Educational Psychology and the Question of Differentiation.

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Introduction

All school reforms in Sweden can be looked upon as a series of reforms concerning one or another aspect of the issue of differentiation (Marklund 1985, p. 29). The reforms between 1940 and 1960 were successively changing the parallel school system running before 1940 and which gave a few access to higher education, to a comprehensive school system 'for all' decided by the government and parliament in 1962. The process is described by Marklund as a continuing process from divergence (high differentiation) to convergence (low differentiation). This process can also be understood as a process from outer to inner differentiation, or a shift from organisational differentiation to pedagogical differentiation. Due to Marklund the convergence process was taking place within a socio-political progressivism, with democracy and the welfare state as its goals, while the divergent school system was propelled by forces which wanted to keep social, economical and cultural divergence's. Even though there certainly can be said to lie some truth in such a statement it nevertheless primarily has to be understood as part of the ideology through which the educational researchers felt themselves involved in transforming a highly divided and undemocratic society to a just, democratic, modern and better society (See for example Husén 1988, Härnqvist 1987). One of the key issues here was to delay differentiation as long as possible.

The objects for differentiation, the units to be divided, were the children attending schools, and the systems organising them. Due to Marklund (1985) the issue was primarily looked upon as a structural problem without any deep down or clear definition of the concept itself. "Differentiation" was something which was more or less taken for granted, for example, in the government bills (Bill 1950:70, Bill 1962:54) that followed from the 1946 school commission and 1957 commission [skolberedningen]. If this is correct it means that the question of why to differentiate, that is, the goal or the aim for differentiation, is to a large extent open for mutually exclusive interpretations. In other words it is a political question which would be hard to separate from the issue itself and which could cause turbulence when tried to be settled by researchers claims on being in possession of objectivity and neutrality (as in the debate on theoretical versus practical aptitudes, see below), and since the why question is inherently bound to the how question it follows that suggestions done by researchers on how to differentiate also carries with it ideas about why to differentiate (See for example Husén 1951, 1954, 1961).

This makes it especially problematic for the research community, since education takes the form as a science within a positivistic era of behavioural and social sciences which means that to be able to do research on the issue of how to differentiate one have to take explicit stand on how one perceive the relationship between research and the state (formally the relation between the how and the why) (See for example Lindberg & Lindberg 1983, Englund 1986 a, b, Dahlström 1992, Herrman 1995, Säfström 1994, 1998).

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2 The parallell school system had three different strands: Elementary school (folkskola); lower section of pre-university school (realskola) and; upper section of pre-university school (gymnasium). There were no connections between elemtary school and the lower or higher sections of pre-university school.

3Even though Marklund would like to call the latter 'individualisation', which for our theoretical understanding of "differentiation" would make no significant change.
The question of differentiation

In what follows we will explore this connection further by working us through a text by Torsten Husén (1962) in which he describes "Problems of differentiation in Swedish Compulsory Schooling" between 1940-1957. In this book Husén intends to give an "over-all evaluation of the problem" up to 1957. Husén starts up his report with a definition of the issue by quoting the Minister of Education in his mandate to the Parliamentary School Committee of 1957, appointed to investigate and report back on the final organisation of the comprehensive school: "The main part of the total work assigned to the committee should be devoted to the structure of the new school" (Prop., No. 106, 1957, p.49, quoted in Husén 1962, p. 1) The Minister further states:

"The task having the greatest impact on the work of the committee, and one might say, the core of its assignment is a reconsideration of the balance between internal, pedagogical, and external, organisational, differentiation." (Ibid., p 52, quoted in Husén 1962, p.1).

In accepting this problem as a starting point for his discussion Husén goes on and defines how organisational differentiation should be understood:

"Organisational differentiation is mirrored in the structure of the school system. This is determined by some central authority, such as the Parliament or the State Legislature, as an outcome of some basic policy adopted in these matters. The structure is to a large extent affected by the traditions characterising a school system and is also influenced by the social class structure of the surrounding society. ... [A] cardinal question closely related to the problem of social mobility"(Husén 1962, p.1).

And pedagogical differentiation:

"Pedagogical differentiation is closely tied up with the structure of the curriculum and its content, methods of instruction, etc. in Sweden this type of differentiation is often called "differentiation within the frame of the class", which means that children might be grouped without changing the organisational structure of the school” (Ibid., p.1-2).

There are however, according to Husén, no distinct borderlines between these two types of differentiation. So what is constructed is an outside and an inside of 'a system of differentiation', where the outside consist of certain preconditions for schooling and the inside is constructed as responses to the 'demands' of the outer side of the system transformed by certain pedagogical techniques like: streaming or homogenous grouping, ability grouping or grouping in sets, split up of a class in subgroups and individualisation. Of these techniques, individualisation is stressed as important in order to provide for individual differences in "capability" among the children: where the idea of a natural and constant split between theoretical versus practical capabilities making up persons accordingly, had a great impact on the discussion (see further below). One can say that while one pool of the system constructs social mobility as the ultimate end for 'a system of differentiation', the other pool highlights individualisation and is as such a prerequisite for the former. In between are pedagogical techniques for modification of behaviour. This system of differentiation can therefore be looked upon as a certain logic through which practice is organised and actions are performed. As such it can be understood as a regulative idea in "the systems of reason that order and divide capabilities of children and teachers" (Popkewitz 1999, p. 5).
The important thing here is that attentions is given to the relation among capabilities rather than between people. It is in the research done by Härnqvist in connection with the 1957 School Commission that inter individual variations are problematized by being related to intraindividual variations. Härnqvist was able to show that the later type of variations were high, which meant that the same person had intraindividual irregularities in his/her capability structure. (SOU 1960: 13). The units to be differentiated by pedagogical techniques, are capabilities like behaviour or "achievements" differing within as well as between people. If so, the question of differentiation is neutralised and objectified, since the distribution of 'capability units' connects to "the system of differentiation" (see above) which links social mobility to individualisation: Individualisation is taken a step further. The 'system' created is then formulated within an utilitaristic kind of argument of providing "for a maximum sum total of adequate education" for "the 'many'" (Husén, 1962, p. 62). The maximum of happiness for the individual and maximum efficiency for the society. What is important here is also the fact that this type of individualisation has to be understood as being in agreement with "the spirit of unity which is brought about in schools" creating a "cultural and social unity" in the society by, among other things "equalise educational opportunity" (p.52-53) (On this point see further below). In accordance with Popkewitz (1999) we can look at the system of differentiation as a system of reasoning which embodies governing of the new man, the secular citizen in conformity with "obligations, responsibilities and personal discipline embodied in liberal democratic ideals" (p. 4).

Differential psychology

A prerequisite for the involvement of educational (psychological) research in connection with the restructuring of a school system was a certain type of psychology; differential psychology. It gave the theoretical as well as the practical underpinnings needed for translating the question of differentiation to measurable and researchable problems. Differential psychology is described in a dictionary for educational psychology (1956) by stating four questions: 1. In what respect are individuals different?, 2. In what do they differ?, 3. what connections are there between those characteristics? and 4.Why are individuals different?

In Härnqvist's inaugural lecture "News in the theory of psychological and pedagogical testing" held in Göteborg 21 February 1959 he outlined some basic components of this language-game.

The first concept is "test" as used by educational psychologists, where "test" is defined as designating special types of "tests constructed according to special principles and used in a standardised way" in order to measure "ability and other psychological factors", which can not be said to be directly related to learning (Härnqvist 1959/1988, p. 151; my translation). Those test are of special value if they can be used for differential predictions in such a way that they can discriminate between certain qualifications wanted for a task, a profession or the like and match those with different sets of qualifications making up an individual. Through this the "right man" could be "in the right place", or rather "the right place" could be related to "the right man" according to Härnqvist (p. 152). In other words, what is implicated is that being in the right place is meant to happen when a certain set of capabilities, which to a low extent are possible to be learned, match those criteria which are defined within certain institutional settings. A method like this, i.e. the testing method, according to Härnqvist gives "a very direct information about the requirements, in terms of ability and knowledge, of an individuals' opportunity for continuing studies in different subjects" (p. 154; my translation).
The classical test theory, with its strict requirements of technical precision in its instruments, have to be supplemented according to Härnqvist, in order to be in accordance with utility criteria, by, for example, a theory of choice as developed by Cronbach and Glaser (1957). Härnqvist describes the central themes of such a theory:

"The test gives information about the individual. For this information to be used, a set of rules, a strategy is needed which connects the information of a certain kind with a decision. ... The outcome of the decision consist of all those consequences which the selected alternative of action is shown to lead to" (p. 155; my translation).

Three components are elevated as important within this theory, and which make up the strategy, that is, define the rules; "selection", "utility" and "classification". The meaning and the use of the first concept is exemplified by the need to select students to be admitted to a certain education. The concept classification is accurate when multidimensional information has been used to choose between different alternatives of action. The strategy though, belongs to the institution making the selection and not to the needs of an individual. The "utility" and the costs of a certain selection is thought of as possible to estimate through a certain procedure:

"The utility of a certain strategy consist of the difference between (1) the value of e series of decisions and (2) the costs for bringing in the information needed to make the decision. The total value of the outcome (1) is in it's turn determined by products of the following factors: (a) the amount of people with a certain test score that have gain a certain treatment, (b) the probability that the outcome of the treatment would turn out in a certain way for those persons, and (c) the value of this outcome to be expressed in an unit which can be compared with the one in which the costs for the information are estimated." (p. 155; my translation).

The logic through which this procedure of relating selections of persons with specific capabilities to cost estimation works is one of prediction of the maximum benefit at minimum costs, a capitalistic logic of value accumulation. And Härnqvist continues:

"For different alternatives of action the information (= the result of the test) can be directly related to the value of the outcome of the treatment, its payoff. Through this a function of the payoff is obtained for every alternative of action, which shows the expected value of the treatment in question for those persons with a certain test result"(p. 155; my translation).

So the decisions that have to be taken are ultimately and intimately interrelated with a capitalistic logic of value accumulation, in which the costs for every choice should be one of the major incitements for the decision made by the institutionalised system of differentiation. According to Lyotard (1993/1982) the penetration of language by the metaphysics of capitalism is an effect of modernity. One visible effect as a result of this state of affairs is an ongoing transformation of language into a useful and productive commodity, exemplified here by the shape of information in differential psychology as "a unit of measurement - which is also a unit of price"(p. 27).

The concept introduced to cover the 'function of the pay off' is "validity". Härnqvist presents three different concepts of validity, "predictive validity", "concurrent validity", "content validity" and introduces a fourth concept "construct validity", covering some of the problems connected with the other types of validity. By construct validity is meant that the validity of a test is "tried out in a series of ways", which in principle do not differ from the general methodology of the basic research in differential and personality
psychology (personlighetspsykologi). More precisely defined construct validity consist of:

"Trying out of different consequences that can be derived from the theory of the property in question, and which takes the form of expectations on the variations of the test results under different conditions. If the test works in accordance with the theory this will support its accuracy (or reliability) in terms of 'construct validity" (Härnqvist 1959/1988, p. 158; my translation).

This type of validity is especially suited for "studies of differences between different groups which, due to the theory for the property in question, can be expected to differ". (p.158; my translation). This means that the theory defining the property in question is of great influence to the tests done. If for example the theory says that there is a difference between theoretical and practical capability, this will be validated through the process described, that is, if the test succeeds in discriminating between those properties in certain settings it establishes them as internally validated; as an actual property of persons. Important here is that the theory is connected with the institutional setting, since it is were the expectations expressed in the theory are formulated. Through this form of validity the theories of differential psychology could be said to describe actual properties of persons, that the basic research methodologies in this perspective, when applied to the empirical world, would lie bare the true (natural) capability of persons.

The relation between the true value (the person's true capability) and accidental variations occurring from time to time is called reliability. In discussing this statistical term for precision and some problems and issues related to the length of a test (since different lengths of the test can be shown to change the score for its standard error) Härnqvist states that the important thing with the test is to predict the place of the individual in relation to the others in the group tested: "The more a test with a certain amount of tasks disperses the capacities of persons, the higher the reliability" (p. 162; my translation). In other words the more a test is able to discriminate between capacities of persons, the more effective it will be in making up hierarchies in accordance with those valued and disvalued capacities of the system. So reliability is closely connected with the capacity of the tests to produce differential and hierarchical truths about individuals.

The language game of differential psychology links up with a general tendency within the 'modern project' to differentiate, that is, that 'modernism' can be understood as "a process of cultural differentiation producing clearly defined boundaries of practice and meaning" (Uscher & Edwards 1994, p. 13, Lash 1990, Bauman 1995). Quite clear is also the tendency to produce hierarchical truths about the individual which link up those 'truths' with the wants and needs of a specific system of differentiation. In other words, and as far as one can see "existing power differentials as a major moving force of 'modernisation'" (Wagner, 1998, p. 25) one can say that this language game produces new rules for 'modernised' social practices. In a history of repression this means that certain techniques of power and domination are closely interrelated with the development of an educational psychology dealing with the transformation of a 'divergent' school system (and society) to a 'convergent school system (and society). The latter thought of as producing "equality, democracy and welfare". Important to note here is that "the focus on the inner capabilities and dispositions for self-discipline, a cornerstone of the new social and pedagogical sciences ... should not be seen as 'the antithesis of political power, but a key term in its exercise'(Popkewitz 1999 p. 5, Foucault 1980, Walkerdine 1988, Rose 1996).

The how related to the why
What sort of democratic society is then forecasted by differential psychology? To elaborate on this point we briefly have to connect our argument to the field of political theory, this doesn't mean that a fully developed analysis of the concept of democracy is needed (or possible). What is needed is a sufficient historical and theoretical context in order to understand how those concepts exposed above and the logic through which they are connected gets intimately connected with a certain interpretation of a (liberal) democratic society. In the following I will basically follow Carr & Harnett (1997) in addition to Dewey (1916) and Gutman (1987) in order to trace some regulative ideas in relation to liberal democracy and education. Historically the essentially contested concept democracy can be understood as either a kind of popular power (value-oriented) or as an aid for decision-making (rule-oriented). The first one can be called 'classical' democracy and the second 'contemporary' conceptions of democracy. The classical concept of democracy has its origin in the ideal of the Greek democracy with "the maximum of direct participation of all citizens in the common life of the community"(Carr & Hartnet, p 40.) As such it is basically a moral and educative concept:

"In Athenian democracy the primary virtue of democratic participation was that it was constitutive of a form of society in which individuals could develop and realise their distinctively human capacities within the framework of a common life and on the basis of the common good"(Carr & Hartnett, p 40).

This idealised conception of democracy is in its modern version understood as providing a moral framework for evaluating existing democratic institutions and arrangements in order to see if they stand up to democratic values and ideals. Related to schooling it is a conception of schooling for all. The second conception of democracy is a product of 20th century political theory and practice. It is based on an analysis of existing societies and therefore claims to be more 'realistic' than the classical conception of democracy. One of its distinct features is that it discharges the classical concept of democracy as being utopian. The classical concept of democracy has never, so goes the critique, worked as it was originally formulated and therefore is in great need of being reformulated on the basis of an extensive empirical analysis of existing societies. And moreover, in existing societies of 20th century the level of complexity is so high that most people are excluded from the possibility to participate in actual decision making. Instead of an outdated and dysfunctional ideal one should rather stress the democratic process as a model for democratic decisions performed by an elite. Important is then that there are within this elite different options, that is, there are different parties who compete for power and their competitions are regulated by votes in the democratic process. This model of democracy is closely connected with a model of laissez-faire economy which shows itself clearly, for example, when it comes to education and schooling. Due to this model there are no internal connections between education and democracy (as in the classical concept of democracy). There is rather an external connection through the economical system. The content of education, for the individual as well as for 'society', becomes related to its cash-value. Education and knowledge linked to the economical system and language are reduced to delivering properties which are related to each other through a capitalistic logic of maximum profit, i.e. knowledge is valued in relation to its capacity of satisfying wants (like status, goods and so on)(Heller & Fehér 1991).

Even if what has been said so far might be a oversimplification, the main trends are clear. The contemporary model of democracy transforms the classical concept from its primary moral base to a concept deprived of morality for the sake of a conjuncture with the economical systems of Western industrial countries. It is reduced to a neutral concept without a vision of the good life (cf. Dewey 1916, Gutman 1987, Giroux 1989,
Aronowitz & Giroux 1991, Rorty 1991, Mouffe 1993). Democracy is seen as a system for ruling and making decisions:

"By redefining democracy so as to make it compatible with the ideology of modern industrial societies, twentieth-century realist and elitist theories of democracy effectively converted democracy from a critical concept incorporating a set of political ideas and a coherent vision of the good society, into a descriptive concept derived from observations of political systems of Western industrial societies" (Carr & Hartnett, p 53).

One of the main 'moves' was to connect democracy with the ideas of liberalism. It is the fusion between democracy and liberalism which clears the ground for 'neutralising' the classical notion of democracy. The attraction of democracy for liberalism was that it seemed to deliver a system of government which "would allow an already established view of the good society - the liberal - to work"(Carr & Hartnett, p 46). It offers a logic through which different parts of the society can be related to each other and be effectively administered. Even though there are different interpretations of liberalism, a main characteristic which goes for all is that it is a form of individualism. This idea has its foundation in an conception of the human being as an essentially egoistic and an atomistic creature, striving to satisfy his/hers own desires. The individual is considered to be a rational being who has an ability to think, choose and act for himself/herself in order to satisfy his or her own desires. Those desires are, in liberalism perceived as essentially given by nature rather than related to the society in which the individual life its lived. So being rational means being in accordance with your natural desires, that is, being able to identify them and to organise your life in relation to those natural desires. The basic 'function' of the democratic system within liberalism, then, is to differentiate and to regulate between different natural given desires and to match them with institutionalised expectations derived from the economical system, that is from capitalism.

Concluding remarks

The reading done exposes some tendencies within educational psychology as one of the major forces of 'modernisation' of the Swedish society, especially by introducing technologies for differentiation which are intimately bound up with power and domination. What is introduced is a system of differentiation with an inside and an outside, that is, the techniques of educational psychology are given a certain mediating role between the two 'ends' of the system. The system constructs a relation between society and the individual, or to be more precise: The outer end of the system constructs as social mobility and the inner 'end' of the system as individualisation. This individualisation is taken a step further by introducing "capability" as the unit for the system to differentiate. Individuals are constructed as certain sets of capabilities and the task of the school system is to link those capabilities to certain structures of skills needed, as defined in certain institutional settings in capitalism and expressed as 'profession' or the like. It's worth noticing that those 'capabilities' to a low extent were thought of as possible to be learned. They were rather ambiguously looked upon as connected to more basic levels of the mental states of the individuals, as given by nature but simultaneously also possible to be influenced by the milieu. The system of differentiation was supposed to solve this tension by relating societal expectations to true capabilities; the right place to the right "man" in a liberal democracy. It is also worth noticing that the language game developed is primarily masculine by , for example, exclusively being addressed to "man".

The language game introduced can be looked upon as an amalgamation of a logic of capitalism, an utilitarian philosophy and a 'sociology of efficiency'. The regulative ideas of
this language game produce a costs/benefit analysis directed to effective differentiation in order to being able to managing the maximum of happiness for the individual (being in the right place) with maximum efficiency (social mobility) for the society. As such it is formulated as differentiation within modernity, that is, as related to the making up of boundaries between different aspects of life as to be able to fix meaning and to fix that which is inside and what is outside. The language game thereby exercises a logic of exclusion. It makes closures of meaning possible. It produces a technique for closure of subjects, that is for producing closed subjects relating to each other hierarchically through valued/disvalued capabilities and as such linked to the wants taking form in capitalism and regulated by the system of differentiation.

Knowledge produced within this language-game of differential psychology then, is produced within a network of interests and considerations shaped in the realms of capitalism, liberal democracy and positivism.

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