its toll not only in the labourer's occupation but effects the entirety of his or her social relations.

The Marxist sulution tu alienation is to rid society of the free enterprise property system. It is contended that if the means of production are socialized and controlled by the workers exploitation will be eliminated as the surplus value from the worker's labour will be accumulated and utilized by the state. Thus it will be returned to the worker rathern than syphoned off into the capitalists' pockets. ${ }^{1 l}$

The theory of alienation advanced by Illich and post-industrial theorists is substantially different from that of the Marxists. They claim that alienation is a consequence of the organisation of work and services. Regardless of who owns them, certain processes and agencies are conducive to the alienation of the worker and consumer. The instigation of managerial control, bureaucratization
and technology which can only be operated rather than used or controlled, conceals inherent alienating characteristics. Whether the state or capitalists collect the surplus value created is inconsequential. If such processes are employed the workers and consumers must lose control of their creative energies, time, relationships and needs and will therefore be alienated. ${ }^{12}$

Just as Illich and the post-industrialists analyse alienation differently from the Marxists, so their solution differs also. They stress the importance of the meons rather than the mode of production, which is accentuated by the Marxists. In overcoming alienation, Illich claims that the issue is not ownership but rather the character of the tools and agencies utilized by society. Some cannot be controlled in the public's interest and therefore must be modified or abandoned. Similarly Dell calls for "now . humanistic conceptions of work and labour." ${ }^{13}$ Regardless of ownership, until the means of production employed allow for participatory democracy, permitting the individual to control the use of his or her own energies, alienation will continue.

Unlike the Marxists, the post-industrial theorists and Illich do not simply call for worker control and a socialist mode of production. This would not necessarily lead to the vital change required in the nature of the means of production and services employed. If alienation is to be eliminated the transformation necessary is one which alters the style of production or service instigated. It must be a change to a means which respects the right of
individuals to control the use of their own energies. It must also permit all who have an interest in a particular work process to become involved in its related decision making.

It is evident that the Marxists and postindustrialists have radically different perceptions of the causes of, and solutions to, alienation. Illich's views on the phenomenon coincide with the post-industrial interpretation in that like them (and unlike the Marxists) he stresses the need to change the means of production and consumption rather than socialize the mode of production. He also similarly calls for the involvement of all concerned in a decision-making process, not simply the involved workers, as the Marxists argue.

It can be seen through these similarities how Illich's writings again concur with post-industrial theory. They offer similar analyses of the bind the populace in hyper-industrial society finds itself in, how this has eventuated and how it can be overcome.
(c) The Education System

Touraine talks of the "parallel school system" of post-industrial society, referring to its alliance with the power elite. ${ }^{14}$ Both Illich and post-industrial forecasters recognise the school as the agency through which the ideology of the decision-makers is imparted. They also commonly emphasize how the school is utilized to stratify society, foster consumer attributes, and pass on the skills and values which will benefit the power elite.

Two interconnected points should be mentioned. Firstly, although there are strong similarities between Illich and the post-industrialists regarding the relationship between schools and the social structure this does not mean that Illich is a post-industrial theorist. The observation that schooling is little more than a "parallel" agency of the power holders is not exclusive to post-industrial theory. It appears more as a truism. In any society the school system serves the function of stratifying society, imparting socially required skills and transmitting the dominant ideology. Consequently it has been advanced by many theorists from various schools of thought. Therefore, although the post-industrialists' and Illich's analyses of the school's function in advanced societies coincide, such an agreement is not sufficient evidence to designate Illich as a post-industrialist.

The second point is related to the idea mentioned earlier that neither Illich nor the radicals recognised by post-industrial theorists, advocate the elimination of institutions, service agencies and production processes per se. Their aim is only to abandon those which cannot be restructured to permit the individual maximum autonomy. There will, of course be disagreement among radicals concerning what can and cannot be restructured in this way. To Illich the school system is beyond hope. It is inherently manipulative and therefore must be abandoned and replaced with a more convivial form of education. Other post-industrial radicals may however regard the school system as being susceptible to the required changes.

This disagreement does not exclude Illich from the post-industrial school nor from being considered a radical in post-industrial terms. What it does illustrate however is that the radical movement in post-industrial society is vulnerable to factionating. This applies not only to the specific issue of schooling but also more generally to the dividing line between what can be retained or reclaimed and what must be rejected or replaced.
(d) The Transcendence of Politics

A vital aspect of post-industrial theory is that it transcends political analysis. A post-industrial society may occur under any political administration. As the emphasis is on the means of production any society which adopts an approach involving hyper-industrialization, bureaucratization and programming assumes the postindustrial character and its associated problems. The nature of the political administration is inconsequential as the outcome will be the same for any society adopting this means. Inherent aspects of such means dictate the style of social relations, consumption, education, work, consciousness and anxiety which eventuate in the society.

A political change alone will not avoid these consequences as the means of production, and their implications will remain unaffected. To avoid a postindustrial society an appropriate change must be made in the consumption, work and production processes adopted. State run post-industrialism is no alternative to private enterprise post-industrialism.

This argument relates to the conception of alienation mentioned earlier and the views of the post-industrial theorists regarding the causes and solution of this problem. This is an issue on which post-industrial and Marxist theorists differ significantly. The Marxists view political change as the essential characteristic of any meaningful social reform. A move to the left is necessary if a social revolution of any merit is to occur. Post-industrialists however hold that such a move is no move at all towards a social revolution unless it is accompanied by a change towards more humanistic work processes and services.

Illich appears a little inconsistent on this issue and an analysis of the contradictions in his work is necessary. A strong case can be made for the view that he agrees with the post-industrialists, that meaningful social reform ťranscends the left wing - right wing debate. He has claimed that the issue at hand in hyper-industrial society is not who should own the means of production but the nature of the production processes which should be employed. ${ }^{15}$ Some processes cannot be controlled for the public good and they are the major offenders, for regardless of who owns them there will be no purposeful social change until they are discarded.

He has also stated that the change necessary, a move to "conviviality" in his terms, "does not of itself mean that one specific form of government would be more fitting than another."16 His description of "convivial institutions" as "self employed persons" ${ }^{17}$ substantiates this idea. The notion that "conviviality" can be attained only through
state ownership is therefore rejected.
It would appear from what has preceded that Illich is aligned with post-industrial ideology in holding that hyper-industrial society and its associated problems are not created by the adoption of one particular political stance. They agree that the rejection of the free enterprise political administration and the adoption of a socialized one will not necessitate the required change.

However Illich appears to be inconsistent on this issue and therefore whether his perception is unequivocally post-industrial is equally confusing. This confusion results from his statement that the "politics for convivial reconstruction" involve "the public ownership of resources and of the means of production and public control over the market and over the transfer of power."l8 As stated earlier this is an obvious Marxist analysis of the necessities of social reform.

There are significant indications that Illich is aligned with post-industrial theorists regarding the relevance and function of political debate in relation to the cause of the hyper-industrial social structure and the solution to its problems. He is however inconsistent and retains one foot in the Marxist camp.
(e) Resistance

As has been noted in the previous sub-section, there is significant similarity between Illich and the postindustrial theorists concerning the form resistance must take if it is to be successful in warding off hyper-
industrialism. They agree that it should attack the social system as a whole and not just the political structure. They mutually emphasize a change in the citizens' value orientations and the nature of the existing institutions, to ensure that they can be both utilized and controlled by individuals.

However, concerning who will constitute the resistance movement against the development of advanced-industrial society there is a significant difference between Illich and post-industrial theorists. This is mainly the result of Illich's vagueness on this topic or rather his sweeping claim that resistance will come from the people of "all classes, incomes, faiths and civilizations." 19

Post-industrial theorists who have analysed the situation are more restrained in their predictions. Through their thesis of "bourgeois radicalism" they mainly emphasize middle-class resistance. It is this group who are considered to be in the social situation most conducive to reaction. They have the time, the knowledge, the security, the motivation and the power to bargain with and therefore successfully oppose the technocrats through advancing their own views.

Post-industrialists have also emphasized the potential resistance existent in groups which are socially declining due to increasing technological development. The third world countries demanding their 'pound of flesh' and the "cultural elite" versed in religious, artistic and humanistic knowledge are also proposed as potential sources of resistance.

Illich on the other hand is by no means as specific as to who will oppose the technocrats as he holds that resistance will arise across the entire social structure. However, in common with post-industrial theorists, he argues that certain institutions, especially the university, harbour the potential to foster such resistance. Additionally he argues that disillusioned techniciens and bureaucrats may also join the dissention. Their analyses are also similar in claiming that the power-elite, when faced with strong, united opposition, must take on new allies in order to survive and thus compromise both its position and ideology. Radical ideology will therefore be manifested in social policy making and action.

It cannot be said however that Illich's thesis regarding resistance concurs with post-industrial proposals. His statements on the issue are considerably more sweeping and less substantiated by argument and evidence than those offered by the post-industrialists who verify specific groups as potential dissidents.

It can be seen that although there are some differences between Illich and the post-industrial forecasters, significant aspects of their analyses concur. Regarding his forecasting and analysis of advanced industrial society, its associated problems and their solutions he could justifiably be called a post-industrial theorist. However, considering his analysis of the nature of eventual resistance against the encroachment of postindustrialism, he differs significantly from post-industrial
theorists who have analysed this issue by failing to adopt the "bourgeois radical" thesis they advance. On the other hand it is difficult to locate Illich in any school of thought on this issue as his claims are so sweeping, vague and unsubstantiated.

The aim of this section has been to associate Illich's thesis with post-industrial theory. It has been shown that on many vital aspects of social forecasting and analysis he coincides with the post-industrial perspective.

What is now required is an analysis of criticisms that can be made of Illich. What are the weaknesses in his argument? Can his concurrence with post-industrial theory be used to formulate a defence against existing criticisms of his writings? Can the further application of post-industrial analysis satisfy any inadequacies Existiny in his work? Findily, do these aspects associated with the post-industrial perspective render him vulnerable to the criticisms already aimed at the works of established post-industrial theorists?

## Footnotes

l. Illich, Deschooling Society, p. 67.
2. Touraine, The Post-Industrial Society, p. 53.
3. Illich, Tools for Conviviality, p. 34 .
4. Ibid., 42 .
5. Illich, Deschooling Society, p. 150.
6. Bell, The Coming of Post Industrial Society, p. 376 .
7. Ibid.
8. Illich, Tools for Conviviality, p. 89.
9. Touraine, The Post-Industrial Society, p. 9.
10. Bell, The End of Ideology, p. 360.
11. Ibid., 362.
12. Ibid., 367.
13. Ibid., 386-387.
14. Touraine, The Post-Industrial Society, p. 7.
15. Illich, Tools for Conviviality, pp. 55-56.
16. Ibid., 17.
17. Illich, Deschooling Society, p. 56.
18. Illich, Tools for Conviviality, p. 43.
19. Illich, Deschooling Society, p. 114 .

## CHAPTER SIX

## THE MARXIST CRITIQUE


#### Abstract

The source [of alienation] must be sought in the normal operations of the basic economic institutions of capitalism.

Herbert Gintis.


Certain tools are destructive no matter who owns them.

Ivan Illich.

In his article "Towards a Political Economy of Education: A Radical Critique of Ivan Illich's Deschooling Society" ${ }^{1}$ Herbert Gintis presents a strong Marxist critique of Illich's thesis. Although the attack centres specifically on Deschooling Society it serves as a vehicle for a typical Marxist rejoinder to Illich's analysis of 'social decay' in advanced industrial society and the solutions to them.

The purpose of this section will be to outline Gintis' critique and a rejoinder to it based on aspects of Illich's work which are concurrent with post-industrial theory. The post-industrial theory implicit in Illich's writings not only enables him to identify and avoid the weaknesses of the Marxist critique but also ensures that he accounts for many of the complexities which Gintis raises as criticisms.

## (a) The Critique

The basis of the Marxist critique of Illich, put simply, is that although Illich has correctly identified the social problems of advanced society, he has misinterpreted their causes and therefore offers a false solution. He fails "to pass beyond negations - beyond a total rejection of the appearances of life in advanced industrial society - to a higher synthesis." ${ }^{2}$ Gintis claims that the Marxist analysis constitutes a 'higher synthesis' and therefore reveals the heart of the problem and proposes an appropriate solution.

Gintis believes that Illich considers the problems of hyper-industrialism to stem from the nature of the work processes adopted and the services offered. Managerialization, bureaucratization and standardization are prevalent and result in the individual losing control over all aspects of his or her existence.

The Marxist agrees that such work processes and services do alienate the individual but disagrees that they are the source of the problem. In their view ridding society of these processes and institutions, is no solution at all. Gintis argues that these institutions and work processes are "merely manifestations of the deeper workings of the economic system." 3 These "social problems and value crises of modern society" are, in truth, the products of "the normal operations of the basic institutions of capitalism ... which consistently sacrifice the healthy development of community, work, environment, education and social equality of the accumulation of capital and the
growth of marketable goods and services." ${ }^{4}$
Gintis illustrates this by claiming that "it is the social relationships of production which are relevant to the form and function of modern schooling." ${ }^{5}$ It is not the school, as a "manipulative institution" in Illich's terms, which determines the kind of society, citizen and value system that eventuate. Rather the existing social structure, namely capitalism, determines the character of schooling and is therefore the root cause of both the outcome of schooling and the 'social decay' associated with it.

As manipulative work processes and institutions are only manifestations of the capitalist mode of production, attempts to eliminate them whilst retaining the broader social framework will invariably fail. The only true solution to the problems is the eradication of their source, the capitalist mode of production. To the Marxist the cause of "the values of commodity fetishism" is not the manipulative institutions and work processes, which merely "capitalize upon and reinforce [them]", but the individual's "daily personal experiences of the [capitalist] social system." ${ }^{6}$ The manipulative institutions and work processes are equally a product of capitalist society as are the social problems for which Illich holds them responsible. Gintis notes that schools are "so important to the reproduction of capitalist society that they are unlikely to crumble under any but the most massive political onslaught." ${ }^{7}$ This point is equally applicable to any other manipulative institution. Illich's notion of meaningful social change occurring simply through the elimination or reconstruction of these institutions is therefore extremely unrealistic.


#### Abstract

They are so vital to the capitalist system that any attempt to change or terminate them would have to eradicate the defence network which surrounds them, i.e. the whole capitalist mode of production. The solution therefore is not and cannot be the elimination of manipulative institutions and work processes. It is rather the replacement of the capitalist system with one which will not foster "the values of commodity fetishism" in the individual.


Gintis also accuses Illich of placing too much faith in the existence of an "essential 'human nature' prior to social experience." ${ }^{8}$ In suggesting that the elimination of manipulation would see the end of individuals possessed by "commodity fetishism" Illich is accused of Rousseauian romanticism. He is presuming that there exists an "essential 'human nature'" which has been corrupted by its experiences with the surrounding social structure. If this manipulative environment is eradicated then the "essential 'human nature'", liberated from corruption, will be permitted to mature, allowing society and the individual to attain a state of well-being.

Gintis' response to this argument rests on the same charges generally levelled at Rousseau. He argues that "there is no reason to believe that individuals would consume or work less were manipulative socialization removed." ${ }^{9}$ There is no evidence to show that there is an "essential 'human nature'" which is good. There is no reason, therefore, to suppose as Illich does, that it will
lead the individual away from "commodity fetishism", and society away from a "hyper-industrial Armageddon."10

Might it not rather be that "essential 'human nature'" is what causes mankind to strive to consume as much as it can, as efficiently and as quick as possible? If this is the case, the elimination of manipulation suggested by Illich, goes nowhere towards solving existing problems, as once again he fails to deal with the root cause of the problem.

Rejecting all Romantic talk of "essential 'human nature'" the Marxist argues that what is called for is the removal of the corrupting capitalist social structure. Its replacement must be a new social, socialist experience which will socialize but not corrupt the individual. This new structure avoids corruption as it leads individuals in a desirable direction, fostering their good qualities and increasing social solidarity. This replaces Illich's "anarchistic" notion of removing socializing institutions altogether and permitting individuals to return to their "essential 'human nature'", with the idea of the individual "restructuring the self through new modes of social participation."ll

The Marxist, therefore, views Illich's "weakening of institutional values" as leading "to unproductive and undirected social chaos." An alternative Marxist social structure must be adopted to lead "to a rejection of the social relations of capitalist production along with commodity fetishism."12

Gintis embellishes this call for a broader social
transformation by claiming that Illich's notion, of the individual being responsible for his or her own deinstitutionalization, is quite unrealistic. Speaking specifically of the individuals being accountable for their own "deschooling" Gintis states, "this is not true, schooling is legally obligatory and is the major means of access to welfare-relevant activity contexts."13 Individuals cannot be in sole charge of their own deinstitutionalization because pressures beyond their control forbid this action. In some cases participation is compulsory. In others it is necessary for their well-being within the existing framework. 'Deschooling', specifically, or deinstitutionalization in general, cannot simply be left to the individual. To ensure the well-being of the society and its citizens a more organized, extensive ̇̇ransformation must oćcuŕ.

Gintis proceeds to claim that even though Illich on the one hand wants an end to manipulation, on the other he

> explicitly accepts those basic economic institutions which structure decision-making power, lead to the growth of corporate and welfare bureaucracies and lie at the root of social decay. Thus Illich's criterion must be replaced by ones of democratic participation and rationally decentralized control over social outcomes in factory, office, community, school and media. 14

Illich therefore accepts the capitalist mode of production and the institutions it produces to reinforce this mode. These institutions inevitably manifest the 'social decay' inherent in capitalism. A "revolutionary transformation of the basic institutions which Illich implicitly accepts" ${ }^{15}$ is essential.

> Such a restructuring of institutions requires,
> The control of technical and institutional forms [to be]...vested directly in the group of individuals involved in a social activity, else the alienation of these individuals from one another becomes a postulate of the technical institutional development of this social activity - be it in factory, office, school or community. 16

What is voiced here is a typical Marxist demand for worker participation and control over the work process and means of production. This would ensure that the individuals' needs are met, their wills respected and that they retain control of their creative energies.

Gintis proceeds to say that worker participation and the arousal of "personal consciousness" which it creates, eventuate "not from the elimination of outside manipulation [as Illich suggests] but from the experience of solidarity and struggles in remoulding a mode of social existence." He is calling for human enlightenment through "a restructuring of the self through new modes of social participation." 17

The emphasis here is on the Marxist conception of "struggle" leading to the overthrowal of the existing social order, its related social relations and state of mind. Such liberation will not eventuate by simply removing existing barricades. There is a need to revolutionize the consciousness of individuals by involving them in the "struggle". It is suggested that the school, which "can be altered through genuine struggle" is the ideal place to start the transformation as this "struggle and control prepares the student for a future of political activity in factory and office."18

Gintis criticises Illich's alternative education system for being as guilty of "not developing in the individual the capacities for cooperation, struggle, autonomy and judgment appropriate for this task" ${ }^{19}$ as the existing structure. It is not until appropriate qualities for inducing such a struggle are fostered that individuals will be "adequate to the task of social transformation in work and community life." ${ }^{20}$

It is only through this course of action that meaningful social change can occur. The resultant society will be "a creative, initiating and synthesizing agent, with the power to determine the architectural unity of its living and working spaces and their coordination." 21 Illich's proposals will only provide "at best a temporary ... or ultimately [a] fatal ... breakdown in the social rabric.: ${ }^{22}$
(b) The Response

Attention must now be focused on the validity of these criticisms. Do they do justice to the thesis offered in the works of Illich? Do the aspects in his work which concur with the post-industrial perspective equip him with a defence against this critique?

Firstly there is Gintis' argument that Illich.is mistaken in blaming manipulative institutions and work processes for the problems of hyper-industrial society. Capitalism is the source of these problems, as it creates these institutions and work processes. Illich's analysis, lacking a 'higher synthesis' fails to discern the heart of
the matter. His solution of replacing manipulation with conviviality is inadequate, as it leaves capitalism unscathed.

There are several points to be made in response to this criticism. One is that neither as a logical argument nor as a matter of historical, economic experience does it appear evident that the elimination of the capitalist mode of production provides a solution to the problems concerning Gintis, Illich, Marxists and post-industrialists alike.

As a logical argument it fails because it makes the dubious presumption that institutions and work processes will be manipulative only in a free-enterprise system. Manipulation of the individual is thought to occur only when a capitalist is at liberty to make a profit from the individual's creative energies. Why should this be the case? IL is surely possible that the state when owning the means of production will be as equally manipulative as the private entrepreneur.

The school system may serve as an example of this. Gintis, whose critique of Illich is centred on Deschooling Society, claims that "it is the social relations of production which are relevant to the form and function of modern schooling." ${ }^{23}$ In a capitalist social structure schooling is "a major source of economic growth" as it stratifies people into an occupational hierarchy through equipping them with appropriate affective traits and credentials for different jobs. ${ }^{24}$ However Gintis fails to show that this function of schooling is the product of a capitalist mode of production. There is no reason to
believe that state control of production would ensure that schools cease to manipulate people towards "economic growth."

Illich would agree with Gintis that schools fulfil these functions, but would not blame them on the capitalist social structure. Rather, he regards them as the product of two other circumstances:
(1) The very nature of schooling avails itself of these functions. It is simply a basic truism that a highly organized school system, in a highly organized society, acts as an agency by which people are equipped with the appropriate skills, views, traits and knowledge of how to function in that society. This fact is unaffected by changes in the mode of production. For this reason Illich plans to abandon, rather than restructure, schooling as it is inherently manipulative. ${ }^{25}$
(2) Both capitalist and socialist hyper-industrial societies "tend to select those productive processes which are more capital-intensive and promise greater cost-benefit ratios." ${ }^{26}$

The schooling systems in either political climate are therefore aligned to the same ideology and will develop similar appearances, as they will have the same functions to perform. Again it is the ideology of "economic growth first", ${ }^{27}$ rather than the ownership of the means of production, which determines the format of the institutions employed, in this case the school. In turn it determines the socialization the individual receives, in this instance from schooling.

This example shows that the state has the potential to instigate exactly the same institutional format or work processes as the private entrepreneur. It therefore has the same potential to manipulate the individuals who participate in them and thereby create 'alienation', 'dependent participation', 'psychological impotence', 'radical monopolization' etc. Like the private entrepreneur the state can "sacrifice the healthy development of community, work, environment, education and social equality to the accumulation of capital and the growth of marketable goods and services." ${ }^{28}$

This is the argument put forward by Illich and the post-industrial theorists. It is reinforced by historical and economic experience. Albert Parry in his book The New Class Divided documents the rise of the technocratic elite in the Soviet Union. Parry's major concern is whether or not this rising elite will take over control, either within or from the Communist Party. This does not concern us here; what is important is whether the technocratic elite seize power or not, and that they do exist and play a vital role in Soviet society.

This technocratic elite is a product of the postindustrial social structure emerging in the U.S.S.R. Although the means of production have been socialized, the state has adopted production processes typical of hyperindustrial society. Therefore there is a "newly rich and powerful [group of] individuals in the Soviet Union. They are the intelligentsia and the privilegentsia. They are at the very top or near the top: bureaucrats and
technocrats." 29 Included in this group, along with party chiefs and military heads, are the industrial managers, economists, scientists and engineers. It is evident that even with state ownership, the adoption of a hyper-industrial social structure has meant that those with the appropriate education, talent, credentials and theoretical knowledge gain in power as they have "control of the nation's economic assets." ${ }^{30}$ Parry quotes Herbert McClosky and John E. Turner to detail this point.

> As Soviet society grows more complex, greater technological knolwedge will be required to operate it - knowledge familiar to practitioners but beyond the understanding of ordinary politicians. As the technical intelligentsia increasingly become the judges of their own needs they move further out of the reaches of the political center and are more difficult to control.31

Historical experience shows that the adoption of a socialist mode of production in an industrial society has been accompanied by the adoption of the typical means of production of advanced industrial society. They have therefore also adopted the problems inherent in these means, those which accompany increased bureaucratization, managerialism and professionalism. The emphasis is still on production efficiency. The worker still lacks control of his or her own creative energies. The problems of centralized control, alienation, dependent participation etc. remain. As Bell concludes,

Today the Soviet factory is characterized by sharp class divisions between workers and engineers. The trade union ... simply exists as an arm of factory management for the strengthening of labour discipline. Despite the formal structure of ... rational organization ... The manager rules and the worker has no control. 32

Against Gintis specifically it can be argued that schools in the Soviet Union serve the function of allocating the credentials, training and affective traits which serve the economy, just as surely as in any other advanced industrial society.

Parry illustrates this point when he quotes Philip Mosely who claims "the Party and its instruments have developed many ways of shepherding the young towards productive and orthodox careers well rewarded by the state and away from dangerous thought." ${ }^{33}$ The school would obviously be one of these "many ways". It is evident that in the Soviet Union, as in any other society, the school's functions are determined by the "social relations of production", as Gintis puts it. However as the Soviet Union's "social relations of production" are as much a product of hyper-industrialization as those of advanced capitalist society, the adoption of a socialist mode of production is inconsequential concerning the functions of the school system. Only a change in the nature of the work processes and institutions employed would have changed these social relations of production and the function of the school.

Gintis is mistaken in claiming that the problems concerning Illich and himself are the result of "the normal operations of the basic economic institutions of capitalism." ${ }^{34}$ They are the result of the normal operations of the basic economic institutions of hyper-industrial, or post-industrial society. No matter who instigates the adoption of alienating work process and institutions
the resultant society and its associated problems will be the same. The aspects of Illich's work which concur with the post-industrial analysis of this dilemma can be used to formulate a strong defence of his writings against Marxist criticism. His claim that "certain tools are destructive no matter who owns them ... [they] must inevitably increase regimentation, dependency, exploitation or impotence" ${ }^{35}$ acts as an appropriate summary of this retort.

This rejoinder uncovers other weaknesses in Gintis' major criticism of Illich. Contrary to Gintis' claim Illich does employ a 'higher synthesis'. As has been stated before, his 'higher synthesis' concurs with the postindustrialists' notion that alienating work processes and institutions are the source of advanced society's problems. These are employed by the power holders in an attempt to maximize efficiency and reduce costs. Contrary to what Gintis claims,Illich does pass "beyond negation". Having sited the source of the dilemma he proposes a oonversion to convivially structured institutions and work processes.as a solution.

The theoretical outline of this 'higher synthesis' has been expounded in Tools for Conviviality. Admittedly this work, published in 1973, appeared after Gintis' critique. The basic thesis, however, is quite evident in Deschooling Society, which is the target of Gintis' critique. In it Illich uses the school system to illustrate the type of institution which is arising in hyper-industrial society,
its causes, inherent problems and the action required to rectify them. The school system and the necessary changes related to it illustrate Illich's 'higher synthesis'.

One reason why Gintis fails to recognise this 'higher synthesis' is that he does not appreciate Illich's emphasis on the importance of the individual's personal experience of the social system. Admittedly this thesis is again more clearly outlined in Tools for Conviviality but it too is evident in Deschooling Society.

Gintis claims that "Illich locates the source of social decay in the autonomous, manipulative behaviour of corporate bureaucracies." ${ }^{36}$ This is thought incorrect as these institutions do nothing more than "capitalize upon and reinforce a set of values derived from and reconfirmed by daily experience of the [capitalist] social structure." 37

The truth is however, that Illich does not view the "corporate bureaucracies" as the source of social decay. What does cause decay is the ideology which dictates the establishment of such institutions. It is the technocratic ideology of increasing efficiency and reducing cost. This is not necessarily a capitalist ideology. Again 'every country tends to select those production processes which are more capital intensive and promise greater cost-benefit ratios." ${ }^{38}$ This ideology determines the society's structure, work processes, social relations, services, and the manner in which they are offered. Individuals are manipulated into acting within these restraints, and their characters and operations are determined by them. Illich would agree with Gintis when he says that "the motivational basis of consumer
behaviour derives from the everyday observations and experiences of individuals." ${ }^{39}$ He realises however that the daily observations and experiences of individuals are equally determined by the technocrats as the nature of the manipulative institutions. Through determining people's experiences and observations of the social system, the technocrats programme them to conform to technocratic ideology, aims and society.

Illich's aim is to restructure society so that the observations and experiences the individual has of it, do not manipulate him or her into this subservient position.

Gintis fails to realise that Illich regards manipulative institutions as a product of technocratic ideology and as aspects of the social observations and experiences individuals have in hyper-industrial society. He therefore fails to recognise Illich's 'higher synthesis': the pre-eminent ideology based on manipulation must be reversed if any meaningful social change is to occur. He is not simply advocating the end of manipulative institutions but an end to the ideology which has created them. His claim that "the ethos not just the institutions of society ought to be deschooled" ${ }^{40}$ serves amply to illustrate his 'higher synthesis'.

Another misconception Gintis has of Illich's thesis is that it "explicitly accepts those basic economic institutions which structure decision-making power, lead to the growth of corporate and welfare bureaucracies and lie at the root of social decay." ${ }^{41}$ It is difficult to see an explicit acceptance of this order in Illich's work.

He regards the manipulative institutions or work processes as destructive. His plans are to transform them convivially. He therefore does not accept the basic economic institutions, he is in fact calling for their reform, or rejection. Gintis' misconception is made all the more tenuous by his claim that "Illich's criterion [of acceptable institutions] must be replaced by ones of democratic participation and rationally decentralized control over social outcomes in factory, office, community, school and media." ${ }^{42}$ He expands on these replacement criteria, which ensure that control is "vested directly in the group of individuals involved in a social activity" ${ }^{43}$ and which therefore ensure the avoidance of alienation as they guarantee work which will "promote the full development of individual capacity for self-understanding and social effectiveness."44

In fact these two criteria form the very basis of Illich's convivial reform. His emphasis on the concepts of "participatory democracy" and "deprofessionalization" appears identical to the replacement criteria offered by Gintis. 45 Added to this is Illich's stress on "tools [which] can be controlled in the public interest." ${ }^{46}$ It is therefore difficult to see how Gintis' suggestions. concerning reforms required by basic economic institutions differ from those proposed by Illich.

The only difference is one of accentuation. What the Marxist emphasizes is that the action the individual is participating in should be unalienating. Illich emphasizes that the individual feels the action is unalienating.

Again it is hard to recognise any radical departure from Illich in Gintis' analysis.

A final point on this issue is that it is again hard to see the logical connection between the instigation of 'participatory democracy' and 'decentralization of power' as necessary reforms to halt 'social decay' and Gintis' other requirement that capitalism must be eliminated. There appears to be no a priori case that state control will result in an increase in participatory democracy and the decentralization of power. Nor does it appear obvious why the adoption of these criteria under a socialist mode rather than a capitalist one would be any more successful in solving the relevant social problems.

A third misconception Gintis has of Illich's work is that deinstitutionalization will result in "unproductive and undirected social chaos." ${ }^{47}$ He considers Illich places too much emphasis on the individual and therefore neglects social solidarity, which as a result would disintegrate.

This conception of Illich overlooks the point that he, like post-industrial radicals, does not desire an end to all institutionalization, industry or social control. His plea for "technological maturity" has been ignored.

His calls for participatory democracy and decentralization of control necessitate control and decision-making. They allow for the relevant mechanisms but ensure that all people involved in or affected by an issue are represented and that the social outcomes of work processes and institutions are checked in the public interest.

All of this is consistent with what Gintis proposes. Illich also calls for a convivial reorganization of industrial production rather than its total rejection. His objective is a social system which allows "individuals and ... communities to choose their own style of life," 48 where "the industrial mode of production complements other autonomous forms of production." ${ }^{49}$ His objective is not Zaissez-faire anarchy, rejecting all order or social solidarity. His modus operandi of "convivial reconstruction" (surely a positive term) aims at a restructured society which is flexible enough to allow for different individual's requirements.

Reference to Noam Chomsky's work on anarchism may assist in rectifying this misunderstanding. He attempts to show that anarchistic notions do not necessitate the collapse of social solidarity, but rather encourages it. Anarchism does not necessarily involve individuals living entirely discrete existences. The aim, rather, is to involve everyone in everything related to them. Chomsky claims that

> the advance of technology raises possibilities of self-management over a broad scale that simply did not exist in an early period. And that in fact this is precisely the rational mode for an advanced and complex industrial society, one in which workers can very well become masters of their own immediate affairs to At present institutions do not permit them and the control over the requisite information, matters. 50

What is required is a transformation of the decisionmaking machinery so that everyone affected may become involved. Chomsky suggests networks of workers councils
at regional, national and international levels. These would be allied to "a system of government that involves local assemblies - again federated regionally ... and again at the level of the nation or beyond." 51

Chomsky's point is that anarchy does not necessitate social disintegration. It is a viable way of creating social solidarity. His notions expressed here serve as a clearer, more detailed statement of Illich's proposals concerning the development of a new social structure through deprofessionalizing and decentralizing decision-making and increasing the involvement of all affected.

Gintis' criticism of Illich's analysis, that it is "anarchistic" ${ }^{52}$ and leads to social chaos sadly neglects the positive, cohesive aspects of anarchy and therefore fails to provide a convincing argument.

Gintis' conception of how change and resistance will occur in society also requires comment.

He claims that the way to bring about meaningful change in individuals is to alter the social situation. In observing and experiencing this better social structure they will be "restructured". The actual experiencing of "solidarity and struggle in remoulding a mode of social existence", will add to this "restructuring" of individuals as they will be involved in "new modes of social participation."53 The school is seen as a place to prepare students for this "struggle". Participation in "the struggle" and the resultant social system will "prepare the individual for itself." 54

Gintis regards Illich's argument in this area as an "anarchistic notion" employing a laissez-faire attitude which leaves individuals to do as they like. This will not only terminate social solidarity, as mentioned above, but will also render individuals incapable of "cooperating, struggle, autonomy and judgment appropriate for the task [of social change]." 55

Again it is difficult to see the difference between what Gintis advocates and what Illich suggests. For the same reasons they both regard the school as an appropriate place in which to start social change. Illich says it is appropriate because "a liberation movement which starts in schools ... could foreshadow the revolutionary struggle of the future." ${ }^{56}$ This is congruent with Gintis' own claim that it would prepare the child for necessary future struggles. ${ }^{57}$

The difference Gintis perceives between Illich's supposedly 'anarchistic notion' and his own appears as another case of his misinterpretation of Illich. He tends to overemphasize laissez-faire anarchy yet again at the expense of Illich's 'higher synthesis', discussed earlier.

Like Gintis, Illich wants to involve the individual in the struggle for social change. He looks forward to a time when "people will suddenly find obvious what is now evident to only a few" ${ }^{58}$ and create a movement to bring about the necessary change in the social structure. His thesis differs from Gintis' however, in that it does not emphasize the struggle itself as a 'restructuring' experience for individuals. What does however cause their restructuring
is their increasing awareness of the need for social change and later on, again like Gintis, their experience of the newly established structure. If involvement however in such a struggle is enlightening as the Marxists suggest then Illich's thesis does make allowance for such involvement and illumination even though he does not acknowledge it. Illich's conception of what the new society should be like is again concurrent with Gintis' view. To Illich it is a convivial structure which is protected by legislation. Experiencing this social structure will 'restructure' the individual, creating a convivial state of mind. There will however be laws which will ensure that the individual's actions do not threaten "survival, justice and self-determined work." 59

Illich holds that such laws are only provisional as individuals after a period of transition will act naturally in a convivial fashion.

It is important to note that Gintis has failed to acknowledge the socially cohesive aspects of anarchism evident in Illich's work. He regards it simply as a matter of permitting individuals to act in any way they choose. To refer again to Chomsky, a society based on anarchistic principles can attempt to reconstruct the individual in the same way Gintis advocates. Chomsky states that a purpose of social change "is to create institutions which will contribute to create institutions which will contribute to transformation in the nature of work, the nature of creative activity, simply in social bonds among people and through this interaction of creating institutions which permit new
aspects of human nature to flourish." ${ }^{60}$ This statement clearly aligns him again with Illich. Illich's proposed convivial institutions and parallel society will assist in the "spiritual transformation", restructuring in Gintis' terms, of individuals to a convivial state of mind.

Like Gintis, Illich claims that experience in, and observation of the new social structure will affect the individual. It will "reconstruct them".

The only major difference here is that Gintis does not believe that there will be a time when laws will not be needed. Individuals can never be relied upon to naturally act in a safe, just, self determined fashion. As stated earlier he holds that there is no reason to believe that an "essential 'human nature'" exists, which will prevail in appropriate social conditions, causing the individual to act in a morally desirable fashion.

This appears as a cogent criticism since it pinpoints Illich's Rousseauian Romanticism. How do we know people will act in a convivial fashion if given a convivial atmosphere? Why should it not be the case that given a choice, humans will act out of greed and selfishness? May it not be the case that given a choice, humans will choose to consume however much they can produce, as efficiently as possible, dragging society back into a manipulative, technocratic milieu?

Gintis does not fall into this Romantic trap. Although he holds that the new social structure must be organized in order to permit people to enter into "new modes of social participation", he does not expect them to do so
without some direction and assistance. This will be provided by their experience in, and observation of, the new social structure which has been formulated by legislation.

Another valid criticism Gintis makes of Illich is that "schools are so important to the reproduction of capitalist society ... they are unlikely to crumble under any but the most massive political onslaught."6l This criticism seems applicable not only to schools but all manipulative institutions. It acts as a pointed rebuttal of Illich's claim that the school "is not yet organized for self-protection as effectively as a nation-state or even a large corporation." ${ }^{62}$ Gintis points out that the school system is a vital component of the nation-state and like any other manipulative institution is defended as well as the state itself.

This argument can be backed up by common experience. Attempts to change any aspect of schooling are usually confronted and halted by a wealth of conservatism, bureaucratic red tape and antagonism. As the school is a vital agency in the continuation of capitalism, the capitalist will not permit its radical alteration or elimination.

However the impact of Gintis' point is limited as it is not restricted to capitalist society. As stated earlier it appears as a truism that schools tend to run 'parallel' to the power elite in that their function is to perpetuate the ideology of the dominant group in society.

As a truism, applicable to schooling in any social
structure, Gintis' point does not allow him to suggest that if capitalism is eliminated the schools will no longer be manipulative. All one could claim is that the group who gained power would use the school system to reproduce their social ideology. The end of capitalism therefore does not necessitate the end of schooling as a manipulative agent for the power elite, it simply changes the membership and perhaps the ideology of that group.

As has been indicated earlier, 'social decay' in advanced industrial societies is a result of the common ideology emphasizing increased efficiency and reduced costs. This ideology is adhered to by both socialist and capitalist power groups in these societies. The replacement of a capitalist power elite with a socialist one will therefore not terminate this ideology's dominance. With such a change schools and other such institutions will become manipulative agents of a new power elite but will continue to reproduce the same ideology and its related problems. Gintis' call for the end of. capitalism fails to eliminate these problems as it fails to deal with their cause. His analysis does not stop schools and other such institutions from being manipulative. They will continue to reproduce and act upon the same ideology and will be no closer to gaining the liberating change desired.

To conclude, the Marxist critique of Illich falters due to various misinterpretations and underestimations of his thesis, and weaknesses inherent in Marxist theory. Gintis' attempt to show Illich as failing to get to
the root of the problems, breaks down on the dubious Marxist premise that the capitalist mode of production is the source of 'social decay'. The aspects of Illich's analysis of the source of advanced society's problems which concur with post-industrial theory, clearly identify this weakness in the Marxist argument and can be used to formulate a viable retort to the criticisms Gintis bases on it.

Elsewhere Gintis underestimates Illich's case by failing to acknowledge his argument concerning 'convivial reconstruction'. This misrepresentation of his work culminates in Gintis' view of Illich's thesis as a Zaissez-faire style of anarchism, permitting individuals to act however they choose. It would appear that an investigation of hitherto ignored aspects of Illich's work show this to be a misreading of the thesis. An adequate response can be formulated from them to Gintis'. claims that Illich offers no appropriate way to create meaningful social change and that the best one can expect from his policies is social chaos.

The criticisms which state that Illich accepts the corrupting institutions of society, that worker control is necessary in the reconstructed society and that he does not realise that the individuals' values systems are created by experiencing the social structure, again do not do his argument justice. They are misrepresentations of his thesis. In actuality there is very little difference between Gintis' arguments on these points and those suggested by Illich.

Only two valid criticisms are offered. Firstly, schooling is shown to be so heavily protected that Illich's
notion of simply changing or rejecting it is unrealistic. Secondly, Illich is shown to base aspects of his proposals on the unjustifiable presumption that there is an "essential 'human nature'." on both counts, however, Gintis' criticisms are weakened. In the latter case he understates Illich's point regarding social experience's importance in shaping the individual. In the former his statement is a simple truism applicable to any society and equally problematic to his own suggested course of action.

It would appear that weaknesses in the Marxist perspective itself and the strengths in the aspects of Illich's analysis which concur with post-industrial theory can be used to form a viable defence of his thesis against the Marxist critique.

## Footnotes

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7. Ibid., 93.
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10. Illich. Energy and Fquity, $p=20$.
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28. Gintis, "Towards a Political Economy of Education", p. 76.
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35. Illich, Tools for Conviviality, p. 26.
36. Gintis, "Towards a Political Economy of Education", p. 76 .
37. Ibid.
38. Illich, Tools for Conviviality, p. 62.
39. Gintis, "Towards a Political Economy of Education", p. 82.
40. Illich, Deschooling Society, p. vii.
41. Gintis, "Towards a Political Economy of Education", p. 77.
-42. Ibid.
42. Ibid., 79.
43. Ibid., 84.
44. Illich, Tools for Conviviality, p. 5.
45. Ibid., 26.
46. Gintis, "Towards a Political Economy of Education", p. 77.
47. Illich, Tools for Conviviality, p. 73.
48. Illich, Energy and Equity, p. 86.
49. Noam Chomsky, in television interview, "How to be an Anarchist", The New Review, III (August, 1976), 27.
50. Ibid.
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52. Ibid., 86.
53. Ibid.
54. Ibid., 91.
55. Illich, Deschooling Society, pp. 48-49.
56. Gintis, "Towards a Political Economy of Education", p. 91.
57. Illich, Tools for Conviviality, p. 103.
58. Ibid., 13.
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60. Gintis, "Towards a Political Economy of Education", p. 93.
61. Illich, Deschooling Society, p. 47.

## THE PROBLEMS OF POST-INDUSTRIAL ANALYSIS

"Is there a post-industrial revolution."
Norman Birnbaum.

The previous section has attempted to demonstrate how the aspects of Illich's writings which concur with post-industrial theory can be used to formulate a rebuttal to the Marxist critique of his work. However these aspects not only provide a defence of his writings but also present him with a new set of problems.

The previous defence of his work has been constructed upon the strengths of post-industrial analysis. Various writers have, however, criticised this perspective. As certain aspects of Illich's writings concur with post-industrial analysis his work is perhaps vulnerable to these criticisms aimed at its weaknesses. It would be unrealistic to attempt to deal with all the problems of post-industrialism here. What this section will contribute, will be an analysis of three major problematic themes. This sort of analysis should show how these criticisms of post-industrial theory relate to Illich's work. Does he manage to evade them by augmenting post-industrial theory with his own arguments or does he fall victim to them?
(a) The Power and the Technocracy

It has already been established that Illich, like the post-industrial forecasters, places social power, control and decision-making in the hands of 'managers', 'professionals', 'specialized workers' and 'bureaucrats'. The 'managers' determine the setting of objectives and how they should be attained. They do however depend greatly upon the expertise of the techniciens. The ideology which provides the basis of the technocratic decision-making system is "economic growth first". The social milieu produced accepts, at the expense of 'human initiative', "any improvement in machinery, equipment, material and supplies which will increase production and lower costs." 2 Society's institutions and tools become increasingly "manipulative" as they are utilized to attain the goals set by the technocracy. The technocracy gains increasing control and its ideology permeates society, influencing all aspects of social life and organization..

This indispensable characteristic of a postindustrial society has been questioned by some writers. For a variety of reasons they argue that technocratic power of the type described by Bell and Illich does not and cannot exist.

Christopher Lasch and Norman Birnbaum have boṭh argued that the case put forward for increasing technocratio control is unconvincing. Lasch argues that the claim that social control and political power is falling increasingly into the hands of managers and techniciens whose knowledge and skills become increasingly vital in hyper-indusfrial society,
makes neither logical nor empirical sense. He asserts that

> professional expertise does not automatically translate itself into political power or even into "the main source of motivation". Bell's vision of the "new class" theory ... simply deduces political power from functional indispensibility without demonstrating the influences of expertise on actual decisions.
> Lasch's claim calls attention to two flaws which are apparent in Illich's work. One is his lack of actual evidence showing such a shift in power. This lack of evidence, detail and documentation reduces Illich's writings in some areas, from empirical study to intuitive theory. The second implication of Lasch's point is that it is not self-evident that managers and techniciens will monopolize political power simply because they are "functionally indispensable" in the social structure. It is possible that they will remain the tools of other decision-making bodies such as politicians and the military. If these bodies retain ultimate control they may hold ideologies which differ from the one Illich assigns them, of "economic growth first". If this is the situation, social policy will be directed in a very different manner from the way he forecasts.

Further to this Robert Heilbroner has stated that Bell is mistaken in even arguing that the "knowledge-related" sector of society has become more "functionally indispensable" than all other sectors. He claims that the . rise of the service sector has been at the expense of the agricultural sector. The industrial "core" has therefore remained roughly constant. ${ }^{4}$ He shows how in advanced industrial nations such as the U.S.A.: France, West Germany
and Great Britain, the percentage of the population employed in the service sector has dramatically increased whilst the proportion employed in the industrial sector has remained "roughly" unaffected. ${ }^{5}$

This argument has implications for Illich's work. In arguing that the techniciens will gain political power and social control due to their "functional indispensability" he neglects the "functional indispensability" of the industrial workers who retain their prominence.

Heilbroner adds to Lasch's argument. In existing hyper-industrial societies the techniciens are no more. "functionally indispensable" than industrial workers. Both sectors therefore have equal political potential. Even if the techniciens do manage to become most essential it will not necessarily result in their grasping political power. Lasch actually sums up these two points when he states that "Although white collar workers, 'techniciens' in particular, make up a larger and larger proportion of the American work force, it does not follow that power has shifted to this group or that scientists and engineers have become in any sense the 'key group' in advanced industrial society." ${ }^{6}$

Bell and Illich could argue that these criticisms are correct if one regards the techniciens as subservient to the decision-makers. However if we recognise that the decision-makers emerge from the technicien body, these criticisms are diverted. Norman Birnbaum offers a plausible response to this possible defence.

He points out that techniciens are hired by the
decision-making body but "when technicians do rise to actual command positions, they cease to function solely as technicians but function as men in command, men with power." ${ }^{7}$ This again makes apparent the idea that the functions of the decision-makers and the subservient techniciens are very different. The latter search for necessary information and implement ready-made policies. The former actually formulate policy and objectives. A distinction of this nature not only allows for differences in function but also for differences in ideology. The latter distinction requires closer examination. It is hard to deny that decision-makers in hyper-industrial society greatly rely upon information provided by the technical and professional elites. However it is not as evident that they rely entirely upon this information for their decisions. Other important considerations may well determine how this information is used.

Birnbaum claims that, contrary to what Bell states, "there are no purely technical criteria for political and economic decisions." ${ }^{8}$ Other domains of knowledge are appropriate in such a process and may alter the decisions made. These domains will be influential in determining the purpose for which the technical information is utilized. This statement is expanded upon by Jurgan Habermas who argues that the "technocratic model" of society, which is assumed by Illich,

> presupposes a continuum of rationality in the treatment of technical and practical problems which cannot in fact exist... Either there are still other forms of decision than the theoretical-technical for the rational clarification of practical issues that cannot be completely answered by technologies and strategies or no reason can be given for decisions in such issues. 9

In other words, theoretical-technical information is only one input into the decision-making system. This system will have an existing values structure and related objectives which will determine the way in which theoretical-technical knowledge is utilized. The value structure and objectives cannot be set by entirely rational standards. Somewhere in the decision-making process value judgments concerning what is good, bad, necessary or unacceptable must be made.

In fact it is possible that firm decisions in this area will not be made. Compromises and changes may occur "between competing value orders and convictions."10 No matter, these basic 'value orders and convictions will "escape compelling arguments and remain inaccessible to cogent discussion."ll

What we have here is a clash of perspectives and models concerning the nature of the decision-making process in advanced-societies. The model adhered to by Bell and Illich is in dispute, their social forecasts and prescribed courses of action are therefore also contentious. The counter-model to their analyses shows how it is possible and probable that decision-makers hold 'value orders and convictions' contrary to the technocratic ideology Bell and Illich assign them. They may adopt a moral-political-social
stance which acknowledges that in a hyper-industrial society, technical and theoretical knowledge is necessary. However, it may also acknowledge that the application of such knowledge in social policy making, demands respect for the rights, needs and differences of individuals and groups. They may well accept the need for a rational choice of means related to social policy, as Illich claims they do, however, he ignores the fact that such a choice "accompanies avowed irrationality in orientation to values, goals and needs."12

Rationalization, the importance of technicaltheoretical information and the "functional indispensability" of the technical and professional elites may all be increasing in advanced societies as Illich claims. However the counter-model outlined here shows that the decisionmakers are not techniciens. They do not implement policies based entirely on technical values, goals and needs.

If this model is accurate, Illich has overestimated the degree to which the power holders are technically orientated. He has understated the moral aspects of decision-making, and misrepresented the type of decisions which are made and the type of social policy implemented in advanced society. If the counter-model to Illich's analysis is correct his fears for society are overstated and the actions he proposes extreme and unrequired.

Another criticism of post-industrial forecasters, related to the previous argument and equally valid of Illich, holds that they not only overemphasize the technical nature of the decisions made but also underestimate the power of
the populace, by representing the power elite as unchallengeable.

There appears to be some doubt about this view. In most hyper-industrial societies the decision-making body must be aware that it can be challenged concerning its actions. If the value structure which orientates its decision does not meet the populace's expectations it may soon find itself divested of power. Birnbaum argues that

> There is in no society a general social programming; programming remains segmental and contested. In so far as programming exists it is imposed upon subject populations whose passive wishes may from time to time, be consulted and who from time to time may rise in protest or electoral revulsion.l3

He continues on to note sadly, that the subject populations regular "day to day influence upon the controllers is minimal." The point remains however that Bell and Illich have overstated the 'programmed' character of advanced societies and the indisputability of the decision-makers control, if this counter argument is correct.

The final aspect of this critical theme is that Illich has overestimated the unity of the power elite. In doing so he has presented an unrealistic picture of it as a cohesive body working to a common goal through common means. Bob Jessop in Social Order, Reform and Revolution calls this into question. He attempts to show that there is more than one source of power in society. Hyperindustrial society may therefore be directed by more than one elite as power can be diffused into several competing, conflicting and compromising groups. Illich has therefore again overestimated the power of the decision-making elite.

In fact the power elite does not exist as he describes it.
Jessop claims that there are four power bases in society. 'Economic power' is wielded by those who have "control over the means of production, distribution and exchange of goods and services." 14 This group control the styles of production, labour and consumption evident in the society.
'Political power' is seen as the "distribution of control over the means of coercion."15 Those who have the authority to compel others to act in a certain fashion hold such power.
'Social power', Jessop defines as "control over the means of status attribution". It is this power elite which set "the terms of entry" to "valued collectivities or the occupancy of valued roles in the economic, social or cultural systems."l6 They determine what credentials, qualifications, background etc., are necessary for an individual to obtain a position which is valued in society. They therefore determine what an individual requires to 'succeed' and therefore, in many cases, what he or she wants.

Finally there is 'cultural power' which is "ultimately based on control over the means of value creation and specification." ${ }^{17}$ control over such a process gives power "because the power relation is contingent on the preference structure of the less powerful." ${ }^{18}$ The group who control the value structures hold power as they determine what the less powerful desire and consequently how they act. This will affect all aspects of social
existence.
Jessop claims that these groups "may or may not be empirically differentiated and controlled by different organizations and individuals." 19 He cails attention to the possibility of conflicts between and within the power groups which exist in society. Such clashes occur for a variety of reasons.

Within a power estate there may be conflict between different groups attempting to gain control. For example in the economic power estate a "fundamental conflict of interest [may eventuate] between those whose power is based on control over the increasingly subordinant bases of power and those who control the newly emergent or newly dominant mode of production wherever the two groups of controllers are distinct. ${ }^{20}$ In a newly evolved post-industrial society this would involve a clash between private entrepreneurs whose powers are declining and the managers who supersede them.

There may be division and competition for cultural power as "different interest groups develop competing interpretations of dominant values and attempt to impose new values on other relevant groups." ${ }^{21}$ These competing groups might take the form of the church, the state, the university, corporations or public pressure groups. There may be a split in the domain of political power as Jessop points out that

> in more complex and formalized systems, there is often a real distinction between those who control the means of authorization, those who organize the authority system and those who work at subordinate levels in the system. These distinctions are also associated with conflicts of interest and may develop into open conflict. 22

This draws attention to the diffusion of roles within the political structure in advanced-industrial society, allowing for possible conflicts to emerge between the managers, professionals, techniciens and bureaucrats.

With different groups holding different sets of values and having different interests to foster and protect clashes for dominance in each power domain must eventuate. Thc rosult is that the control of each power domain is à very precarious affair. The existing power holders will therefore have to compromise their own policies with those of other groups in order to retain power.

Again it can be seen that this clash and the resultant compromises are not accounted for by Illich. If Jessop's analysis is correct, Illich's notion of there being one indisputable power group is rendered inaccurate. Power is rather a matter of compromise between different competing interest groups which attempt to ensure that social policies reflect their values.

Jessop elaborates on this argument by saying that there may also be conflict between the different power domains. There is therefore even less chance of the one interest group gaining absolute control as Illich forecasts. Jessop claims that "each power system requires the output of the other three systems if it is to produce its own
output in turn." 23 For example the economic power system will require the social power system to provide appropriate "terms of entry" to its system. If the systems are out of line with one another the policies of the dominant economic power group cannot be fully carried out, they therefore must compromise to some extent with the dominant group in the social power system. The economic power elite may well have policies similar to the ones Illich ascribes the managers, emphasizing technical-theoretical knowledge, efficiency and reduced costs. The social power elite on the other hand may not emphasize "terms of entry" which necessarily suit the economic power group's policies. Its members may still be operating by means of such institutions as sex, geneological descent or the old boys' network, which are all
inappropriate for the technocratic economic power system.
When this is the case there is a "contradiction in the relationship among different power systems. This focuses on the contradiction between different centres over domination of their various exchanges." ${ }^{24}$ The different power groups will have to negotiate and compromise their positions rather than one group with one ideology totally engulfing all power in society. A diffusion of power of this order and the ensuing compromises are likely in a newly evolved post-industrial society as the social structure and social relations will have not yet stabilized. Conflicts will result between the groups with declining power and the new elites which are rising in stature.

This further weakens the argument offered by Illich, that the technical elite will grasp all social power and
implement their policies on society in an unhindered fashion. If Jessop's conception of intra and inter power system struggles and compromising is correct, it renders Illich's monopolistic view of social control and power unconvincing and makes his social forecasts, warnings and plans of resistance equally suspect.

## (b) The Soft Machines

Alan Gartner and Frank Riessman call attention to the nature of the institutions investigated by Bell. They claim that although he acknowledges the rise of the service agencies in society, his analysis only covers a portion of that sector. He tends to focus on the "expansion of the private sector", based on the increasing functional importance of engineers and scientists, at the expense of the "soft services". 25 The picture Bell gives of society is therefore unbalanced and distorted.

The "soft services" take the form of public welfare and service agencies. They are publicly financed, and instead of aiming to benefit a private individual or corporation their function is to meet the needs of society's members. Included in the "soft services" sector are the agencies of "health, education, social services [and] recreation." ${ }^{26}$ By the very nature of the services they offer and by the fact that these agencies are publicly financed they "are far more likely to be public in character than is the work of the engineers"; ${ }^{27}$ which Bell's analysis focuses upon. Due to their public character "the [soft] services are potentially under greater control of the
public, the people, the consumer, the voter." 28
The point Gartner and Riessman make here is that Bell has emphaized the services based around engineering, sciences, economics, business administration etc. These are extremely vulnerable to the increasing control of the technocrats as they are essential elements of the technocracy. The public service sector however is not impelled to compromise itself with technocratic policy. By the nature of its function and financing it must serve and answer to the public rather than the technocracy. Because he ignores this side of the service sector the picture Bell has drawn of the social structure and social relations is unbalanced and unrealistic. He has failed to take account of the aspects of the service sector which put power into the public's hands. . He has failed to acknowledge that in the soft services "there are the seeds of strain and motion" ${ }^{29}$ which lead society away from technocracy rather than into it as he forecasts.

Does this criticism of Bell apply to the writings of Illich? For two reasons the answer here must be 'no'. On one level this criticism cannot be aimed at Illich because he does not fail to account for the soft services. In his books Deschooling Society, Limits to Medicine and Energy and Equity, dealing with schooling, health and communications respectively, the soft services are absolutely central to his analysis. Unlike Bell, Illich has explored the implications of the soft services and therefore cannot be accused of giving an unbalanced analysis.

On a second, and more important level, Illich's
analyses of the soft services act as a rebuttal to Gartner and Riessman's argument. Illich puts forward convincing evidence and arguments to show that contrary to their claims the soft services are by no means under greater control of the public than the services in the private sector. With relation to the health, school and communication systems of hyper-industrial nations, Illich has made strong cases showing that these soft services are equally as manipulative and alienating as any private sector services based on engineering, economic, business administration or scientific know-how. There is no reason to believe that the public has any more control over schooling, health, communication, sociai welfare of recreation systems than it does over the economic, research or industrial service agencies and systems of society.

Gartner and Riessman's claim that the soft services hold "the seeds of strain and motion" ${ }^{30}$ because they are accountable to the public, suffers from the same miscalculation of their position. The soft services may be manipulated by the power group to the same degree as the private service agencies and therefore have as little chance of breeding dissent. They may harbour a certain radical potential, but it is no more than the propensity for conviviality which Illich advances. It is however illogical to presume that they hold such power exclusively. Some service institutions in the private sector possess the same potential for change and are no less likely to open themselves up to reform than any in the public sector. In fact Gartner and Riessman's examples work against
their own arguments. They claim that the soft services of the public sector have the "seeds for strain and motion" necessary for radical reform. This "is expressed through the consuming groups who have been raising new issues in new form - for example community control, the environmental movement, consumerism, the women's movement." ${ }^{31}$ It is difficult to see the exclusive connection between these groups which are "straining" and "moving" and the soft services. It seems incorrect to say that their actions are signs of public control of the soft services. Nor does it appear correct to view them as resisting attempts to manipulate the relatively liberated soft services. The consumer, environmentalist or women's movement for exampie are concerned equally with the roles of the public and private sector in their relevant fields. Their actions are not demonstrations of public control or attempted control of the soft services. They only show them as attempting to participate in the decision-making processes of all institutions related to their concerns.

Gartner and Riessman's own examples therefore do not illustrate the soft services as more publicly controlled or having any more radical potential than institutions in the private sector. Their criticisms of Bell are therefore not applicable to Illich's work as he convincingly demonstrates that the soft services may be as manipulative as the private sector's service agencies and equally removed from the public's control.
(c) Dissent or Decline

The third theme of criticism aimed at post-industrial forecasters relates to the possibility of resistance against the technocracy. Illich, it will be recalled, is very vague about who will dissent and claims that people from all walks of life will, in the future, react against the rising power elite. This section will examine the cases for and against the post-industrial thesis of 'bourgeois radicalism' in order to assess not only their validity but also their implications for Illich's own analysis in this area. An examination will also be made of other mechanisms, groups and institutions suggested by Illich or post-industrial forecasters, as potential catalysts of resistance, in an attempt to gauge how viable they are as radical or radicalizing forces.

## (i) Bourgeois Radicalism

The reasons why various theorists predict the bourgeoisie to be the radicals of the future have been outlined in Chapter One above. They have the motivation, the time, the means and the power to act as a radical and radicalizing force in hyper-industrial society. More detail and evidence must now be added to that synopsis.

Empirical research has accredited the middle-classes with a radicalism which "is directed mainly to social reforms which are basically moral in content." In their actions they envisage

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no rewards which will accrue to the middle
class specifically, but only to society at
large, or to some under privileged group.
It is argued in fact that the main payoff
for middle class radicals is that of a
psychological or emotional kind - in
satisfactions derived from expressing
personal values in action. }3
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The working class on the other hand is seen to be "geared largely to reforms of an economic or material kind." Its objectives are "benefits to one particular section of society [the working class] from which its own supporters are drawn." ${ }^{33}$

Frank Parkin's study of middle-class radicalism has therefore shown it to be dependent on "prior value orientations" 34 and "bread moral concerns of a basically non-class kind" ${ }^{35}$ in that its objectives are altruistic. Anti-apartheid, political amnesty, nuclear disarmament, civil liberties, and gay and women's liberation movements serve to illustrate this form of dissent. For working class radicalism however the "primary aims and the political basis of their support have been firmly grounded in the pursuit of material improvement for their members." ${ }^{36}$ Parkin regards it as not surprising that such a distinction should occur. He views it as a natural result of the "different economic and status positions the two groups occupy." The middle class "have, almost as a matter of definition, greater material security and a more favourable share of economic rewards than the bulk of industrial workers." 37 Claus Mueller has also drawn attention to the fact that

> the socialization strategies, values and language code of the upper-middle class make it the class least vulnerable to the constraints of communication imposed by the political-economic system. Its communicative patterns permit the articulation of needs and demands that go beyond those sanctioned by dominant interests. 38

He claims that "the middle class are set apart from the working and lower classes by values that encourage the articulation of dissent and by the ability to engage in political reflection." 39

Other writers have noted the "apathy, resignation and indifference [which] characterize the political position of the working class throughout the developed industrial countries of the West today. "40

Barry Hindess hypothesizes that this results from either

> a general satisfaction with the way things are going. [Or] more pessimistically, it may be attributed to the effects of advertising, the creation and manipulation of false needs by vested interests, by perhaps, manipulation of the langugage and thus by effectively disguising real exploitation and effectively limiting the scope of human experience. 41

Aligned with this, the "decline of social democracy" has served to politically isolate the working class. The middle class however avoids such estrangement."42

As working-class apathy is increasing and because middle-class values encourage dissent based on "moral concern" it will be the bourgeoisie which will be evident in the reaction against the encroachment of technocracy. Resistance to increasing technocratic power must be of a moral nature. It involves a reaction against a compulsory life style being forced upon people, no matter how insidiously. It involves opposition to the interference in
the lives of others brought about by the implementation of of meddling and repressive social ideologies and legislation. It involves an attempt to liberate individuals, to ensure that their right to control their own creative energies is respected. As the required resistance involves extreme "moral concern" deriving "from issues of a progressively 'moral' non-ideological nature ... it could be anticipated that political protest in affluent societies will tend increasingly to have a middle-class rather than workingclass basis." 43

Another reason why the middle class are more likely than the working class to react against the increasing technocracy is that it is in their fields of employment that this encroachment is most likely to be felt. The working class who have traditionally had little or no control over their creative energies, do not expect such autonomy. The middle class however feel inhibited by technocracy's increasing encroachment on their autonomy. Professionals, semi-professionals and skilled blue-collar workers "experience a certain contradiction between their technical capacity and their limited autonomy on the job." 44 As Mueller states,

> they have the power of knowledge but their authority to use it is diminishing in the planned society. Their knowledge is not translated into policies since decisions are aligned with technocratic interests. 45

In as much it can be expected that their concerns will not simply be limited to material and economic matters but will involve "conditions of operation and control of the administrative and productive units in question." 46

The working class experience no such contradiction. Regardless of their political stance they "can be directly employed in capitalist concerns without the least degree of commitment to organized goals and values and hence experience no strains between the latter and their personal political views." ${ }^{47}$ Without such strain they are not stimulated into reacting against the organization; hence the resistance movement again remains exclusively middle class.

But such a contradiction is not expected to occur for all members of the middle class. Mueller points out that "the upper-middle class is far from homogeneous politically."48 Hc draws attontion to tho dictinction made by John Galbraith in his book The New Industrial State, between the 'technical' and the 'professional' intelligentsia.

The 'technical intelligentsia' includes the technical and administrative staff of private corporations and governmental agencies. These individuals are not expected to react against the technocracy as they adapt "to the goals of the large organizations employing them." They also "tend to support societal goals that are determined by private interests." ${ }^{49}$ Little conflict therefore exists between them and the technocracy to create radical reaction. The nature of the work that they are involved in also serves to reảuce the occurrence of such conflict. They have "limited contact ... with different segments of the public and ... they encounter less intensely the social problems" within or created by the technocracy. ${ }^{50}$ With little to
disrupt their faith and comfort in the technocracy, and with a secure place guaranteed for them in the existing hierarchy, they are unlikely to resist the technocratic ideology or structure.

The 'professional' intelligentsia includes "the human service sector, teachers, lawyers, physicians, psychologists, social workers, architects, clergymen and government employees in these areas."5l It is this sector of the middle class which is expected to oppose the encroachment of technocracy. Such a response is expected for several reasons. Firstly this group is
expected to hold values beyond those of the pursuit of material self-interest ... The capable, conscientious performance of services and the disinterested acquisition of knowledge rank equal to, if not higher than, the goal of profit. 52

These are the values which they are expected to implement in their work. They realise that "growing rationalization and planning of society reduces the autonomy" ${ }^{53}$ of their actions and reduces their ability to work by these principles. They are therefore induced to react against this encroachment.

Their concern for the services they are supposed to provide and the values by which they are meant to act place them, as Mueller says, "between the needs of the public and an essentially political administration of the services." They are caught in the "potential contradiction between the financial requirements of adequate services and administrative decisions based on cost-efficiency considerations." ${ }^{54}$ Their only option is to become critical of the ideology and policies which envelop them and create
this contradiction.
Frank Parkin's study of the British Campaign for
Nuclear Disarmament supports and illustrates this trend.
He discovered that of the C.N.D. supporters

> the heaviest concentration was in professional occupations of the welfare and creative variety, with teaching as a dominant example: clergymen, medical, social workers, architects and scientists were also well represented. 55

He continues on to say that although "the various professional, managerial and white-collar posts of a commercial kind are key areas of employment for middle-class males in the country at large, only a comparatively small minority of the C.N.D. sample were to be found in them."56

The 'professional intelligentsia' has not only the motivation and background for resisting the technocracy but also the power to succeed. They are powerful, not only numerically but also in that they hold vital positions in society. They therefore have a strong political bargaining power. "The dependence of the political system on the cultural strata to perform [their] function gives this group a political leverage as well as the daily opportunity to act out of motives that do not fit into the technocratic equation." 57 The technocracy depends on the 'professional intelligensia' to carry out its policies. As this class is endowed with rare skills, its functions cannot be fulfilled by members of the untrained populace. They are therefore in a bargaining position which can force the decision-makers to negotiate and even compel them to compromise their policies in order to retain their power.

This is the case for bourgeois radicalism, proposed
by various theorists and adhered to by some post-industrial forecasters. It is however not a self-evident case and has incurred criticism from writers who remain unconvinced.

Norman Birnbaum is one theorist who has produced several effective criticisms of bourgeois radical theory. He does not see any logical link between radicalism in advanced industrial society and the middle class. He advances a case arguing that the skilled workers, the professionals and technical elite, will align themselves with the technocracy rather than act as a radical opposition to it. ${ }^{58}$ Birnbaum claims that the growth of the whitecollar sector occurs mainly in "its subordinate categories: clerical and minor public officials, school teachers, techniciens, bureaucratic hierarchies." Although these categories may experience some feeling of "solidarity and group consciousness generated by their subordinate occupational positions," 60 they are at the same time members of the existing power structure's hierarchy. They will sense, either naturally or through manipulation from higher sectors of the hierarchy, that they are responsible, functioning parts of that structure. They therefore "feel that a certain community of social and cultural interest unites them with those who actually dominate them." ${ }^{2}$ The 'subordinate categories', experiencing a sense of unity with the ruling elite, will act in harmony with the elite's policy. They will do so out of a sense of responsibility; as a part of the hierarchy they will hold common interests with the elite. They therefore act out of a sense of self-protection and self-interest. This process of the assimilation of
subordinate groups into the hierarchy "is the familiar pattern of ... embourgeoisment."62 It serves to neutralize their radical potential as they come to perceive any radical action as a threat to their own interests.

Birnbaum claims that the necessary element for radicalism in a group is their traditional attitude towards such action. He argues that the degree to which "new whitecollar groupings are politically radical ... appears to depend upon the existence of a general tradition of bourgeois radicalism as much as upon the strictly objective conditions of work in which the group finds itself." 63 A white-collar group may be caught in the 'contradictory situation' the post-industrial theorists refer to. However it will not respond by opposing the dominant group unless it has a tradition which provides it with values and beliefs which encourage and endorse this action. When tradition of this sort does not exist the subordinate groups will passively, or perhaps begrudgingly, accept their roles. The power elite will continue to implement its policies in an uncompromising fashion.

The lack of a radical tradition among the greater proportion of the bourgeois means that they also lack "political capacities". In as much they will not know how to oppose the dominant group. As Birnbaum points out "they may by a process of revulsion gradually develop new political desires, but desires and capacities are quite distinct." The development of political capacities is a more cumbersome process than the development of political desires and "it is difficult to see ... why those enmeshed
in a highly complex and bureaucratic society should suddenly develop new political capacities." ${ }^{65}$ There is no apparent process or agency which will restructure the existing, non-radicalizing tradition. Individuals will therefore remain incapable of redirecting social policy even though they may have the conviction and desire to do so.

A criticism of this nature seems contrary to the evidence put forward by Parkin and Mueller. Both argue that the middle class have the heritage, skills and value-systems which encourage opposition to the dominant elite. Disagreement may arise for two reasons. Firstly some elements of the bourgeoisie may have radical traditions. These will therefore be the elements featured in the analyses of Parkin and Mueller. For example one such group may be the professional intelligensia discovered by Parkin in the C.N.D.

Secondly there may be some confusion over what constitutes 'radical action'. Parkin has noted that the middle-class radicals do not aim at "deep-seated changes in the entire economic order." ${ }^{66}$ What they press for are changes of a moral nature. In as much "movements based on the middle-class are in a sense able to avoid any direct challenge to the legitimacy of the existing social structure, since solutions to problems of this kind do not usually entail serious readjustment to basic institutions." ${ }^{67}$

This notion of middle-class radicalism allows them to participate in the radical 'moral' reform movements as discovered by Parkin. It does not however involve them in disrupting or opposing the existing power hierarchy of which
they are a part and to which they have loyality as it embodies their own interests. This is consistent with Birnbaum's analysis. By aiming at 'moral reforms' the middle class can assume a radical position without opposing or resisting the superstructure in which it is comfortably housed.

If the problems, however, existing in
hyper-industrial society are rooted in the existing superstructure, bourgeois radicalism offers nothing to bring about meaningful changes directed at the heart of the issue. It deals simply with the manifestations rather than the source of the problem. Whether one can consider middle-class reaction against the encroachment of technocracy as radical behaviour, or whether middle-class ideology constitutes a 'radical tradition', depends very much therefore on whether 'radicalism' is seen as reacting against the manifestations or the causes of society's problems. If it is the former, then they do have the 'revolutionary tradition' necessary to involve them in meaningful opposition to the power-elite. If it is the latter, they are sadly lacking in revolutionary potential and cannot be expected to constitute the radical force post-industrial theorists hold them to be.

This constitutes the case against bourgeois radical theory. It is claimed that unless they are endowed with a radical tradition the bourgeoisie, through a sense of loyalty and self-interest, will act in harmony with the power-elite rather than react against it. Without this tradition they will be lacking in 'political capacity'.

Even the 'radical' activities in which they are involved are simply of a moral kind and do not eliminate the source of society's problems by bringing about the necessary institutional or political changes in the existing system.

What implications do the cases for and against bourgeois radicalism have for Illich's thesis?

Illich makes the claim that resistance will come from "all classes, incomes, faiths and civilizations."68 Opposition to the power elite will emerge across the entire social structure. It will involve those who "have become wary of the myths of the majority; of scientific utopias, of ideological diabolism, and of the expectations of the distribution of goods and services with some degree of equality." 69 This awareness will come to people in all sectors of society.

Obviously this does not account for the thesis presented earlier concerning the decline of working-class politics and the rise of middle-class radicalism. From the perspective of bourgeois radical thought, Illich's analysis of potential dissent is naive. In the light of the works of Hindess, Parkin and Mueller, his claims that resistance will involve people of "all classes [and] incomes" is rendered suspect. He fails to consider the various reasons why the middle class can be such a radicalizing force, and does not accurately account for their potential as an opposition group to the power elite.

Illich does however agree with the bourgeois radical theorists on at least one aspect of their analysis. He discounts as a source of opposition "professionals who
are experts in the corrupt use of language and law." This complements Galbraith's exclusion of the 'technical intelligentsia' from the radical ranks, as they are too eveloped in the existing social structure.

Illich however has overestimated both the middle class as a radical force and the working class' potential by failing to account for their alienation and estrangement. In this way his analysis of resistance to technocracy is rather unbalanced. The thesis of bourgeois radicalism exposes the naivety and inaccuracy of his investigation in this area.

This conclusion is of course based on the assumption that the conception of bourgeois radicalism is a valid one. What implications do criticisms of bourgeois radicalism have for Illich's notions of resistance?

The major criticism of bourgeois radical thought made above, holds that the middle class feels a loyalty to the existing structure which negates its radical potential. It also lacks the 'political capacity' necessary to bring out meaningful social change. Their radicalism deals with 'moral issues' which are manifestations of the problems of hyper-industrial society. This leaves the actual economic organization of society, which is the source of the dilemmas, unscathed.

If these criticisms are valid, a large sector of the society is excluded from the ranks of resistance. If the middle class is 'politically incapable' due to its lack of a 'radical tradition' or as a result of 'embourgeoisment' it will join the working class as being politically impotent.

If they are merely dealing with the manifestations of the problem, for example political prisoners, nuclear arms, racism, sexism, civil rights, then the middle class have no role to play in Illich's avant-garde of opposition. His conception of resistance involves a strike at the heart of society's problems, an elimination both of the ethos and the agencies of manipulation and the substitution of convivial modes. Middle-class radicalism, tampering with fringe issues, does nothing to eradicate the source of the dilemmas. It is therefore not a forceful protagonist of Illich's' thesis. If its activities are to be transformed into worthwhile radical actions, the middle class must aim at restructuring the basic institutions of society and the means of production.

Whether such a transformation is possible is debatable. It has already been stated that middle-class radicalism is restricted to moral issues rather than pressing "for deep seated changes in the entire economic order." ${ }^{70}$ The middle class has too much at risk to demand such changes. They are secure in the existing structure, and changes to the entire social order of the type Illich calls for, could well threaten this santuary they have found. They are therefore unlikely to participate in such radicalism.

With the criticisms of bourgeois radicalism excluding the middle class from any meaningful social radicalism and with the evidence concerning the decline of working-class politics still being applicable the picture of dissent looks somewhat gloomy. From this perspective Illich appears to have overestimated the radical potential of all social
classes. It would appear that rather than claiming that opposition will come from "all classes [and] incomes "it would be more realistic to claim that no particular social class is qualified or likely to offer cogent resistance. In fact, for $a$ variety of reasons, all classes appear estranged from the operations of opposition against increasing technocracy. The power elite is therefore able to achieve absolute control.

Illich's analysis of resistance is therefore vulnerable to, and weakened by, both the cases for and against bourgeois radicalism. The case for it shows Illich's analysis to be naive as he underestimates the radical potential of the middle class and overestimates that of other social classes. The case against bourgeois radicalism shows Illich's analysis as overly optimistic. His faith in a general radical potential in society is seen as unrealistic. In actuality there is no social class which can be expected, or relied upon, to oppose the encroachment of technocracy. The intention here is not to prove or disprove the cases for and against bourgeois radicalism. Rather it is to show that both analyses have serious implications for Illich's work and cast grave doubts as to the validity of his analysis.

If no social class can be relied upon to act as the avont-garde of opposition, is there any other group who can be called upon?

## (ii) Other Sources of Resistance

Illich has also suggested the school, the university, the church and youth as possible sources of radicalism.

An analysis of their relative potentials is required. The school has already been investigated in relation to the Marxist critique. It has been shown as a truism that a society's school system is closely connected with the dominant ethos and its leaders. The school therefore implements and fosters this ethos and its advocates. It is therefore almost logically impossible and indeed most unlikely that the school could be transformed into a radicalizing agency as its ties with the power elite are established in tradition and resist alteration. The school as a radicalizing agency is an extremely rare phenomenon and no more likely to occur in post-industrial society than any other.

The university is also regarded by Illich as a potentially radicalizing agent. "It provides time, mobility, access to peers and information and a certain impunity privileges not equally available to other segments of the population."7l Parkin discovered that the "intellectual elite" supplied by the university, gave C.N.D. "leadership and a coherent set of goals." These were necessary as "popular demands or general discontents are rarely able to translate themselves into effective political movements on a mass scale." ${ }^{72}$

Are students and academics as free from constraints as Illich considers them to be? The neo-Marxist Jürgan Habermas argues that Illich's conception of such liberty is a fallacy. The increasing trend in universities is towards conformity and away from dissent. Students' studies are becoming increasingly "organized according to well-
defined and socially normative models." ${ }^{23}$ This not only means that students choose courses which will ensure their social, occupational and economic stability but also that the power elite forces individuals into these courses, rather than potentially radical ones. This pressure takes many forms. High fees can ensure that university education is only possible for the individual if it is cost-effective in the long term. Bursary allocation is organised so that only students enrolled in technocratically useful subjects receive public financial assistance. Course requirements can be set rigidly so that an individual's university education is restricted to subjects which will equip him or her for a certain occupation. No opportunities are available for experimentation and radicalization. Medicine, law and engineering are examples of such courses.

Habermas also points out that students are usually at university only to gain personally useful credentials. He also points out the fallacy in believing that the university itself is an agent of social change. "It generates neither new, technically exploitable knowledge [nor] the consciousness of modernity with all of its practical consequences."74 As has been shown above, the university in advanced societies falls under the auspices of the power elite who use it for their own purposes. The university is not permitted to hinder their policies. As Parkin states "intellectuals employed in bureaucracies ... are under certain pressures to conform. ${ }^{75}$ They therefore do not, or cannot, offer any forceful resistance to the technocracy.

Parkin does however proceed to grant the radical
movement some hope. He discovered that "freelance intellectuals, by contrast [to the bureaucratized ones] are not subject to bureaucratic restraints and are able to translate their personal views into public stances." 76 This group, including journalists, writers, actors, dramatists etc., may therefore join the resistance movement. Perhaps the same distinction can be made in the intellectual body as was made in the middle class, between the professional and technical intelligentsia. It seems possible that the technical faction of the university population has the same character as the technical faction of the middle class. They are willing and able to fit into ṫne present structure withouit experiencing tine unsetilingy contradiction between the values they hold, the occupational functions they fulfil and technocratic policy. The 'professional' (to use Galbraith's term) faction of the university would include the faculties of fine arts, arts, architecture, philosophy and social science. They would be more likely to experience the contradiction between their beliefs, the knowledge they hold, the functions they regard themselves as performing and an emergent social system which impinges on their autonomy. This would therefore place the 'professional' faction of university students and academics in a situation conducive to radical opposition against the existing social structure.

It can be concluded that 'freelance academics' and some academics and students of the arts and social sciences may be in the radical avant-garde. Illich actually acknowledges that the university, its staff and students are
under pressure to conform and that certain sectors are more likely to fit into technocratic policies than others. ${ }^{77}$ In his final analysis however he waives these considerations and overestimates the role the university is able to play in radical activities by understating the existing manipulation of tertiary educational institutions and misinterpreting the intention of many students and academics. As a result his analysis of the opposition the technocracy faces from the university is overly optimistic.

Illich also pins hope on the youth movement. The young are unattached, with nothing to lose by the radical restructuring of society. Their actions are not yet determined by self-interest and they have not been seduced into the system and socialized appropriately.

Again it appears that the youth of the middle class are those actively involved, responding to "society's failure to live up to certain professed ideals." ${ }^{78}$ These are the young people who have "success in the education system with all this implies in terms of future occupational attainment and income and status rewards." 79

Again however there is no evidence to show that this active segment is involved in the type of active opposition which Illich advocates. There is no proof that they are getting to the heart of the problem rather than its manifestations.

It would appear however that the young, too, act out of self-interest. Socialization to value systems which nominate what is worthwhile, acceptable or desirable occurs from a very early age through family and peers. Even those
actively involved in opposition may draw the line at radical activities which could limit their own opportunities for social advancement. As Heilbroner points out, it will not be surprising if the graduates of the post-industrial educational institutions expect

> the normal reward for having completed the long training that society has enjoined. Guarantees of employment, security of tenure in work, the "right" to expect an uninterrupted flow of income are thus plausible consequences of the transition to a post-industrial occupational and educational framework. 80

The youth of the middle class have too much to lose by pressuring for the reconstruction of the entire system. Their objectives and acts will therefore not involve major social rebellion.

Perhaps one reason why the young will be a potential resistance-force is that like the "professional intelligentsia" they are victims of the contradictions between what is and what should be. The are caught between "the heightened sense of human possibility and the increased demands imposed upon them for earlier forms of occupational or preoccupational socialization." 81 They will react therefore in order to break down a frustrating situation. There is however no indication that all young people will feel this bind nor that those who do will be equipped with the radicai tradition necessary to inspire them to react. Even if they do react, it cannot be ensured that their actions will be aimed at that which Illich regards as the heart of the matter. Due to the uncertainty of these issues it would seem that once again Illich has exaggerated the role this group can play in opposing increasing technocracy.

Illich has also seen the church as serving a vital role in the resistance movement, for it can bestow on the individual an appropriate state of mind for reconstructing society. ${ }^{82}$

Parkin reports that C.N.D. had a considerable religious contingent which regarded the church as having two functions in the movement. Firstly, in line with Illich's opinion, some wished to "sensitize Christian consciousness to the dilemma." 83 With a vitalized Christian outlook believers ought to oppose the policies of the existing power elite.

The second proposed function of the church in the C.N.D. is not compatible with Illich's views. Many individuals wanted the church to extend its teachings past "personal conduct" and into major political issues. C.N.D. was seen "as providing an opportunity for the church to recapture its waning moral influence and leadership." 84 Although the distinction between religious and political issues was emphasized, a call was made for the church to take a definite political stance. This contrasts with Illich, who argues that "it is blasphemous to use the gospel to prop up any social or political system." 85

Once again, however, there is no evidence to show that these religious groups of activists reach the source of the problem. Illich himself has pointed out that the church does tend to retreat from any major forms of social change. As a result it cannot be considered a contender for bringing about the radical reforms he advocates. A strong case can be made to support the notion that the
church and its teachings are often used to retain the status quo rather than to radicalize the faithful. The church therefore appears a dubious source of radicalism and radicalization unless it is dramatically overhauled.

## (iii) Resist What and How?

The previous analysis has considered the radical potential of different groups and institutions in society. The picture is rather bleak. But even the actions of those few radical factions which have been found to exist are not immune from further problems. Two major conceptual perplexities in particular pervade their actions. What are they aiming for? How do they get there?

From what has been said, it is evident that there is no single united front of opposition to the technocracy, therefore no single, common plan of action or set of objectives exist. The result is an unclear statement of aims and factionating which weaken the focus of opposition. Birnbaum refers to "a cultural revolution so diffuse, so multiple in its forms and so contradictory and retrograde in many of its aims, [it] is not necessarily productive of political progress." 86

As things stand, groups have their own objectives. Women's and gay liberation, ecology, civil liberties, nuclear disarmament, anti-racist movements etc., are all heading in different directions. Their political potency is diffused and therefore reduced. It is unlikely that a radicalized individual will belong to all of these groups and the amalgamation of them all into one united front is equally implausible.

It is not simply a matter of coordination; there is a major problem in developing a common ideology. There is an absence of "a general political will" 87 pervading radical groups. Such a "will" is vital for meaningful social reform. Illich supplies a common ideology with his thesis of "convivial reform" which could amalgamate the existing radical groups at the same time as indirectly serving their individual needs. A convivial society would be open to the changes necessary for the attainment of the objectives of all these groups. Political prisoners, women, minority and ethnic groups would be liberated from their present manipulated positions and restored their dignity.

Illich however, does not supply a method by which these groups, which are at present so fragmented, can be amalgamated into one radical pressure group with the numbers and potency to force the power elite to compromise. Without such a mechanism it is unlikely that these groups will come together or that they will be able to influence the power elite to any great extent individually.

In a united front or as individual organizations radical pressure groups are still faced with the problem of how to bring about change, i.e. what mechanisms or technqiues can they use.

Illich places much faith in existing mechanisms such as legislation and governmental policy making. ${ }^{88}$ Several theorists have however rejected this view. They argue that the existing structure is too set in its ways to be utilized for the radical transformation of society, and that to pin one's hopes on such mechanisms is naive. Mueller argues
that the state cannot be relied upon to bring in new radical legislation. He claims that

By gaining control over institutions which are beyond the traditional domain of government, the state has become pivotal in the management of advanced industrial society. Considering the directive power of the executive, it appears unlikely that structural changes can be brought about through parliamentary institutions since they seem to have exhausted 89 their function in advanced industrial society.

The state in post-industrial society is too closely tied into the existing production system to enable it to shake off these financial and ideological bonds with ease. Its actions and policies will therefore link directly with technocratic ideology. Entrusting such a group with the role of instigating anti-technocratic policies is entirely unrealistic. As Hindess concludes, "the centralization of the economy, the interpenetration of government and industry ... the spread of planning, the autonomy of political leaders ... - all these are irreversible as far as action which can be taken within the present political system is concerned." 90 Illich's notion of using the present political system to instigate radical social change, ignores this point entirely and by doing so is rendered naive and ineffective.

If the existing structure cannot be entrusted with such a task other mechanisms must be utilized, but which ones? As Birnbaum sadly points out "it is difficult to see any new forms or institutions for formal political participation developing." ${ }^{91}$ If this is the case the future looks particularly grim and Illich's writings shed no light in this area at all.

One could revert to the Marxist analysis and emphasize the necessity, in some situations, of violence. This totally contrasts with Illich's view, which holds that violent reaction is uncontrollable and unfruitful. 92 Neither however appears necessarily true. As Marx has claimed, there will be some situations in which violence is unavoidable. It will be inherent within the existing system. Those who have power and security are unlikely to surrender them without some struggle. Violence, therefore, whether desired or not, must occur in such a situation, Marx also argues that where no mechanisms exist within the established structure through which the necessary changes can occur violent reaction may be the only way to bring about reconstruction. He argued that "physical force ... as opposed to terror was ... a perfectly acceptable revolutionary weapon provided that the economic, social and political considerations were such as to make its use successful." ${ }^{93}$ Hence Marx distinguishes between the unguided "terror" which Illich dismisses and "physical force" with a distinct objective, which cannot be rejected quite so easily.

It may be the case that in post-industrial society radicals must employ "physical force" as the means to attaining the required radical social transformation as all other mechanisms appear ineffective. In that light violent revolution may be justified on Marxist terms. However, whether the time is right to ensure its successful deployment is another matter. It is doubtful at this stage of the radical movements' developments in post-industrial
society whether they have the numbers, determination, equipment, unity or motivation to triumphantly launch a physical attack on the existing power structure. As such the time is not right for violent revolution. Yet another course of action is ruled out.

It would appear that there is no appropriate mechanism available through which convivial reform may come about. Illich's suggestions are at best naive and all alternatives appear equally ingenuous.

## (d) Summary

This section has attempted to show the implications which criticism of post-industrial theory have for Illich's work. It has focused on three critical themes. Firstly, problems related to the conception of an increasingly powerful technocracy. It was concluded that if these criticisms are correct, Illich, concurrent with postindustrial theorists, has overestimated this group. He overstates the power elite's unity and the importance of techniciens and technical ideology in the decision-making process of advanced societies. At the same time he has understated the power of the public, the non-technical aspects of decision-making, and the diffusion within the power structure and its related weakening effect.

Secondly an analysis has been made of the 'soft services'. It was concluded that Illich obviously does not ignore them as other post-industrial theorists have done. His analysis actually focuses upon them and in fact cogently refutes the argument that this type of agency is more public
in character than the service agencies of the private sector. Finally the viability of Illich's theories on radicalism were discussed. A conclusion was reached that in this area he is vulnerable to the arguments proposed both for and against post-industrial analysis. He has optimistically, or naively, exaggerated the plausibility and possibility of meaningful social change occurring in hyper-industrial society. He has overstated the number of people who will be involved in such a resistance movement and how united they will be. He has exaggerated the function of various institutions and groups in opposing the existing structure. He has also placed an unjustifiable amount of faith on existing mechanisms as means by which the necessary transformation of society will eventuate.

It would appear that Illich can be defended against the Marxist critique by constructing a retort based on the aspects of his work which concur with post-industrialism, presuming them to be correct. However, if the criticisms of these themes are correct, he is faced with a new set of problems. Although it has been shown that his own personalized style of post-industrial analysis does avoid the critical theme relating to the soft services, he fails to evade the criticisms concerning resistance and the technocracy. These two critical themes render Illich's thesis vulnerable, casting doubt on many of his forecasts regarding hyper-industrial society, and negate many of his suggestions for future action.

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CHAPTER EIGHT

## CONCLUSION


#### Abstract

Time-consuming acceleration, stupefying education, self-destructive military defence, disorientating information ... unsettling housing projects, pathogenic medicine [are] the results of industrial overproduction that paralyses autonomous action.

Ivan Illich, Limits to Medicine, p. 125.


It was stated in the introduction to this work that most analyses of Illich's writings are ineffective and shallow as they fail to acknowledge or perceive the "higher synthesis" which runs throughout them. His arguments, such as theone proposed in Deschooling Society, can be fully understood only when viewed in the light of his wider considerations regarding the social structure of advanced industrial society. Certainly the argument advanced in Deschooling Society has merits and shortcomings of its own. To do it justig however we must view it simply as a description of one of many problems arising from "a destructive social order." ${ }^{l}$ What it prescribes is just one course of action adhering to a general theme of reaction against that social order. A closer investigation of the "higher synthesis" which pervades Illich's work was necessary if we were to understand his analysis of the nature and cause of advanced society's social structure, which requires, amidst other social reforms, "deschooling".

The purpose of this thesis has been to identify this "higher synthesis", demonstrating its congruence with major themes proposed by post-industrial theorists. This convergence furnishes his work with an amalgamation of merits and shortcomings. An examination has been made of how the strengths of post-industrial thought can be utilized to provide a defence of Illich's writings against many criticisms and how its weaknesses make possible a new critique of his work.

The strengths Illich acquires from the post-industrial themes, incorporated into his analysis, relate to his interpretation of the source of social decay. Like post-industrial forecasters, he argues that the reduction of individual initiative and the growth of alienation are the result of the implementation of 'manipulative' institutions and tools in society. This analysis transcends the now outmoded left wing - right wing polemic as both factions of this debate act by the common ideology, which encourages the initiation of 'manipulative' mechanisms. As a result any advanced socialist or capitalist nation is vulnerable to the problems and the decay which are related to this ideology and the institutional format it manifests.

Illich has identified this ideology, which is becoming increasingly dominant in advanced society, as "economic growth first". ${ }^{2}$ Like post-industrial theorists, he proceeds to argue that the dominant power group in this society is constituted of those individuals endowed with the knowledge and skills necessary to implement this
ideology successfully. This group will regulate the other sector of society through the manipulative institutions and tools they wield. No interference will therefore hamper the attainment of their 'technocratic' objectives.

The post-industrial interpretation of the source of alienation in advanced industrial society is a major strength of Illich's analysis in that it can be used to defend his work cogently against the Marxist critique which has previously been regarded as a major stumbling block for his social analysis. This defence rests on the premise that it cannot be shown, either logically or empirically, that the manipulation which creates alienation is the product of capita 1 ism, as the Marxists argue. It is rather the product of a 'technocratic' ideology and power elite. As the state is equally capable of adopting and implementing this ideology, the Marxist claim, that society must reject the capitalist mode of production in favour of a socialist one, does not stand as a solution to the problem of alienation. The component members of the alienating body are replaced but the problem remains since the ideology which is its source still persists.

Gintis' pivotal criticism of Illich is that his work lacks a "higher synthesis" and as such fails to identify the central dilemma of advanced society. His analysis and proposed solutions are therefore said to be shallow and misguided. As previously stated, Illich's writings in actuality do exhibit a "higher synthesis". His claim that "certain tools are destructive no matter who owns them", simply but effectively illustrates this post-industrial
styled "higher synthesis". To Illich
the issue at hand is not the juridical ownership of tools, but rather the discovery of the characteristic of some tools which make it impossible for anybody to "own" them. The concept of ownership cannot be applied to a tool that cannot be controlled. The issue at hand, therefore, is what tools can be controlled in the public interest. Only secondly does the question arise whether private control of a potentially useful tool is in the public interest. ${ }^{3}$

This is a different interpretation of the source of advanced society's problems to the one proposed by Marxists but it presents, nonetheless, a cogent analysis of the issue. Gintis fails to recognise this analysis in Illich's work. As a result it would appear more appropriate to conclude that on the strengths of the post-industrial themes incorporated in Illich's writings, it is the Marxist critique of Illich, proposed by Gintis, which is shallow and misguided.

The juxtaposition of Illich's writings with post-industrial themes, however, presents some encumbent problems. As post-industrial theory is not self-evident, Iflich's concurrence with it renders him vulnerable to the criticisms which have previously been made of the works of more conventionally acknowledged post-industrial forecasters.

Illich must yield to the criticisms which have been levelled at the post-industrial analysis of the power structure of advanced industrial society. If these criticisms are correct, Illich, like the post-industrial theorists, has overemphasized the role of the technical intelligentsia and the 'technocratic' ideology in the decision-making process. In doing this he has ignored the
non-technical aspects and inputs of this procedure and has neglected the evidence which indicates that the technical intelligentsia do not constitute the decision-makers. He has also overstated the unity of the power-elite in advanced society by failing to account for the inter- and intrapower group struggles documented by other theorists. As a result of these struggles, the technocrats must compromise, and therefore dilute, their ideologies with those of others', in order to act.

Illich also has to face criticisms of his analysis regarding how resistance can and will occur against advancing 'technocracy'. His analysis of this issue is extremely indistinct. His claim that resistance will arise from all "classes, incomes, faiths and civilizations"4 simply illustrates his position. Criticism may, therefore, eventuate from several perspectives. Two have been dealt with above.

Firstly, he does not adopt the post-industrial concept of 'bourgeois radicalism'. By failing to do so he can be criticized for neglecting the works of various theorists which have ascribed to the middle class the central role in the reaction against 'technocracy'. In failing to acknowledge the middle class' peculiar revolutionary potential, Illich overestimates the roles of other social classes in the resistance movement and therefore distorts his analysis of the situation.

However his claim that resistance will come from "all classes [and] incomes" does anticipate a reaction of sorts from the middle class and although it is not
especially accentuated it renders him vulnerable to a different critique, one based on the existing criticism of 'bourgeois radicalism'. The case against 'bourgeois radicalism' stresses that besides a few component elements of the bourgeoisie there is little chance of its offering a strong, united, determined resistance to 'technocracy'. If this critique is correct, Illich is again displaying a weakness common to post-industrial theory.

Illich also neglects the evidence which shows the decline of working class politics. It appears that the working class is another class which will fail to react against the encroachment of 'technocracy'. As a result IIIich's revolutionary specuiations are rendered even more dubious.

Critics of post-industrial theory have also pointed out that most people in society lack the capacity to react politically against the 'technocracy'. They also note that there is no existing or emerging mechanisms which can be used as a means through which a strike at the power elite, or elites, can be made. These criticisms of post-industrial forecasting are equally applicable to Illich as they are directed at questionable themes in his work which concur with post-industrial theory.

On the topic of resistance Illich is in a worse position than acknowledged post-industrial thinkers. His analysis is indistinct to the extent that he falls victim of both the cases which have been made for and against the post-industrial theorists' conception of 'bourgeois radicalism'. Even though the two cases are rampantly
opposed to one another, Illich's analysis fails to account for the evidence proposed by either viewpoint and consequently is vulnerable to the convincing aspects of both arguments.

There is, however, at least one major critical theme of post-industrial theory which, although applicable to Illich, is rebutted by the nature of his own use of the perspective. This is related to the criticisms that post-industrial forecasters neglect the public welfare and service agencies in their analyses of the social structure of advanced, industrial society. It is argued that these 'soft services' are actually publicly controiled and directed. The post-industrial notion that agencies are becoming increasingly manipulative is therefore incorrect and distorted, as it neglects those in the public sector which are fully accountable to the public.

Illich's analysis has actually focused on these 'soft services' and has amply illustrated that there is no reason to believe that the public service agencies are any the more publicly accountable than the institutions in the private sector. As the government may be as manipulative as any private institution and is often closely linked with, or serves the same function as, private enterprise, it will be just as likely to manipulate the public service agencies under its control in order to guide people in 'appropriate' directions.

The very form and content of Illich's analysis, which augment and direct his application of post-industrial themes, strongly reject this criticism of post-industrial theory.

It is evident that he not only concurs with post-industrial themes but also adds to the perspective, giving it new strengths.

What is implied here, and what has been evident throughout this work, is that Illich's thesis, concurrent with post-industrial thought, stands and falls on the perspective's strengths and weaknesses. The cases for and against post-industrial thought have been equally detailed in this work and the benefits and problems they give Illich's analysis of advanced industrial society have been ascertained. The strengths of post-industrial analysis have been accepted in this thesis as providing a plausible defence of Illich's writings against the Marxist critique. However this work has also questioned the weaknesses of post-industrial analysis which provide a new critical perspective.

No attempt however has been made to prove or disprove post-industrial theory. It must be acknowledged that there still exists a conflict regarding the validity of this perspective. There is obviously a need for further analysis to investigate the plausibility of the cases for and against post-industrial theory and also the implications of any subsequent findings, both for Illich's general thesis and his specific areas of reform, e.g. 'deschooling'. This further investigation must ascertain whether the weaknesses of post-industrial theory and therefore those of Illich's analysis, diminish the strengths of post-industrial theory and therefore those of Illich's analysis. What implications
do the weaknesses of post-industrial theory (discussed in chapter seven) have for the defence of Illich against the Marxist critique, constructed (in chapter six) on the strengths of post-industrial theory?

This dispute necessitates an analysis of the cases for and against post-industrial thought of an order which cannot be offered in this work as it requires an investigation approached from a different perspective than that adopted here.

It should however not be thought that this is the only remaining analysis which is required concerning the implications of this work. As stated in the introduction, an objective of lhis lhesis was to pui Ilifich into perspective. The clarification of his "higher synthesis" provides a clearer insight into his work. A case against the major, existing criticisms has been made but a new critique has emerged. As a result some fallacies concerning Illich's work have been revealed. At the same time new directions have been uncovered along which criticism may be advanced. More positively these criticisms identify aspects of his writings which require adaptation. Such restructuring is necessary in order to account for these newly perceived problems, either to vindicate his work or to acknowledge and account for them in further writings.

Future work may concentrate on how the response to the Marxist critique and the emergence of new problems, both offered in this work, affect his writings not on an abstract level, as has been analyzed here, but in the more practical realm. Such work would relate to his particular
exhortations for social action related to 'deschooling', 'limited medicine' or 'equitable energy' in advanced societies.

In this way this work has attempted to indicate that Illich's writings are opened up for new themes of investigation both on the theoretical and practical level. These investigations provide a clearer understanding and evaluation of a body of work, which has often been prematurely rejected.

## Footnotes

1. Illich, Limits to Medicine, p. 89.
2. Illich, Deschooling Society, p. 67.
3. Illich, Tools for Conviviality, pp. 25-26.
4. Illich, Deschooling Society, p. 114.

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