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**Donald Broady**

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The Prokla Approach**

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Apropos of a Tenth Anniversary.

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CRITIQUE OF THE POLITICAL ECONOMY OF EDUCATION: THE PROKLA APPROACH  
Apropos of a Tenth Anniversary

A report from the research projects "TEACHING PROCESSES - CONCEPTION OF THE REAL WORLD - EDUCATIONAL AND VOCATIONAL GUIDANCE" and "SOCIALIZATION AND QUALIFICATION" within the Research Group for Studies in Curriculum Theory and Cultural Reproduction.

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## FOREWORD

This paper is a preliminary version of a contribution to a special issue, edited by Henry M. Levin, of the Journal for Economic and Industrial Democracy (Sage Publications). According to the plans, the issue with its theme "The Political Economy of Education" is to appear in Vol. 2 (1981). By now duplicating a limited edition of this preliminary version, we hope to receive discussions on the theme, as well as comments that could influence the final paper.

Some parts of the content in this paper are also to be found in a more comprehensive report in Swedish: Broady, D., 1978: Utbildning och politisk ekonomi (Education and Political Economy). (Stockholm Institute of Education, Department of Educational Research, Studies in Curriculum Theory and Cultural Reproduction, No. 1)

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Donald Broady

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## INTRODUCTION

This year marks the tenth anniversary of the emergence of a new research discipline: the so-called "critique of the political economy of education" or the "Marxist economics of education". It has now been ten years since the volume Materialien zur politischen Ökonomie des Bildungssektors (1971) was published in Erlangen, West Germany. Edited by Elmar Altvater and Freerk Huisken, this collection of papers from an Erlangen seminar series of 1969-1970 gained immediate significance in the Marxist discussion of the relation between education, state, and economy. Much of the ensuing theory development and research in these areas, both in West Germany and elsewhere in Europe, emerged from confrontations with this "Prokla-tradition" (named after the Berlin journal PROKLA -- Probleme des Klassenkampfes, founded 1971, in which many of the subsequent contributions by Altvater and his colleagues were published).

The 1960's had witnessed an explosive development of research in the writings and methodology of Marx. This research movement was usually called "the reconstruction of the critique of the political economy;" a generation of theorizing Marxists, especially in the German-speaking sphere but to some extent also in Eastern Europe, discovered that the theory in Marx' later works is more than just "economics" in the conventional, narrow sense. This theory -- the critique of the political economy -- is rather a theory of fundamental societal relations. Especially important was the rediscovery of Marx' large, unwieldy Grundrisse manuscript from 1857-1858 and its connections with the method of Hegel, in particular that of Wissen-

schaft der Logik. (Most influential in establishing the importance of Grundrisse was Roman Rosdolsky's major work, 1968.)

"Marxist economics of education" or "the critique of the political economy of education" was to be the first area in which these newly-won theoretical insights were tested on a larger scale and also in empirical research -- perhaps because the West German Marxists themselves, as teachers and as students, were affected by what was going on in the educational sector. Elmar Altvater and others were, during the 1960's, among front-rank figures of SDS, and committed themselves to the struggle against planned state reforms of higher education. They had interest in understanding the conditions of their own work at the universities, and they had interest in understanding the connection between intellectual work on the one hand, for example that of teachers or researchers, and, on the other, the conditions of the working class.

So "Marxist economics of education" is today part of the heritage handed down to a generation of radical researchers and educators in West Germany and some other places in Europe. But it is still relatively unknown in the English-language area, in spite of the fact that similar problems have been dealt with there. Therefore, and because we here may find the outline of an interesting research program, which is still topical today, a look back at the pioneering works of the Prokla circle and the subsequent debate is in order.

## I. EDUCATION AS REPRODUCTION

Marxist and Marxist-influenced educational research during the last decade encompasses disparate trends, but there has usually been, at least, one common point of departure: education has been analyzed as part of the state-administered reproduction of fundamental societal relations.

In Europe, this was true of the "Prokla school," Elmar Altvater and others, who stressed inquiry into how the state secures the conditions underlying capital accumulation. In the area of education this means primarily how the qualification of the labor force is undertaken. Second, French sociologists, such as Pierre Bourdieu, and political scientists, such as Nicos Poulantzas, have been more interested in reproduction of social classes and in the transmission of ideology. Third, "system theorists," such as Claus Offe, have attached relatively large importance to the fact that the state and the bureaucracy must legitimate their own actions as well as rectify "consequential problems" which result from prior state action or from the anarchy of capitalistic economy.

In my opinion, it is a strength of these and other comparable contributions that they assume that education ultimately is social reproduction: reproduction of relations of production, class structure, the labor force, ideology, and personality patterns. That this is the case is actually obvious; no society can survive unless each new generation is trained in how to master and accept the jobs and life conditions in general which await it. It is not given a priori, of course, that specifically the educational sphere must help form the

labor force and the citizens. It seems evident, however, that in the more advanced societies socialization occurs less and less in the family and in production, and instead increasingly in the public sphere (which includes not only schools, nursery schools, etc., but also television and the cultural industry, leisure centers, and so forth). But even if one could imagine a hypothetical situation in which education did not contribute appreciably to social reproduction -- that is, if education were mere storage of students -- it would nonetheless be evident that no society can with impunity permit an educational system which is unable to train people to adapt themselves to existing labor conditions, living conditions, and power structures.

In other words, it is certainly a functionalistic error to reason a priori that since a society has this or that appearance, then its educational system must have this or that appearance. On the other hand, one may always safely assume that there are given limits to how the educational sector may function so as not to threaten social reproduction. This is actually a tautology (in order that reproduction function it is necessary that it not be thwarted), and it is slightly embarrassing to have to write it down on paper. Nonetheless, this perspective is absent from most of the pedagogical debate and research. Thus, e.g. methods taken from the economics of education are currently being used for educational planning and, above all, as an aid to rationalization and increasing efficiency. But the same methodology is not used to explain the social function of education. It would seem that ambitions of that kind from the late 1950's and the 1960's have been abandoned.

## II. ECONOMICS OF EDUCATION

It may be helpful to pay some attention to the economics of education. Here we find a remarkable exception which proves the rule that educational research has been blind to education's reproductive functions. It may also be helpful to compare traditional economics of education with the attempts at using the methodology of Marx' critique of political economy which we will discuss below.

I will be brief. "Economics of education" usually means exactly what the words say: it concerns relations between education and economics. As an economic discipline of its own it emerged during the 1950's in the United States, was imported to Europe during the latter part of the decade, and became important, e.g., in the subsequent expansion of higher education throughout Europe. Historically, the economics of education was an outgrowth of the post-war era's neo-classical growth theories which tried to explain economic growth on the basis of the factors fixed capital and labor. Some economists, however, noted that these two factors alone could not be the basis for all growth; from the end of the 1950's and into the 1960's a "third factor" or "residual factor" was discussed, a factor with which it was hoped the great variations in growth between various countries could be explained. For example, how was the German "economic miracle" possible, in spite of the material destruction during the Second World War? Quantitative measures of fixed capital and labor were not sufficient explanations. Further, comparative international studies suggested a correlation between educational level and economic growth. Around 1960 economists began to work with the concept "human capital." Qualifications (knowledge and skill, inclu-

ding also capacity for scientific research and development) must be an important ingredient in the "residual." If so, education is a growth-creating factor along with the previously reckoned with factors land, capital, and labor. And thus, it should be possible to analyze education as an investment, both as a contribution to the national product, and, at the individual level, as an "investment" in one's own education which later in life would yield a return in the form of a higher salary.

Thus, the possibility of analyzing education with the tools of economics arose at the end of the 1950's. There was a bold and methodologically interesting element in the human capital concept. It very consistently tried to draw parallels between the education sector on the one hand, and commodity production and the commodity market on the other. The education "market" was regarded a commodity market. Assuming a free market, the "prices" of various education were determined by supply and demand, and the "consumer" of education chose the educational alternative which yielded the greatest marginal utility, rather in the same way that the consumer chooses among detergents in the supermarket or a businessman decides upon an investment. According to some economists, then, also educational planners should take heed of economic calculations so as to insure that the educational investments yield the maximum socio-economic yield.

These more orthodox variations on the human capital theme have been harshly refuted. In my own country, for example, Bengt Abrahamsson (1976) pointed out that the cost/benefit analysis -- as worked out in Sweden -- leads to the remarkable conclusion that the education of well-remunerated court jesters for our royal family would

yield greater socio-economic gain than, say, the education of physicians or social workers (since high salary and productivity were equated). Among other critics of the human capital notion, we should point out Enno Schmitz, whose dissertation (1973a) is a thorough critique of the foundations of the human capital conception. Among other things, Schmitz makes the interesting observation that this conception may have explanatory value when used to analyze education in the private sphere. For example, a corporation's internal education of its employees is an investment which is expected to yield a return (Schmitz, 1973a: 113ff.). However, say Schmitz and others, the analogy is faulty when applied to the analysis of public education.

Today, post festum, it is easy to establish that the optimistic trust in educational investments as a relatively independent growth-inducing factor was a boom-time phenomenon. Also most of the other hopes which were tied to the possibility of using analytic tools of economics for educational research and planning have been frustrated. Economics of education has increasingly abandoned its original "pure" economic ambitions and tried instead to develop methods of predicting future quantitative and qualitative labor shortages and to adapt the scope and shape of education in accordance with these forecasts (the "manpower approach"). Further, attempts have been made to broaden the demand model by taking into consideration the importance of non-economic factors in educational planning or the individual's choice of education ("social demand"), etc. But the measurement problems are enormous, the forecasts often turn out wrong, and in practice economics of education is today primarily used for rationalization and for increasing efficiency. The hopes

of uncovering the connection between education and socio-economics seem to have been abandoned.

This development has been called "the vulgarization of the economics of education" (Straumann 1973). The formulation alludes, of course, to Marx' critique of political economy: Marx placed great value on the "classical" bourgeois economists of the eighteenth and early nineteenth centuries, Ricardo being the apex and terminus of this period. The subsequent development in economics toward instrumental and legitimizing theory was, according to Marx, a continuing "vulgarization" of the classical economists' ambitions to explain the intrinsic relationships of the bourgeois mode of production. Thus, Straumann's formulation "the vulgarization of the economics of education" implies that economics of education during the last two decades has developed analogously with bourgeois economics during the nineteenth century. But the analogy should not be forced: economics of education was never "classical" in the Marxian sense. From the very beginning, there was a practical need for successful educational planning; as the educational sector expanded, this need became increasingly important, which was the precondition for the emergence of the economics of education as a discipline of its own during the 1950's. Not even the more theoretically oriented human capital contributions represented "classical" political economy in the Marxian sense; on the contrary, they were attempts at utilizing marginalistic theory, and as such examples of what Marx meant by "vulgar economy."

Marxist economics of education takes radically different points of departure. Alternative labels are common in the literature,

such as "Marxist critique of the political economy of education," which better than "Marxist economics of education" expresses the distinctive nature of this research tradition and its dependence on Marx' "critique of political economy," i.e., the theory and methodology founded by Marx in Grundrisse, Capital, etc. The critique of political economy has two objects of inquiry. First, there is "real" political economy (socio-economics). Second, there is "idealistic" political economy (i.e. theorizing within the framework of bourgeois economics). Similarly, the research in Marxist economics of education has been characterized by two different, but interwoven, intentions. First, there is the study of actual economic conditions, such as the connection between educational reform and changing demands on the qualification of the labor force, the relation between economic cycles and changes in the educational sector, and the amount of state financing available for educational investment, etc. Second, there is the study of established theories in the economics of education. Historically, Marxist research in the economics of education emerged from a critique of the theories of the economics of education which were discussed in connection with West German educational planning during the 1960's. As early as in the mid 1960's, Elmar Altvater and Claus Offe and others within the West German SDS had begun criticizing the topical educational theories (which had been imported foremost by Friedrich Edding) as well as the actual state educational planning (see e.g. Altvater, 1965; Offe, 1966).

Here is a problem which Enno Schmitz has put his finger on. Marxist economists of education have attempted to investigate the established theories in the field by utilizing Marx' critique of po-

litical economy. Schmitz questions this intention. For if, as mentioned above, established economics of education is "too much 'vulgar economy'" (Schmitz, 1973b: 806), then it may reveal little of the real connection between education, labor market, qualification requirements, etc. Rather, it may serve more to conceal the real relationships. The theory of Marx, the critique of political economy, had not vulgar economy as its object, but rather the earlier, classical bourgeois economy. In the works of the classical economists Marx found "the self-comprehension of bourgeois society" in its unprecedented pure and systematic form; the ideology of the classical economists corresponds to the essential relations of bourgeois society as manifested on its "surface." "Ideology" in this precise Marxian sense must not be confused with lies and falsification. It may be then, as Schmitz suggests, that early Marxist economics of education (such as represented by Altvater and Huisken, 1971) relied on Marx' method in a context in which it did not fit. I will return to this central point.

I would now like to move on to the other endeavour of Marxist economics of education, i.e. the investigation of the "real" political economy of education.

Marxist economics of education begins with the assumption that there exist fundamental relationships between educational and politico-economic developments. It is obvious, of course, that some relationship exists: state finances limit the amount of educational investments, and the scope of various educational courses is limited in accordance with forecasted demand for skilled labor. But Marxist economists of education assume that the relationships are of

another and more thoroughgoing kind than this quantitative relationship; they examine education within the context of the reproduction of capital and reproduction of society as a whole. In short, the bounds for education are ultimately set by the conditions underlying capital accumulation. For example, state educational expenditures lead to a decrease in the amount of society's surplus-value available for productive investments; but on the other hand, these expenditures are necessary for, among other things, the reproduction of the labor force. Therefore, here exists a conflict: The separate capitals have interest in keeping public educational expenditures low, while at the same time the collective capital requires an adequately qualified labor force. And, according to the analyses of the Prokla circle, the state has as its long-term task to attend to the conditions for reproduction of collective capital.

It is difficult to make general comparisons between Marxist and traditional economics of education, partly because the latter can be anything from the construction of models to collecting empirical data. But a couple of important differences should be noted.

Marxist economics of education has developed as an attempt to explicate the politico-economical conditions of education, while the interests of traditional economics of education have been closely tied to the need for methods of educational planning, e.g., problems of resource allocation, rationalization, and forecasting.

One can thus say broadly that Marxist economics of education adheres to the early ambition of the human capital conception: to explicate the relationship between education, the labor market, and the development of productive forces. But there are significant

differences. As mentioned above, the human capital concept regarded the qualification of the labor force (and therefore education) as an independent source of economic growth and as "capital," both for the individual as well as for society. According to marxist economics of education, however, the educational sphere is to a large degree determined by the qualification requirements of capital:

Education, then, is not an immediate source of enrichment for the person who is being qualified, and it can thus not be called a capital value. It is the process of capital accumulation and its technical manifestations which determine how the capital owner may transform the changed qualifications of the labor force into increased capital productivity.

(Salling Olesen, 1976:3)

### III. THE PROKLA SCHOOL

#### III.1. The Controversy with the Stamocap Tradition.

Since the mid 1960's, Altvater and his colleagues, the Prokla School, have tried in a series of contributions to investigate how the course of capital accumulation determines the modern interventionist state -- and so also the development of the educational sector. If one were to summarize in a formula the foundation of the analyses of education which have emerged in the wake of the Prokla approach, then one should particularly stress the close ties to Marx' critique of political economy, regarded as a general theory of capital accumulation which is simultaneously a theory of crisis. According to many critics, the Prokla school was too quick in at-

taching the analyses of state and education to the capital accumulation process.

The state analyses of the Prokla School is sometimes called the "stincap" theory, from "the theory of state interventionist capitalism." The term "stincap" is analogous in construction with "stamocap," the theory of state monopoly capitalism, which is in Eastern Europe, and in various forms also in most Western European communist parties, the dominant view of the capitalist state. In short, the advocates of the stamocap theory regard Marx' critique of political economy (Capital and its preparatory works) as dealing with competitive capitalism. However, development of productive forces has progressed with leaps and bounds, large monopolies have thwarted competition, and the state and capital have amalgamated. Thus, today capitalism has moved into a new phase, "monopoly capitalism," which has invalidated the general "laws" put forward by Marx -- laws dealing with commodity exchange, capital accumulation, and the falling rate of profit. Therefore, the analysis of modern capitalism must build not on an orthodox application of Marx' methodology, but rather on Lenin's analysis of the state and imperialism.

This is, of course, an unjustifiably cursory characterization of the stamocap theory, a theory which by no means is a uniform and completely developed phenomenon. Perhaps it would be better to refer to "the stamocap theories," but the term "stamocap theory" has won acceptance (although not to any great degree among the devotees themselves), in spite of the fact that the suffix "theory" can be confusing. The stamocap theory is "more a research program than an independent theory," says Kosonen, for example, in a contribution criti-

cal of the widespread practice of confronting the Prokla School with the stamocap theory. The stamocap tradition should be regarded as a broad, empirically oriented, and theoretically eclectic research tradition, while the Prokla School has long dealt mainly with the critique of political economy on a general level; not until the mid-1970's did the Prokla School attempt empirical accumulation analyses. (Most influential was the so called "Realanalyse"-attempt by Altvater et al, 1974; further developed in Altvater et al., 1979.)

It is, therefore, unfair to compare the state analyses of the Prokla school with those of the stamocap researchers, as if they were two comparable alternatives. On the other hand, the Prokla analyses (e.g., Wirth, 1973; Ebbinghausen /ed./, 1974; and several works by Altvater) often had the character of polemics, directed against methodologically dubious premises of the stamocap tradition -- premises which recur in many other marxist traditions, not least of all in predominant Anglo-Saxon ones. A review of a few main points in this polemic will therefore say something about the viewpoints of the Prokla circle itself.

Let us first comment on the Marxist thesis, as put forward already by young Marx (e.g., in his critique of Hegel's philosophy of law); of the "reduplication" of bourgeois society in "society" and "state." The Prokla researchers criticized the stamocap tradition for blurring this fundamental distinction.

In precapitalistic societies the state is, so to speak, the obedient tool of the ruling classes. Not until the advent of capitalism occurs a "reduplication": on the one hand there is "society" to which private interests belong (the interests of separate competing capitals, and also of labor); on the other hand

the "state" appears as a neutral instance, raised above the class society, with the task of providing for general good. Assuredly the bourgeois state is a class state; it is "in content no less bound to defend separate interests of a class than are other states -- but it can, under normal circumstances, do this in another form: the form of fictitious universality." (Aagaard Nielsen, 1976:70). Therefore the bourgeois state, as opposed to other class states, is no "tool state," no lengthened arm of the ruling class. Its task is to secure the existence of capitalism (not that of separate capitals), by means of mastering crisis, and caring for the general conditions necessary for capital accumulation; education is one example. As capitalism develops, these functions become more numerous and extensive; which does not mean, however, that the fundamental separation of "state" and "society" dissolves. On the contrary, it is this separation (i.e., the appearance of the state as representing a general interest, raised above all the separate interests fighting each other within the "society") which makes possible the specific form of modern, interventionist capitalism. This form is distinct from both precapitalist societies and planned economies, it is distinct from various types of dictatorships, and it is also distinct from capitalist economies with weakly developed state intervention (of the Italian type).

According to the Prokla researchers, this society/state distinction is blurred in analyses of the Stamocap type where the modern bourgeois state is treated as the lengthened arm of monopoly capital factions. One reason for the Stamocap view may be that these analyses have often functioned as ex post facto support for an already previously prescribed political strategy, i.e., one or another kind of

anti-monopoly strategy (an extreme example being the compro-messo storice in Italy) which includes the notion of two stages in the transition to socialism. Socialism must be preceded by a (bourgeois) democratic phase, attained through the union of all forces (including non-monopolistic capitalist factions) in a struggle to wrest the state apparatus from the hands of monopoly capital.

Other reasons for the stamocap researchers' view of the state may be found in their methodological premises. As capitalism developed into "monopoly capitalism," they argue, competition in the traditional sense has largely been thwarted. Thus, Marx' methodology is not currently valid since it dealt with competitive capitalism and not monopoly capitalism. It was Marx' view that the general laws of capitalism manifested themselves in and through competition. These were laws such as the law of value, the general law of capital accumulation, the law of the tendency of falling rate of profit. These laws manifest themselves in competition, which thus acts as a regulating principle on production, circulation, and consumption. Now that competition in the traditional sense has been thwarted and can no longer act as a regulating principle, it must be replaced by another regulating instance: the state, or more specifically, the intertwined interests of (monopoly) capital and the state. This means that the stamocap researchers tend to espouse a so-called "power sociological" view of the state: it is the grip of the monopolistic capital faction on the state apparatus which determines the state's actions.

### III.2. Eimar Altvater on State Interventionism

So much for the brief summary of the Prokla School's evaluation of the stamocap tradition. If we now move on to the Prokla School's own concept of state, we find an entirely different view of state action, a view which also has been very important for Marxist economics of education.

The Prokla School has been reluctant to use the term "monopoly capitalism." The state, they say, is not a passive tool in the hands of a group of monopoly capitalists. Rather, it is consideration for the conditions underlying accumulation of the collective capital which sets the limits for state actions. This means that the state may act contrary to the interests of certain capitalist factions, even monopolistic factions. In order to clarify the conditions for capital accumulation, the Prokla School utilizes Marxist critique of political economy. They see this theory as just as valid today as one hundred years ago, since its object is the "anatomy" of bourgeois society, i.e., the laws of development which underlie every capitalistic society (even if these laws may manifest themselves in different ways in different societies). According to the advocates of the Prokla School, the stamocap researchers read Capital only as a theory of superficial manifestations occurring during a special period -- that of competitive capitalism.

But if the modern interventionist state is not the lengthened arm of monopoly capital, then what is it? No one can deny the fact underlying the stamocap theory's "tool state thesis," i.e., that the state increasingly intervenes in society and that therefore the

interests of the state and of capital become increasingly intertwined. Altvater et al deny neither that the bourgeois state is a class state nor that state interventionism has increased. But they maintain that one cannot understand how the interventionist state functions and what separates it from other class states if one confuses state and capital and satisfies oneself with pointing out that the state is the ruling class' state (which says everything and nothing, since it is true of every class society).

Altvater, in his influential paper of 1972 on state interventionism, points out that the bourgeois state appears as the protector of an illusory common interest. In Marx' words, the state appears as "an independent entity outside bourgeois society." This is not a case of mere deception. According to Altvater, the ideological manifestation of the state as an independent entity is (like all ideology) economically determined. It is necessary for the state to function "non-capitalistically in a capitalistic society;" otherwise it would not be able to fulfill its aim of guaranteeing the reproduction of the collective capital. The reduplication of bourgeois society into "society" (private interests, such as separate capitals or the interest of workers as wage workers) and "state" is a necessity. For example, the state is not subject to the constraints of value formation, and thus can attend to business which may be necessary for the collective capital but which is not remunerative. Since the 1930's the state has taken over to an ever increasing degree those functions which private, separate capitals are incapable of fulfilling. Specifically, Altvater thinks that the activity of the interventionist state relates to the following four areas: 1) "general material con-

ditions for production;" 2) general juridical conditions (legislation, courts); 3) settlement of the conflict between wage labor and capital, and when necessary repression of the working class through juridical and policial means; 4) guaranteeing the existence of the national collective capital and its expansion on the world market.

It is above all the first area, "general material conditions for production" -- which might best be called the "infrastructure" -- which interests Altvater, and this is the point of departure for his determination of the state. The word "material" may be a bit misleading in this context, since Altvater includes among the "general material conditions for production" the qualification of the labor force -- the most important function of education, according to the Prokla School.

The central point in the analyses of education which have been undertaken in conjunction with the Prokla School's analysis of the state is the attempt to discover the relationship between the need of capital for a qualified labor force and developments within the educational sector.

Capital's interest in education is beset by contradiction, says Altvater. On the one hand, education and qualification of the labor force is seen as a necessity for the collective capital, and on the other hand, separate capitalists want to keep public educational expenditures as low as possible, for two reasons. First, educational expenditures reduce the availability of funds for productive investments; if the cost for the reproduction of the labor force increases, then the sum of surplus value available to capital decreases. And second, people who are being educated cannot be used in productive

labor. Further, an expensive education raises the value of the labor force, which in some circumstances may raise its price, which is to say, the level of wages. Indeed, the latter thesis has been called into question (e.g., Cogoy, 1973:158), but the basic reasoning is correct, of course: it is the essential task of the state to insure thereproduction of the collective capital, and in this context education is a necessity. But at the same time, increased consumption, even collective consumption of education, means that resources are withheld from circulation, and thus, that the opportunities of separate capitals for accumulation of capital are diminished. Hence, important contradictions within state educational policy. (See, e.g., Altvater, 1972; Altvater, 1973: 179ff.; and a presentation in resumé in Altvater et al, 1976: 107.)

Parenthetically, it should be pointed out that one must distinguish between different kinds of educational expenses. On the one hand there are expenses for school buildings, teaching aids, etc.; and on the other hand there are teacher salaries, etc. The production of school buildings and teaching aids can proceed according to normal capitalistic principles under the auspices of private capital, just like every other kind of capitalistic production. Expenditures for teacher salaries are of an entirely different character: the "production" which takes place during education, i.e. the production of qualifications in pupils, is not commodity production. The resources which the state invests in teacher salaries are thus withheld from capital accumulation.

All this may indeed sound obvious, but the optimistic beliefs that educational investments are a rosy road to economic growth and

a means for solving social problems are amazingly tenacious.

One of the Prokla School's lasting contributions is that it drew attention to such politico-economic limits on the state's freedom of action in regard, say, to educational reforms. Thus, the Prokla School has been beneficial as a corrective also to the previously mentioned tendencies to reduce the issue of the character of the bourgeois state to a question of the dominance of a certain class or class faction.

### III.3. Interpretation of a School Reform. An Example.

As mentioned above in the introduction to this paper, a volume entitled Materialien zur politischen Ökonomie des Ausbildungssektors (Altvater and Huisken /eds./, 1971) is the cornerstone of Marxist economics of education in West Germany. This collection of contributions should be seen first and foremost in relation to the interest of the academic left in the societal function of higher education, their own functions as *intelligentia*, and their relationship to the working class. These contributions were also one stage in the struggle against the state reform of higher education; they were a critique of theories for educational planning; and they were contributions to the ongoing discussion of the comprehensive school. I shall review the last-mentioned, always topical debate surrounding the West German comprehensive school as an illustration of the significance of the Prokla School's reasoning.

The comprehensive school has today not yet been entirely rea-

lized in West Germany; the reform which was initiated at the end of the 1960's has bogged down, and the tri-sectioned secondary school (from the fifth grade) is still the rule; this is hardly compatible with modern ideology of equality. Ever since the turn of the century, Social Democracy has pressed for the comprehensive school. The decision for a gradual reform was finally made in 1969, after unsuccessful attempts at introducing the comprehensive school following the Second World War. Many Social Democrats and Free Democrats welcomed the reform as a victory for modern principles of democracy and progressive pedagogy and hoped that the school would be a springboard for the democratization of the rest of society.

But critics from the left objected, saying that democratization of the school can never precede the transformation of society; the order must be reversed. And these leftist critics were provided with ammunition when Altvater/Huisken in 1971 and Huisken in 1972 pointed out the connection between the reform and the new demands being placed on the qualification of the labor force.

Jánosy's already classic book, Das Ende der Wirtschaftswunder (1966), served as a foundation. According to Jánosy, with the close of the period of reconstruction and with increasing mechanization and automation, the level of qualification of the labor force had become the decisive prerequisite for continued capital accumulation in the Federal Republic. Actually, Jánosy himself wrote that the labor force needed other qualifications than previously; this, however, has often been misinterpreted to mean that technological development leads to demands for higher qualifications.

Jánosy's argument on the level of qualification of the labor

force became, to cite Baethge (1972:21), "for whole age-cohorts of critical students the basis for their understanding of the attempts at educational reform in the Federal Republic." One of these "critical students" (who also had many years' experience as a Folk School instructor) was Freerk Huisken, whose dissertation Zur Kritik bürgerlicher Didaktik und Bildungsökonomie (1972) immediately became a model for Marxist politico-economic analyses of educational reform.

Huisken's point of departure was a remarkable reversal in the official German ideology of education -- away from the traditional, humanistic, idealistic Bildung, and towards Ausbildung and crass programs for rationalization, efficiency, and economization.

Huisken related this ideological reversal to the fact that the 'technical composition' of capital had increased during the 1960's, which means, expressed simply, the productive workers had become fewer and the machines had become more numerous and more complicated. Since the educational system lagged behind this development, future workers were provided with insufficient or inadequate qualifications; this led to a crisis in the educational system and to a string of state interventions. This argument, then, follows Jánosy.

Altvater and Huisken's volume of 1971 and Huisken's dissertation of 1972 were pioneering works and must be judged in that light. They were somewhat one-sided in their orientation towards an understanding of the politico-economical determination of education. The same is true to a greater degree of some subsequent repeaters. Yet, even a few years after the comprehensive school reform of 1969 it became clear that the reform could in no way be considered a mechanical and necessary result of capital's ongoing difficulty in incrementing

itself. The fact was that the reform was bogged down.

The comprehensive school decision resulted in nothing more than half-baked compromises here and there in more progressive states, but as a rule these did not result in any noticeable pedagogical progress. Such is the situation today.

The failure of the reform put an end, first of all, to the illusions of the "optimists." A couple of the most well known advocates of reform (as Hans-G. Rolff and Carl-Heinz Evers; see their contributions in Rolff et al, 1974) changed their positions, apologized, and admitted the correctness of the Marxist pessimism regarding democratic school reform in an undemocratic society. Second, of course, all possible "economistic" illusions held by certain of the leftist critics were smashed; they had earlier

very quickly and mechanically depicted the reform program as technocratic measures, caused by the difficulty capital was having in incrementing itself. Today they stand there, surprised by the reality that the bourgeois-progressive reform program was never realized.

Thus wrote Martin Baethge in an article in 1972, characteristically entitled "Farewell to Reform Illusions." The leftist critics he had in mind included, of course, some of the contributors to Altwater/Huisken (1971) (in which Baethge himself had participated with a reservation) and Huisken (1972), i.e., that group of researchers which is commonly called the Prokla School. Baethge criticized the tendency to analyze educational reforms as economic necessities. For example, the educational reform of 1969 was regarded by some (e.g., Glauber et al, 1973) even as a direct answer to the West German recession of 1966-1967. As mentioned above, Huisken (1972) analyzed the development of educational policy during the

1960's as being determined by new qualification requirements. More specifically, Huisken considered the "crisis of education" to be precipitated by the lack of consistency between, on the one hand new demands placed on the labor force, and on the other hand, qualifications actually imparted to the pupils in school. And in the Altwater/Huisken (1971), a group of authors (Hanf et al.) analyzes the comprehensive school reform from the following perspectives: the changing needs of industry with respect to qualification of the labor force; capital's need to restrain educational expenditures; and the need to "warehouse" pupils in order to restrain the unemployment level. Hanf et al assume

that the left-oriented school critique has overemphasized the political power and repression aspect and neglected to analyze the objective -- that is, the economic -- position of education.

For Hanf et al, the comprehensive school is in two ways an answer to the requirements of capital. On the one hand, it must consider changes in the relationship between the various kinds of workers: more /.../ theoretically qualified workers are needed to supervise production, and therefore this stratum of workers must be incremented via mobility from lower strata. At the same time there is a general change in the concrete labor processes which make up capitalistic production, and thus in qualifications required of workers in capitalistic production. They should have fewer technical skills, but more general knowledge of the scientific principles which underlie these technical skills. The comprehensive school should impart to workers these changed qualifications and see to it that more workers are recruited for supervisory and regulatory functions.

On the other hand, capital is interested in saving money within the educational sector. This is in order to instead invest in production processes which create new value and yield a profit. Thus, capital requires rationalization in the educational sector. This can be attained through the standardization of the different elements of education, intensification of the teaching processes, and the localization of education to large centers. In the West German debate, these rationalization measures have been linked to the comprehensive school model.

(Rasmussen, 1975:305)

In this section I have used the comprehensive school debate as an example which illustrates the Prokla School's explanatory attempts in the economics of education which emerged round 1970. These were attempts -- much too abrupt, say some -- to link state educational policy, educational planning, and pedagogical development to the course of capital accumulation and, in particular, to the development of the qualifications required of the (industrial) labor force. In the following section I will try to develop this complex of problems by presenting some important criticism which has been directed against these attempts at explanation.

#### IV. SOME CRITICS OF THE PROKLA SCHOOL

The pioneering works of the Prokla School (Altvater and Huisken, 1971; Huisken, 1972) have, then, been criticized for too abruptly and monocausally relating state educational policy to the development of capital accumulation.

The two most influential critics have probably been Martin Baethge and Claus Offe. Baethge, who was cited above, has long been active in Göttingen and is now a professor of sociology at the SOFI institute. Offe was part of the "third" Frankfurt generation and is now a professor of political science in Bielefeld. Briefly, Offe claimed that the state's scope of action was not (other than very indirectly) determined by the requirements of capital accumulation, but rather by the state's (the politicians' and the bureaucracy's) need to legitimize its own existence and thus to preserve the mass

loyalty of the citizens. I shall return to Offe at the end of this section, after which I shall discuss Offe's attempt to connect system theory to Marxist critique of political economy as a base for the analysis of the state. I shall then discuss how this attempt has been received by some of the Marxists who are more aligned with the Prokla School.

#### IV.1. Martin Baethge

Already in an appendix to the Altvater/Huisken anthology of 1971, Baethge and a few colleagues criticized what was later to be known as the Prokla School for using Marx' politico-economic categories at too high a level of abstraction, and thus neglecting concrete, historical analyses of how these categories manifested themselves. They also criticized the abrupt attempts to link state educational policy with general requirements of capital, without differentiating between the various qualification requirements at various workplaces or of various factions of capital, and without considering that the state is not simply the lengthened arm of capital, but rather has to mediate between different class interests -- including those of the working class. Baethge et al mention, for example, that different workplaces place very different demands on the kind and level of qualification required of the labor force. Their conclusion is worth considering:

If the demands of the progressive factions of capital were used as a general measure for educational policy (which would be the approximate principle underlying a "good" technocratic educational reform), then a reform of that kind would necessarily widen the gap between the average level of qualification and the average level of the requirements of the workplace.

(Baethge et al., 1971:447)

If, then, education were designed in accordance with the progressive, i.e. most advanced, technologically most highly developed capital factions' needs for highly qualified labor, then the labor force on the whole would be overqualified and be unable to find adequate jobs (with the subsequent risk of "social unrest"). This is a decisive weakness in the Prokla School's early educational analyses (e.g. Huisken, 1972) and in a long series of analyses which were influenced by this same perspective. Baethge et al put their finger on this perspective: an overestimation of the importance of the technologically most highly advanced capital factions as regards qualification of the labor force. Baethge et al think, then, that the Prokla School, with its simplified economic explanations, neglects all these contradictions within and between capital factions, workplace structure, and qualification requirements. Thus, the Prokla School overlooks the conflict-beset conditions which underlie state educational policy.

In other contexts Baethge makes the important observation (to which I will return at the end of this paper) that qualification requirements have to do not only with production, but also -- and probably to an even greater extent -- with the reproduction of the labor force:

Individual labor must not only produce, but in order to be capable of producing, it must also reproduce itself. That is, it must nowadays feel comfortable in bureaucratic forms of communication, be able to play its role as consumer, and be able to assume its "civic" functions, etc. For many, this is surely more important than the production function as far as acquiring necessary knowledge and attitudes is concerned. For this reason, all attempts to derive the qualification requirements of capital exclusively from the technical structure of the immediate production process are false and proceed from an overly abridged point of departure.

(Baethge, 1972:25)

As for qualifications for production, Baethge has stubbornly maintained that the structure of the workplace can indeed be changed (e.g. through the introduction of new technology) without necessitating a change in the structure of qualifications. To express it in Marxist terminology: labor can become more complicated (i.e. more value is produced per unit of time) without the labor force necessarily being more qualified; the work can be organized differently, so that less qualified labor can be utilized. Actually, there exists in the nature of the capitalistic production process a tendency to constantly break down the labor process into sub-steps for the simple reason that qualified labor often is more costly than unqualified. In principle, this is true of all new technology which in the beginning may well require qualified labor, but which with time usually tends toward dequalification.

The types of criticism of the Prokla School's analyses of education of which Baethge and Offe are early examples -- the former more politico-economically oriented, and the latter more oriented towards system theory -- have been carried onward by many others. In the following I will present a few examples.

#### IV.2. Renate Heinrich

In her analysis of the West German comprehensive school reform, Renate Heinrich (1973) maintained that the reform was not a necessary consequence of the economic situation:

Capital's short and midlong-term requirements for qualification of the labor force could have been satisfied within the existing four-class school system. This could have been done through corresponding increases in achievement and capacity and through rationalization measures -- and this to a markedly lower price.

(Heinrich, 1973:60)

Heinrich pointed out the many contradictions which characterized the underlying conditions for the comprehensive school reform and the school experiments accompanying it. The widely divergent local conditions are of interest here; such considerations were lacking in the pioneering works. Further, Heinrich tried to combine the Prokla School's qualification analysis with Klaus Offe's argument (1970) on the importance of the "achievement principle" for qualification; this is, of course, an essential aspect of how the comprehensive school socializes pupils: the achievement principle is united with the illusion that in principle everyone has an equal chance at educational success. This union means that the pupil must take upon himself the blame for possible "failures." The pupils internalize the "achievement principle" and grade themselves. (Heinrich, 1973:116ff.)

In some respects, then, Renate Heinrich's work was more advanced than the pioneering works of the Prokla School. She utilized an abundance of empirical material and focused on the contradictions and local variations within the comprehensive school reform. She further attempted to unite the Prokla School's qualification analysis with an analysis of how the qualification process actually functions in the school (in part with the aid of Offe's concept of the achievement principle). But for all intents and purposes, Heinrich was loyal to the Prokla School's (Altvater's) conception of state interventionism and education.

#### IV.3. Enno Schmitz

I would like to mention Enno Schmitz as a representative of a fundamentally more critical evaluation of the Prokla School. In his paper "What will follow the economics of education?" (1973), Schmitz criticized the two pioneering works Altvater/Huisken (1971) and Huisken (1972).

Schmitz senses that underlying this type of educational analysis there is the incorrect

theoretical notion of a rationally acting state which as a total-capitalist represents "in concentrated form" the interest of separate capitals in educational policy.  
(Schmitz, 1973b:812)

Schmitz maintains further that when the Prokla School tends to regard the conveyance of qualification as the only social function of the educational system, they are forgetting at least three additional functions:

1. Due to changes in the organization of industrial labor, employment and career opportunities are becoming more dependent upon formal proof of completed education. This means that grades, diplomas, and the like, lose their connection to occupational skills and function instead as independent goals for the individual who plans a career. Thus, the educational system is not primarily shaped by qualification requirements, but rather serves to recreate a hierarchical structure of occupational positions.

2. When unemployment threatens the stability of the political system, state policies must see to it that society integrates the unemployed. This integration is normally achieved through new employ-

ment opportunities. But the market can no longer offer jobs to growing groups of youths, ethnic minorities, etc. They are integrated instead into the educational sector -- and this education has little to do with the requirements of production.

3. The educational system imparts not only occupational skills, but also ideology. Education has to legitimate the inequitable allocation of opportunity. This legitimation function is becoming increasingly important as a completed education becomes necessary for career success.

The concept of the achievement society, in which anyone can attain occupational status as measured against the yardstick of individual achievement, must at least in some way correspond to real occupational opportunities. This in order that the concept not be robbed of all credibility and, thus, of its integrating function.

(Schmitz, 1973b:808f.)

Enno Schmitz thinks -- largely in agreement with Offe on this point -- that the Prokla School neglects the other functions of education through its one-sided interest in the changing demands on labor force qualification. Among these other functions of education are: 1) "formal" qualifications (diploma, etc.); 2) absorption of the labor force; 3) the conveyance of ideology. These functions lack immediate connection to the production process.

Schmitz further criticizes the Prokla School for focusing on the production of exchange-value to the exclusion of the "use-value side." For public administration employees or for teachers, for example, work is not a matter of commodity or value production, but rather it is a question of one or another form of "use-value" production. Schmitz questions whether the general categories of Marxist critique of political economy -- which deals with commodity and

value production -- are useful here.

According to Schmitz, the Prokla School has assumed the "technocratic" perspective of Franz Jánosy's standard work of the mid 1960's, i.e. the notion that technological development entails changed (higher or different) qualification requirements, and that factors other than technology which could influence the development of qualification disappear. These are factors such as power relations, division of labor (e.g. into head and hand work), supply and demand in the labor market, and the possibility of adapting a new technology to a given qualification structure through a change in the structure of the labor force (e.g. by breaking down the labor process into repetitive part-jobs). More advanced technology can very well result in the dequalification of the labor force.

These objections to the pioneering works of Altvater, Huisken, et al are not original; we have already encountered most of them. However, Schmitz makes an observation which is both original and interesting: all of the points criticized above are found not only in the Prokla analyses of education, but also in the traditional economics of education which the Prokla school refutes. (A similar critique is found, e.g., in Becker, 1976; Becker and Wagner, 1977.)

Schmitz goes further and asks the question "Is the economics of education a suitable object of ideological critique?". The Prokla School based its critique of educational planning on a critique of traditional theories of the economics of education. Schmitz had devoted his own dissertation (1973a) to a critique of the assumption by the human capital concept that a parallel could be drawn between educational financing and resource allocation in a market economy.

This assumption is fundamentally incorrect, says Schmitz, who thus denies that "prices" (educational costs) on the educational "market" could be analyzed as being regulated by supply and demand, etc. Indeed, these neo-classical model formation ambitions which Schmitz criticized have largely been abandoned; today's established economics of education deals with rationalization, economization, efficiency, and the like, within the educational sector and has abandoned its ambitions of explaining the connection between education, the labor market, and economic growth. Actually, this makes Schmitz' question even more acute: Is the economics of education a suitable object of ideological critique? When the Prokla School argued the critique of established economics of education and educational planning, they believed that these theories really were manifestations of essential economic relations. The model, of course, was Marx' critique of classical bourgeois theories of political economy. Marx found in these classical theories a summary of unmatched coherence of "the self-comprehension of bourgeois society" and its real manifestations. But economics of education is of an entirely different character from classical economics; in Marx' words, it is "vulgar economy."

Once for all I may here state, that by classical political economy, I understand that economy which, since the time of W. Petty, has investigated the real relations of production in bourgeois society, in contradistinction to vulgar economy, which deals with appearances only, ruminates without ceasing on the materials long since provided by scientific economy, and there seeks plausible explanations for the most obtrusive phenomena, for bourgeois daily use, but for the rest, confines itself to systematizing in a pedantic way, and proclaiming for everlasting truths, the trite ideas held by the self-complacent bourgeoisie with regard to their own world, to them the best of all possible worlds.

(Marx, Das Kapital I, MEW 23:95, Translation from the George Allen & Unwin edition, London 1957, p. 53.)

Schmitz' thesis is that Altvater/Huisken et al made the mistake of ascribing to established economics of education the same methodological status held by the classical theory of political economy in Marx' critique.

Unlike classical economics, which could function as an "ideological counterpoint" for the Marxian critique of political economy, bourgeois economics of education does not have explanatory power in the sense of being an historically adequate and class-specific ideology. The value of this latter kind of ideology lies partly in the fact that it describes reality -- even though from the perspective of one class's interests -- so that the critique of ideology can simultaneously be a critique of social structures. Indeed, the economics of education was promoted during the early 1960's by the expectation that it would later be able to offer a "useful ideology," i.e. knowledge which would aid in planning. But the hopes which were raised with this economic discipline were never fulfilled. It, like other areas of modern economics, was too much "vulgar economy." That is, the explanation of the actual conditions within the educational system and the relation between it and the labor market were not in the foreground of the scientific interest. There was instead a dominant interest in using normative models to conceal existent power structures which support these conditions. The strongly ideological function of this economics of education has greatly reduced the explanatory value of the prognoses derived from these theories, and has caused them to lose almost all value for all interest groups.

(Schmitz, 1973b:806)

Schmitz puts his finger on a decisive point here. If traditional economics of education, as well as educational planning, are "too much 'vulgar economy'," then Altvater, Huisken, and others are working in vain when they rely too heavily on Marxian methodology for an understanding of state educational policy and ideology. More detailed investigation is required here, however; Schmitz makes things a bit too easy by simply postulating that traditional economics of education is to be regarded as nothing but extreme vulgar economy, as a smoke screen with no explanatory value. Even from a Marxist point of view, vulgar economy may contain elements of real

manifestations, of "ideology" in the stricter politico-economic sense (not to be confused with pure illusion or lies and fraud).

The problem which Enno Schmitz pointed out, then, was whether it was possible to use the categories of Marxist critique of political economy in a critique of bourgeois economics of education (or whether this is "too much 'vulgar economy'"). A few years later, the Danish Marxist Hans-Jørgen Schanz (1976:89-101) made some interesting comments on the same problem (without referring to Schmitz). As mentioned above, Schmitz was inclined to answer the question with a negative. Schanz also points out that

there exists no classical bourgeois economics of education, and this means that it can be a bit precarious to criticize the economics of education on the basis of Marxist intentions.

But contrary to Schmitz, Schanz maintains that the methodology of Marx is still useful in the critique of economics of education. Nonetheless, says Schanz, there are considerable similarities between the foundations of classical economics and modern economics of education. In short, Schanz thinks that modern economics of education -- which he views as theories of the development of qualification -- is like classical political economy in that it forms theories about the development of productive forces. Further, the form-determination for this development of productive forces is markedly absent in both kinds of theory construction. It is here that Schanz sees the point where a Marxist critique can begin.

#### IV.4. Claus Offe

Among the "system theorists," I am here most interested in Claus Offe, who has been of considerable importance also for the Marxist discussion of state and education during the 1970's.

There are interesting demarcations between the positions of Claus Offe and those of the Prokla School. Let us cite Offe's expert report to the West German Commission of Education in 1975. There he criticizes the Prokla School for wanting, too quickly and without meditations, to explain the actions of the state, and in particular its educational policies, through reference to the conditions for capital accumulation, or more specifically, the requirements of capital for a qualified labor force. Offe takes a bead at the Altvater/Huisken anthology of 1971, in which the editors claim in the introduction that "educational policy serves in its broadest sense to insure a trouble-free reproduction of society /.../" (p. XVIII).

Offe thinks that this point of departure is entirely incorrect, because the societal subsystem of the schools and universities has distinguished itself from other subsystems in all developed industrial societies since the beginning of the 1960's. It has brought to the fore and precipitated conflicts which neither of the sides involved would consider "trouble-free reproduction." (Offe, 1975b:247)

And Offe agrees with Habermas' presumption that "a consistently pursued educational policy leads to system threatening conflicts."

Offe criticizes the Prokla School's hurried coupling of 1) the structure problem (e.g., inadequately qualified labor in relation to the requirements of capital); 2) state action (e.g., educational reforms); and 3) the resultant effects (e.g., the qualification

which actually takes place in the schools). During this criticism,

Offe establishes that:

the objective result of state action does not have to correspond to the declared goal of this action any more than this goal corresponds to an adequate understanding of society's structural problems. Thus, agreement between even two of these levels would be highly improbable, itself in need of explanation.

(Offe, 1975b:248)

V. CLAUS OFFE'S ATTEMPT TO BRING TOGETHER SYSTEM THEORY AND THE CRITIQUE OF POLITICAL ECONOMY

If, then, Offe does not accept the explanations of the Prokla School, what are his own? We can present the central argument in Offe's book (1975a) on the West German reform of vocational education in 1969.

Offe's point of departure, with the polemic point directed at the Prokla School, is this:

economic factors and social interest can only attain their goals to the extent that they have at their disposal organizational resources arranged and sanctioned by the state.

(Offe, 1975a:9f.)

Offe is not at all denying that capital interests exist, or that these can determine state actions, but -- and such is Offe's conception of the "reduplication" state/society -- when capital tries to act on its interests, this means an attempt to destroy the state order, after which the state attempts to restore unity in its system of organizational resources (Offe, 1975a:18). Offe thinks that the Prokla School and other "reductionists" disregard this circumstance, which he feels offers an important explanation of the action of the

state and its bureaucracy.

Offe begins with the basic assumption that the driving forces behind political development (e.g. educational reforms) are the inconsistencies and tensions which are built into the capitalist state's system of "organizational resources." And Offe (1975a:180ff., 302ff.) deals with the following four types of organizational resources:

1. "Freiheit." The preservation of the principle of private property (each person commands his own commodity) in exchange and contract, such as between capital and wage earner.
2. "Steuerstaat." The state's freedom of action (state finances, etc.) is tied to the yield of private exchange.
3. "Social- und Interventionsstaat." The state sees to it that in the long term capital and wage earners can sell their commodities.
4. "Demokratie." The action capacity of the governmental powers to act is dependent upon legitimation, as manifested in parliamentary elections.

State policy can be understood as that course of action through which the bearers of state power (bureaucrats and politicians) react to inconsistencies and discord between these four organizational premises underlying the system structure of the capitalistic state. Thus, state policy is not effectuated by the interest of social subjects or their aggregates, nor by class interest, nor by the values of the state's personnel, but rather it follows a highly abstract "consonance interest" of the state "in itself," an interest empty of all attributes of content -- an interest in unity and consistency among the state's organizational resources.

(Offe, 1975a:303f.)

Offe's thesis, then, is that state action should be understood from the perspective of the state apparatus' own interests. The example he chose in the inquiry which I review here is the reform of vocational education in West Germany from 1969. He interprets the

realization of this reform as the state's reaction to a system-threatening social situation which included lay-offs, growing unemployment, and as a result, strained state finances. The state apparatus then takes to "organizational resources" of type 3 above -- i.e. improved labor qualification -- in order to raise the exchange value of labor force in the labor market.

The example is clear and well taken, since it says something about Offe's special attempt to connect Marxism to system theory. He denies by no means that external forces -- primarily capital's accumulation difficulties -- can precipitate state action. In this he agrees with the Prokla School. In his case study of the vocational school reform, he regards labor's excessively low exchange value as such a precipitating factor. But there is no stimulus-response model which suitably explains state action. By pointing out one or another precipitating factor one has said nothing about why the state acts as it does. Politicians and civil servants are not puppets of capital; they are interested in preserving the "subsystem" in which they themselves work. They are interested in quaranteeing state finances, in seeing that bourgeois legal rules function, that the party they represent is able to keep the trust of the voters, and that they themselves retain their positions and jobs. Regarding the vocational school reform of 1969, Offe proposes the following assumption:

The aim and function of the vocational education reform was neither creation of qualified labor nor preventive care for labor which might become superfluous. Rather, it was a matter of relieving in the long term the state apparatus of the socio-political expenses for, first, a merely restitutory social policy, and second, a policy of expansive higher education.

(Offe, 1975a:180)

And the result, of course, if Offe is right, is that the state's representatives only in exceptional cases will react "adequately" to social problems. Thus, it is not an exception but rather the rule when, say, educational reforms fail -- which is what happened to the vocational school reform. State action does not solve social problems, but instead, because of the anarchistic way in which the capitalistic economy functions, it incessantly gives birth to new consequential problems, which in turn call for state action. And so on.

The words "consequential problem" are frequent in Offe's works. He thinks it is incorrect to seek external causes for why the state apparatus tries to solve difficulties which it has caused itself. Further, Offe feels that the state apparatus does not react directly to the process of capital accumulation, class conflicts, etc. Rather, it reacts to "consequential problems" which emanate from these. In an earlier work (Offe, 1972), he developed his view of the state as an authority, the task of which is to repair certain "functional deficiencies" arising from the accumulation process due to both the internal competition between various separate capitals, and capitalism's anarchistic character in general.

For the broader discussion of the state and education, however, Offe's (and Jürgen Habermas', 1973; 1976:271ff.) emphasis on the state's legitimation problems has probably been most important. "Legitimation problems" refers to the problems the bureaucracy and the politicians have in keeping the "mass loyalty" of the citizens and the voters. (A homegrown example: An explanation of the Swedish comprehensive school reform in the spirit of the Prokla School would

deal mainly with new requirements on the labor force aimed at increasing flexibility and mobility, general alround qualification for all of the labor force, etc. An explanation in Offe's spirit, however, would draw considerable attention to the need of Swedish social democracy to reinforce its egalitarian image and the interests of the state educational bureaucracy itself.)

Obviously, Claus Offe's theses on the "self-interest" of the state apparatus have been criticized by Marxists aligned with the Prokla School and by other more politico-economically orientated Marxists. Perhaps the two most stubborn critics have been Joachim Hirsch and Manfred Deutschmann (Hirsch, 1974a; 1974b; 1976, and other works -- the last-mentioned is a critique of Offe's book (1975a), to which we referred above. Among Deutschmanns works, see e.g. 1974a: 195-217 which is a critique of Offe, reprinted separately as Deutschmann 1974b; and further Deutschmann 1976, which is a critique of Ronge and Schmieg, 1973).

I will present a picture of this critique by summarizing some of Manfred Deutschmanns comments on Offe's book on the structural problems of the capitalistic state (Offe, 1972). Let us preserve the above-mentioned society/state dichotomy as our point of departure. This was an important element in the Prokla School's state analysis (cf. section III above). The essential task of the state is to preserve the capital relation, i.e. the relationship between wage labor and capital. In this Offe is in agreement with the more orthodox Marxists. But Deutschmann accuses Offe of having an economistic understanding of the category "capital." Capital, enjoins Deutschmann, is not reducible to money, machines, or the interests of separate

capital factions. "Capital is a social relationship, thus encompassing wage labor and capital." (Deutschmann, 1974a:215). Therefore, the interests of wage earners as wage earners are also included in the collective interests of capital, which are preserved by the state.

The state, then, is an ideal collective capitalist, and the collective interest as such cannot really manifest itself. The class interest of the collective capital is not something which is given in advance and can be unequivocally socially localized. Capital is a social relationship, encompassing wage labor and capital. In the definition of the collective interest, which has as its goal the preservation of the social relationship between wage labor and capital, must be included from the start the needs inherent in wage labor as wage labor and in the free, equal citizens as citizens.

(Deutschmann, 1974a:215)

Offe ignores the politico-economic determinations of the state and considers the state a residual entity with the task of repairing the functional deficiencies and consequential problems arising in the wake of the accumulation process. By doing this, Offe is transferring the crisis to the state and seeing as crucial the problems of legitimation, or the question of mass loyalty. Thus, says Deutschmann, Offe's theory of crisis becomes "ultimately a purely political theory of crisis." Offe regards power as a result of these "consequential problems," and tends to see the class character of the capitalistic state as its essence. This is misleading, says Deutschmann, since in all class societies the state is an instrument for one class's power over others. By merely pointing out the class character of the bourgeois state, one says nothing about its specific form in capitalistic societies. Offe has neglected the character of the capitalist production process as a value increment process, which makes power

in a capitalistic society a fundamental prerequisite for (and not, as Offe maintains, a result of) capital accumulation. (Deutschmann, 1974a:195-217).

So much for Manfred Deutschmann's critique of Claus Offe. These two positions are representative of a broadly diversified debate during recent years in West Germany on "politico-economical" versus "system theoretical" theories of state (and of education). In summary, Offe's contributions from system theory have been criticized for:

- o The "sociology of power" point of view, i.e. the tendency to explain power relationships in bourgeois society more from the perspective of the bourgeois class's (understood to be a sociologically defined group) or the bureaucracy's exercise of political power, rather than from the perspective of the development of the capital relation (seen as the social relationship between capital and wage labor). Offe, Becker/Jungblut, and other "system theorists" are accused of "ignoring the wage labor - capital relationship and primarily considering political power as a system-preserving measure." (Schrader and Schrader-Wälke, 1974:45)

- o Viewing systems (political, economic) and subsystems as isolated from each other and from politico-economic determinants. (Deutschmann, 1976:79)

- o The "structuralistic" tendency to eliminate subjectivity. Structures seem to move independent of human actions. The origins of and changes in structures are inexplicable. When, for example, Offe differentiates between system theory and action theory, there are unfortunate political consequences. All opportunities for action and change seem precluded. "The only thing left is the affirmative self-

reproduction of that which is given." (Deutschmann 1974a:199, 40, 217)

In conclusion, I should like to propose two hypotheses. First, when one delves into this West German controversy between "system theorists" like Offe and more politico-economically oriented Marxists, it is striking that the same sort of criticism which has been directed at the "system theorists" and which I reviewed in this section, should also be applicable as criticism of much other radical sociology of education, e.g., that represented by Nicos Poulantzas.

Second, I should like to propose a convergence hypothesis. The controversy between system and legitimation theory (Habermas, Offe, and others) on the one hand and more politico-economically oriented social science on the other has been of great importance for Marxist discussions of state intervention and educational policy in West Germany; I am under the impression that the viewpoints to some extent have converged during recent years. I would like to make this more plausible by referring to a few contributions in two collections of essays from the latter half of the 1970's.

During the early 1970's, Altvater et al seemed to represent a slightly deductivist view of the relation between the development of capital accumulation and state intervention (including educational reforms). They were often criticized for neglecting the importance of politics, ideology, and the class struggle, and for one-sidedly relating state intervention to difficulties in value increment, and also for ignoring the "use-value side." But in a paper in Pozzoli (/ed./ 1976:89ff.), Altvater and his colleagues meet their critics implicitly at the points mentioned.

And Claus Offe, who during the first half of the 1970's was (next to Habermas) the foremost representative of a Marxist-oriented system and legitimation theory concept of the state, seems later to have been impressed by all the politico-economically based criticism directed at him. If, for example, he had earlier been inclined to separate economics and politics in his analysis of state in a "system theoretical" way, he later admits the necessity to observe the politico-economical formal determinations of the state (see Ebbinghausen's anthology, 1976:14, 70, 80ff., 188ff.)

In the early 1970's these viewpoints on the grounds for state intervention in the educational sector were antagonistic; they may now be converging. An exciting discussion is taking place at the intersection of these viewpoints.

#### VI. QUALIFICATION THEORY. SOME CENTRAL PROBLEMS AND POSSIBILITIES FOR FURTHER RESEARCH

The qualification concept must be regarded as the central concept to Marxist economics of education (as well as in early traditional economics of education). "Qualification" in the narrow sense usually means the adaption of the (future) labor force to the jobs which await it. In the broadest sense of the word, qualification simply means all kinds of knowledge, skills and behavior.

The discussion on qualification theory and qualification research is very extensive. Here I shall only briefly indicate what the "reconstruction of the critique of political economy" has added to this discussion.

The qualification concept is not a Marxist invention, of course. It occurs also within traditional industrial sociology and economics of education. One sometimes hears the statement that traditional or bourgeois economics of education differs from Marxist economics of education in that it deals exclusively with qualifications required by the concrete labor process. This is not entirely true. Many attempts have been made, for example with the aid of social-demand models, to transcend the limits of the early human capital and manpower approaches. On the other hand, it is true that Marxist qualification theory, unlike traditional theory, begins with the two-fold character of the capitalistic production process, i.e. both concrete labor process (the production of use-value) and value increment process (production of value and surplus-value). It is a basic thesis in Marxist historiography that with the development of capitalism the concrete labor process was subsumed by and formed in accordance with the abstract value increment process. As far as qualification theory is concerned, this means that the development of qualification in the modern capitalistic society cannot be simply related to some kind of "neutral" technological or work organization development, but should rather be related to the process of value formation and, in general, to the conditions for the reproduction of capital. This is the decisive difference between traditional and Marxist qualification theory.

According to the human capital conception, the qualification of the labor force (and thus education) was regarded as an independent growth-creating factor. The manpower approach simply aimed at forecast labor demand, without more closely examining the basis

for these demands. Marxist qualification theory, however, works the other way around, so to speak; it begins with the development of capital accumulation and tries to find in it the explanation for the structure of the workplace, which in turn explains changes in qualification requirements, changes which in one way or another are presumed to be related to the development of educational policy and pedagogy.

Many Marxists have criticized Horst Kern's and Michael Schumann's study Industrial Labor and Worker Consciousness (1970) on this very point. This comprehensive and already classical study dealt with certain technological innovations in West German industry during the 1960's, with related changes in requirements for labor qualification, and with the worker's "subjective" views of the changes. According to the Marxist criticism, Kern and Schumann dealt excessively with the concrete labor process (use value production) and tended to regard technological development as "neutral," as the independent variable which gives birth to new qualification requirements. The Marxists have instead analyzed technology and qualification requirements as dependent on the value increment imperative. Kern and Schumann have later admitted that this is an important weakness in their study (Kern and Schumann, 1972:75; 1973:134ff.; 1977: the foreword).

Nonetheless, the Kern-Schumann study has been a powerful source of inspiration also for the Marxist discussions of the ongoing development of qualification. During the 1950's and 1960's, before Kern and Schumann published their results, the notion that technological development more or less automatically required more highly qualified (better educated) labor had been dominant within industrial sociology

and the economics of education, not the least in the United States. The results of Franz Jánosy's study from the mid-1960's were also often interpreted in this way (in spite of the fact that Jánosy himself referred to "different-qualification," and not higher qualification). And this high-qualification thesis seems still to be predominant in East European economics of education.

Kern-Schumann's results precipitated renewed discussion of these issues. They established that technological development does not necessarily result in a development toward higher qualification. Neither did their results point to any unambiguous tendency toward dequalification. Rather, they suggested the "polarization thesis," i.e., for the great majority of industrial employees, mechanization and automation have led to a significant dequalification as regards jobs, while a minority (even if a growing one) has been called in to fill jobs which require higher levels of qualification.

The majority of Marxist qualification researchers in West Germany seem to have aligned themselves with one or another variation of this thesis of a polarization within the working force, and, as far as most waged workers are concerned, a dequalification. This involves, e.g., the extensive qualification investigations which have been undertaken at the institute SOFI in Göttingen (a main report is Mickler et al, 1977).

But the Kern/Schumann polarization/dequalification thesis has also been rejected. Frigga Haug and the Projektgruppe Automation und Qualifikation have for a decade advocated a "higher-qualification thesis." Annelore Chaberney and Karen Gottwalt (1976) have presented the results of an extensive study of changes in workplace and

qualification structures in the Federal Republic during the period 1960 to 1970 (approximately the same period studied by Kern and Schumann). These changes have primarily led to demands for higher qualification, say Chaberny and Gottwald, who discovered dequalification only in certain limited occupational areas, primarily in occupations oriented toward crafts production. (Notice, however, that the study took place during the 1960's, a period of economic growth and labor shortages; Chaberny and Gottwald note that the 1970's, with economic stagnation, fewer immigrant workers, etc., may have led to an increased tendency toward dequalification).

The West German discussion of qualification development has to a great extent dealt with changes in the post-war structure of the workplace and of qualification, especially within industry; the Kern-Schumann study was one of the most important points of departure. Most of the empirical contributions thus far have been one-sided in that they have focused on industrial labor. But some changes can be detected. At SOFI in Göttingen, particularly extensive studies of industrial qualification were undertaken earlier, but studies of the service sector are now also being undertaken. The Chaberny-Gottwald study dealt with labor in production as well as labor in circulation and in the public sector, and it is precisely thanks to this broadened perspective that they can support the thesis of higher qualification which they propose and which runs contrary to the results of Kern and Schumann. Of course, Chaberny and Gottwald observed tendencies (although not general tendencies) toward dequalification in parts of production; but at the same time the number of workers employed in production has decreased sharply, while the number of employees in

the secondary sector (circulation) has stagnated, and the number of employees in the tertiary sector (state employees, etc.) has increased. According to Chaberny and Gottwald, this along with changes in the occupational structure suggests a general rise throughout society in the qualification level of the labor force and the workplace.

One often mentioned weakness in the Prokla School's early qualification analyses is the one-sided orientation toward (productive) industrial labor. "In FH's /Freerk Huisken's/ eyes, society consists of workers, capitalists, and teachers," chastises one critic (Sørensen, 1976:129). The Prokla School is often criticized further for its "monocausal" view of

educational policy -- and thus also the economics of education and educational planning, learning theory, pedagogics, etc. -- as immediate reflections of the current level of economic development.

(Gröll, 1974:34)

This undertaking is inadequate for the simple reason that general education, at least, in many respects lags a half century or so behind other social developments. The main points in the criticism of the Prokla School's contributions to qualification theory have been presented elsewhere in this paper (section IV above). Therefore, I shall not deal with their obvious limitations here, but rather I shall suggest how they may be developed.

Broadly speaking, two orientations towards the realization of this research program can be discerned. First, a narrowing, i.e., a movement towards more concrete, specific analyses. Second, there are possibilities of broadening the qualification analyses into new

fields, in particular concerning the qualifications necessary for the reproduction of labor.

The narrowing is surely needed, and we will begin with it. The early contributions of the Prokla School contained especially sweeping statements on the general relation between educational policy, qualification requirements, and capital accumulation. For example, Huisken's dissertation (1972) has often been criticized because he doesn't specify his qualification argument to different branches of industry. This is a deficiency which later studies have tried to correct.

And just as one can narrow down the analysis of qualification requirements to certain workplace structures, one should also analyze different courses of education in order to determine in what kinds of qualifications they actually result. A study of vocational education is, of course, most rewarding here. Further, different kinds of unemployment re-education are well suited to qualification-oriented research (assuming, of course, that it is not just a matter of absorption of labor and storage of unemployed workers). As an example I would like to mention a report from the SOFI Institute in Göttingen (Baethge, et al, 1976) which summarizes a comprehensive study of state re-education policy in West Germany during the years 1969 to 1971. The study suggests that the requirements of the production process as well as the short-term interests of separate capitals (and not only the monopolistic capital factions) were decisive factors governing this re-education policy. The results of the study contrast sharply with the common notion that the expanding re-education policy in the labor market is better explained in terms of the state's political

legitimation problems or simply as absorption of labor, rather than in terms of political economy. Thus, empirical analyses of qualification may be helpful in a wider area than is commonly thought.

Qualification analyses seem a natural aid in conjunction with inquiries into vocational education and labor market re-training. The connections between workplace structure and education are, of course, considerably more complicated when related to compulsory education and broader courses of education. In their workplace investigations Kern and Schumann had found that the technological development was accompanied by increasing demands for such qualifications not bound to certain specific labor processes:

Among the non-process-dependent skills observed in this study are in particular: flexibility (understood as ability to adopt quickly to new work realities; technical intelligence (understood as ability to causal, abstract and hypothetical thinking); perception (understood as ability to perceive changes in a complex signal system); technical sensibility (understood as ability to conscientious, reliable, and independent work attitude).

(Kern and Schumann, 1970:68; 1977:71f)

Also Marxists from widely divergent camps generally share this view of a general change towards these types of qualifications by Kern and Schumann thus called "non-process-dependant"; though this choice of terminology has been questioned:

Naturally such "qualifications" are not "non-process-dependent"; they can appear as such only if they socialize so strongly within the educational sector, and to such a high degree have become internalized by the workers that they appear as independent elements in the worker's individuality and no longer appear as a product of the relation to capital.

(Altvater, 1971:90)

But the agreement ends here for the most part. I have already exemplified how Marxist qualification theorists have arrived at widely different results. Some say that development leads to dequa-

lification, others claim unequivocal tendencies toward higher qualification, and still others speak of requalification. Not to mention all of the more interesting conflicting viewpoints on more qualitative problems of qualification.

The entire field of research into qualification theory is, moreover, in pressing need of conceptual lucidation and terminological definition. Qualification is a term which soon will mean whatever one wishes. "Qualifications" often refer simply to the actual characteristics of the labor force; alternatively, the word refers to the knowledge, skills, and behavior imparted to students through education. "Qualifications" sometimes also refers to the knowledge, skills and behavior which workers should possess in order to cope successfully with their jobs in accordance with current demands of technology and labor organization, regardless of whether these capacities actually exist. And it is not uncommon for "qualifications" or "qualification requirements" to refer to the demands of the labor market for labor. In a capitalistic economy, education is usually separate from working life; the labor market is the market where labor force is bought and sold and thus acts as the mediating link. This is a state of affairs which forces the individual laborer to attend to the exchange value of his labor force in this market. Qualification, then, takes place most immediately for the labor market, and only indirectly for the workplace; there is no reason to take for granted that employment criteria correspond to what the job actually demands of the employee. And finally: "qualification" has at times (e.g., Aagaard Nielsen, 1976) been used in reference to non-empirical demands on the labor force, demands which have not

been realized to any great extent, but are mere developmental tendencies.

The first direction, then, in which the research program of the Prokla circle can be used productively is a more precise handling of qualification concept in focusing on limited part-problems. And today industrial sociologists and others are developing methods for more precise empirical qualification investigations.

A second direction may be the expansion of the qualification concept to include more than just labor capacity. The Prokla School is often criticized for having an overly-narrow qualification concept. But Altvater, for example, advocated a broader conception of "qualification," including qualification to the role of law-abiding citizen, voter, consumer, family member, etc.

1. Qualification is not a homogeneous category which one can work with blindly, as has been done until now in the economics of education. Within the concept of qualification are reflected all of the contradictions of the capitalistic production process, including, then, the contradiction between wage labor and capital.
2. Because of the capitalistic character of the production process, the worker is "used" by the capitalist. Because the instruments of labor and results of the labor process are the capitalist's property, the worker must be qualified to respect this state of affairs. Because of the capitalistic character of the production process, qualification and discipline are necessarily one.
3. The worker is not only a producer, but appears also in the market. His qualification must also cover the area of circulation, encompassing, for example, mobility and the obedience of laws.
4. The worker is a citizen too, and this must also be part of his social qualification. This includes established forms for political behavior, the illusion that the state is the guarantor of freedom and equality in the political sphere, as well as the guarantor of the individual's qualifications in bourgeois society, whether the individual is a worker or a capitalist.

(Altvater, 1974)

By expanding the qualification concept we, of course, may risk merging it into concepts such as learning, socialization, or any kind of influencing. It is probably wise at least to limit qualification theory to fields in which the acquisition of qualifications is separate from the use of them, and furthermore to maintain the production process and wage labor as the logical starting point for of qualification theory -- as was done in the pioneering analyses of the Prokla circle.

These Prokla analyses dealt largely with job preparation, and preparation for industrial jobs in particular. One way of transcending a too-simplified coupling between education and qualification demands is (as Altvater often did himself) to emphasize the relative autonomy of the state, and its function as a mediator between, on the one hand, the demands of capital, and on the other, the actual process of educational qualification. We saw above how Claus Offe tried to solve this problem.

Another approach is to start from "internal" studies in the educational sector, studies of organizational and curricular development and pedagogical practices. Such studies are necessary, of course; considering only the "output" of education leads to a functionalistic dead-end. One misses, for example, the educational sphere's "own" history, traditions within the teacher corps, etc.

And if one overemphasizes the qualification or output perspective, one also risks missing an extremely important fact (which in my opinion most Marxist analyses have neglected): State-administered education is not only aimed at a certain output in order to insure the reproduction of labor, class structure, ideology, etc. Over

and above this, education must attempt to solve present socialization problems. There is the simple matter of keeping the children in the classroom, of alleviating the conflict between primary socialization and the school environment so that not too many students are expelled from the educational process and the labor market, and so on. (For example, there is a clear tendency in primary school education away from work and towards entertainment, which would seem to be an expression of the need to master what is called the motivation or discipline problem, but which, rather, should be called the socialization problem. This development can hardly be explained through reference to external qualification requirements; the buyer of labor force can hardly be interested in this type of qualification).

It is my opinion that Marxist educational analysis has generally tended to overemphasize the output perspective while neglecting the socialization problem. This is true of the Prokla Schools's economics of education, with its stress on the qualification of the future labor force. This is also true, for example, of the Poulantzas-influenced analyses, with their emphasis on the structures which are to be reproduced and positions to be fortified. A functionalist fallacy is precariously close in both cases: the social structure or capital requires for its reproduction that education function in a certain way, and therefore education functions in this way. Reasoning of this kind does not explain how education can fulfill its necessary functions; this reasoning is abortive for the simple reason that one cannot assume a priori that education really functions reproductively. There is no automatic process by which education obediently

adapts itself to new societal or capital demands. On the contrary, it would seem that education is an area where state interventionism has had trouble attaining the intended effect. It is practically the rule that educational reforms fail, that courses of education becomes wrongly dimensioned, and the labor force inadequately qualified. All this is hardly surprising, since consistent and expedient educational planning is hardly conceivable in a capitalistic economy, an economy distinguished precisely by its planlessness. And it is not all given that the educational sector is entirely affirmative vis à vis society and capital; its development is highly contradictory, and it is easily shown that many individuals have undergone "failed" socialization which has led them to be either critical towards or -- more often perhaps -- unable to function under existing circumstances.

Therefore, structural and educational economic analyses which show that education fills certain socially necessary functions are insufficient as explanations of how this happens (or doesn't happen -- if education is functional or dysfunctional is an empirical question). Neither, in my opinion, are the common methods of traditional historical materialism sufficient, partly due to the "power sociological" conception of state (the notion of the state as the lengthened arm of the ruling class, an institution for the exertion of the bourgeoisie's -- primarily political -- power). This view tends to neglect the modern bourgeois state's fundamental task of preserving the relationship between wage labor and capital, a task which includes the state's defense of the interests of workers as wageworkers. Partly for this reason the power sociological view of the state as the bourgeoisie's instrument of power is untenable, as is the related

conception according to which bourgeois ideology is viewed as blatant lies and fraudulent manipulation. In order to understand ideology -- the transmission of ideology in school, for example -- it may be worthwhile to retain the Marxian conception of bourgeois ideology as socially determined ("necessary") forms of consciousness, the origins of which should be studied. This approach may be better than the predilection of traditional historical materialism for simply ascribing ideology to classes: "bourgeois ideology," "proletarian ideology," etc. Obviously, these descriptions of "traditional historical materialism" are unjustifiably sweeping. I think it is important, however, to be cautious of simplified notions which regard education and its transmission of ideology as the simple tools of the bourgeoisie. Caution is also called for with regard to the complementary, voluntaristic notions of the class struggle which play the role of deus ex machina in too many Marxist contributions.

These are simplified remarks of some methodological limitations on politico-economic, structuralist-Marxist, and traditionally historical-materialistic analyses of education. In order that these limitations may be transcended, it is my opinion that theories of socialization must be taken into consideration.

And it is no accident that fields like socialization theory, need theory, the sociology of everyday life, and in general studies of "the subjective factor," have been most vigorously pursued within Continental Marxist research during recent years. This article's point of departure was the pioneering works of the Prokla circle ten years ago. In these works were studied the reproduction of capital and how the changing conditions for accumulation of capital may

determine changes in technology and work organization, which in turn leads to changed qualification demands on the labor force and changes in the educational system. A natural extension of this approach would be to have a closer look at this labor force and how it is reproduced -- the "subjective factor" in the major process of capital reproduction. And a possible starting point for this kind of investigations could be the following thesis:

In a capitalistic economy the societal qualification demands become manifest via the individual's necessities to secure the conditions for their own individual reproduction. And state educational policy and planning, as well as the trends in educational research and changes in methods of instruction may be interpreted as attempts to handle the individual's "reproduction deficiencies."

The wageworkers need to attain qualifications which enable them to sell their labor capacity at best possible terms. They also need to know how to preserve the exchange value of their labor capacity on the labor market, which means, for example, avoiding it being worn out too early. In addition they need multifarious other kinds of "reproduction qualifications": to handle their private economy, to bring up the next generation labor force, and all that it requires to master living in society. In school the pupils need to attain such qualifications (their parents are often more well aware of this fact than most school reformers and ideologists). And the point I want to make is that qualification requirements -- even though "in the last instance" determined by the process of capital accumulation -- appear, so to speak, "from below," via all these needs of the wage-workers to reproduce their labor capacity and their life conditions

as a whole.

So a for educational research interesting extension of the Prokla approach would be to connect investigations on "the major circulation," that is the reproduction process of capital, with investigations on "the minor circulation" as the reproduction process of labor has been called, including investigations on how the individuals in everyday life produce, maintain, and sell their labor power; the upbringing of the next generation of wageworkers and all the socialization problems connected herewith; and investigations on how the state intervenes in all these reproduction conditions of the individuals (the state social policy in a wide sense, or perhaps rather: the state "socialization policy").

In traditional theory these two fields, reproduction of capital on one hand and of manpower on the other, have been separated from each other. In comparing the classical political economists with the classical sociologists, Kurt Aagaard Nielsen has noted that while the former took "the minor circulation" for granted, the latter did the same with "the major circulation":

By considering labor power as a natural precondition the classical economy could operate with it as an "economic factor," quite simply, and ignore the social problems surrounding the reproduction of labor power.

Adam Smith even assumes that all problems of reproduction of wageworkers could be solved through the free development of capital expansion. Malthus and Ricardo admit that workers have problems in securing a livelihood, but these problems are considered as natural and not seen as threatening the continuance of the capital relations.

(Aagaard Nielsen, 1979: 6f.)

This view, which AagaardNielsen calls "the economist's most heart-felt wish for a 'variable labor capacity'," proved to be unrealistic. Labor is no unlimited, elastic resource, neither with respect to quantity nor quality. Labor's reproduction problems became manifest as "subjective" adjustment problems and protests of various types among the workers. In the case of capital, they manifested themselves as "objective" difficulties in the recruitment of adequately qualified labor. These problems, according to Aagaard Nielsen (1979), were the material basis of the emergence of modern social sciences.

Within the social sciences the classical sociologists assumed a position opposed to that of the classical economists: they considered economic reproduction -- the self-regulating market -- as a natural given, and proposed intervention only in the area of social reproduction (Aagaard Nielsen, 1977).

Kurt AagaardNielsen works at the institute of sociology, University of Copenhagen, where numbers of studies (e.g. Abrahamson et al, 1978; Pilegaard Jensen, 1979; Laerke Nielsen, 1979) have given attention to the relationships between "the major circulation" (reproduction of capital) and "the minor circulation" (social reproduction, including the production and preservation of labor capacity, and the state's intervention in this matter to master the consequences of the individual's "reproduction deficiencies").

An important source of inspiration for these Copenhagen studies was one of works from the Prokla group ten years ago, Müller and Neusüss (1970). In this historical study of English factory legislation and in particular the fight regarding the length of the working day, Müller and Neusüss analyzed the manner in which the reproduc-

tion needs of capital have interplayed with the wageworkers reproduction needs: how to keep the market value of their work capacity up, and how to acquire guaranties against its wearing out prematurely.

Also today attempts are being made in BRD to broaden qualification research to include qualification for social reproduction. In addition to the previously mentioned institute SOFI in Göttingen, this is the case at, e.g., the institute for social research, ISF, in Munich:

the capitalist mode of production presupposes for its functions not only a certain qualification for the incorporation of labor in immediate labor process, the "labor capacity," but also specific qualifications for the (re)production of this labor capacity: for its shaping and preserverce, for its exchange against capital to life subsistence of the workers, and at last for the representation, at the political level, of its interests in education, preservation, and use of the labor capacity. (Asendorf-Krings et al., 1980:211)

For educational research, however, this perspective has not as yet had much influence. Nevertheless, investigations on the connections -- and contradictions -- between the "major" and "minor" circulations (that is, between the reproduction process of capital and that of manpower) would seem to be rewarding for educational research as well. Such investigations would seem to offer possibilities of developing the program for a "critique of the political economy of education," as formulated within the Prokla circle ten years ago.

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