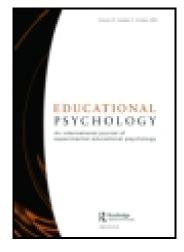
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Science and Individualism in Educational Psychology: problems for practice and points of departure

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ABSTRACT It is mainly through schools that the profession of educational psychology is maintained. What assumptions are made in the training of such people? Critically, as Olssen argues, they are assumptions which have formed the basis of psychology itself and were historically embedded in discursive traditions at the turn of the century, traditions which constituted the generative source of the way the discipline of educational psychology was to develop. Assumptions about the nature of science were important, as Rom Harré and others have argued. More important, though, is the assumption of individualism: the presupposition that problems of learning are problems of an individual child, to be fixed by personalised intervention. The influence of psychology on education is often hidden, but in the case of individual psychology it is often overt. If there are problems with psychology, including the psychology of individual development, then educational psychology will need very careful scrutiny.

Educational psychology emerged as a branch of psychology in the late 19th century. It has become central to the study of educational issues, a central force in the everyday lives of ordinary people and a central institutional base from which technical, social and educational problems are tackled within specialist university departments of education. Today, huge resources are involved in supporting psychological research into educational issues and in the training of educational psychologists.

Over the last 30 years, psychology itself has come increasingly under attack (Harré, 1985, 1986, 1987; Richards & Light, 1986, Manicas, 1987). As developments within educational psychology are linked to developments in psychology in general, the implications of this attack are of considerable importance. The main critics have come from Britain and America, the countries constituting the main bases for development of institutionalised psychology of a scientific sort. While to some extent they are

building on criticisms made in the 1960s by writers such as Klaus Riegel, Thomas Szasz and R. D. Laing, the latest wave of criticism is both more sustained and more widespread. In this article I have three main aims. Firstly, I will document the nature and explain the basis of the criticisms that have been made. While these objections have, in the main focused upon psychology's scientific methodology—frequently called 'positivism—I will maintain that the real culprit is psychology's fixation on the individual and on the way it depicts reality in highly individualistic terms. Secondly, I will explore the implications of these criticisms for educational practice; and thirdly, I will investigate some proposals for reconstructing psychology along with more appropriate lines. In order to meet these objectives, it is necessary to look into some aspects of psychology's history.

Psychology and Science

Psychology arose in the 19th century as a product of the growing faith in reason and science which characterised the period known as the Enlightenment. While it was never a single monolithic framework for study, but rather a series of disparate approaches, by the end of the 19th century those active in psychology shared a view of themselves as part of a broader, more encompassing scientific approach to the world. In the first decades of the 20th century, a series of distinct traditions developed and each was to have an impact on education. The most important of these included individual difference psychology, concerned with mental measurement and assessment; behaviourism, developed initially in America and concerned with the control and shaping of human behaviour; cognitive developmental psychologies, concerned with the process and development of mind; and Freudianism, concerned largely with the interpretation and treatment of pathological behaviour. All offered explanations of conduct which were of use to educators and all shared the general belief, prevalent during the later 19th century, that progress and achievement in human affairs, as well as the emerging problems of order and control associated with the establishment of new cities, could be achieved through the application of scientific methods to every aspect of life. The growing prestige of science can be seen as a consequence of the growth in the success of the physical sciences over the preceding centuries. Since the 15th century there had been a progressive decentring of the church in its role of moral and social leadership and a corresponding faith that social problems could be addressed through the application of technical competence and expertise to any sphere of life.

Psychology became inextricably linked to science. In most standard histories its development can be traced from about 1860, after a preparatory period in philosophy, biology and physiology, to about 1930 when it proliferated into fairly well-defined schools, viewpoints and movements (O'Neill, 1982). The word 'psychology' itself goes back to the 15th century and was used to refer to the human soul, one aspect of the study of spiritual being. According to O'Neill, the word came first to be used to designate a secular, although philosophical, analysis of mental phenomena in 1732 and was first used in England by David Hartley in 1748. It was only in the 19th century that the meaning of the word shifted from referring to a philosophical study of mental phenomena to a scientific one. Writers on the history of psychology point to Wilhelm Wundt (1832–1920) in Germany as being the founder of modern psychology. Wundt is credited with establishing the first experimental laboratory in 1879. While Wundt's work was to influence developments in Britain and America, Manicas (1987) maintains that his methods were eelectically borrowed and adapted to the conceptions of psychol-

ogy as science that were developing in those countries. Consistent with developing lines of thought in Germany, Wundt viewed the scope of experimental psychology as distinctly limited. Believing that mind was a social phenomenon, he agreed with his contemporary, the sociologist Durkheim, that the social was not reducible to the individual and that the best way to study the concepts of consciousness was through the study of what Durkheim called 'social facts'—myths, traditions and customs. In this context psychology's application was, as Manicas has put it, the "limited programme" of study perceptions and the contents of experience. The higher mental faculties, being irreducibly social, would be left to sociology.

In Britain, as in America, the conception of what sort of activity psychology should be was not so modest. Between 1875 and 1925, says Richard Rose in his book The Psychological Complex (1985, p. 4), "something happened . . . an event . . . a shift" from philosophy and religion to a belief that psychological science could be practical and useful in addressing social problems. While Rose perhaps overemphasises the idea of rupture in this process of emergence, it was during this period that the first distinctively psychological types of organisations were established. In 1876 the journal Mind was first published, edited by Alexander Bain, and devoted to the topics of 'psychology and philosophy'. In the same year, Wilhaim suggested that there was a need "to procure a decision of the scientific study of psychology". In 1897, James Sully Professor of the Philosophy of Mind and Logic in London, established the first English laboratory for experimental psychology at University College. In the same year, a laboratory was established at Cambridge. In 1901 the British Psychological Society was inaugurated and in 1904 the British Journal of Psychology appeared. Thus, by the very first years of this century the infrastructure for the discipline was in place.

As it affected education, the earliest major development in psychology was the psychology of individual differences. Influenced by developments in statistics and by a variety of social problems resulting from industrialisation and the growth of new cities, British and American psychology came to be concerned not with the generalised normal human mind, as in Germany, but with variability amongst human individuals. It was concerned with specific mental capacities and, above all, with the *measurement* of mental capacities. Amongst its leading 'organic intellectuals' were Charles Darwin's half-cousin Francis Galton and the statistician Karl Pearson. Both were active eugenicists, a fact which reflects the importance of eugenics as a social influence on psychology's development. Defined as the science of improving the genetic quality of the stock, eugenics was born from a concern that the less intelligent sections of the population would breed more quickly than the more intelligent middle-class sectors and, thus, lower the overall intelligence in the population. Such concerns inspired eugenicists such as Galton and Pearson to develop measures for classifying the mental abilities of the population.

While eugenics was a major concern other social issues concerned with poverty, urbanisation, immigration, industrialisation and, by 1914, war, were important influences affecting psychology's development. In America, institutionalisation and professionalisation proceeded more quickly than it did in Britain and between 1875 and 1925 psychology became a major growth industry. From the establishment of the first psychological laboratory some time in the 1870s, by 1882 there were 18 laboratories, by 1904 48, and by 1917 there were more American psychologists listed in the British Who's Who of Science than the combined numbers in Britain, France and Germany (Manicas, 1987, p. 208).

In America, the psychology of individual differences was related closely to other

emergent forms of psychology, such as behaviourism, in the sense of being 'sciences in use' for the processing of educational and social matters. As Boring describes matters in 1929:

By 1900 the characteristics of American psychology were well defined. It inherited its physical body from German experimentalism, but it got its mind from Darwin. American psychology was to deal with the mind in use... Thorndike brought the animals into the formal laboratory... then went over to study school children and the mental tests increased. Hall helped here too with his pioneering in educational psychology... Then Watson touched a match to the mass, there was an explosion and behaviourism was born. (Boring, 1929, p. 454).

Much of the early impetus for development in America came from mental testing. As Lewis Terman, author of the famous Stanford-Binet intelligence test, put it in 1920:

It is the method of tests that has brought psychology down from the clouds... that has transformed the 'science of trivialities' into the science of human engineering. The psychologist of the pre-test era was, to the average layman, just a harmless crank, but now that psychology has tested and classified nearly two million soldiers, has been appealed to in the grading of nearly two million children, is used everywhere in court institutions for the feeble-minded, delinquent, criminal and insane, has become the beacon light of the eugenics movement, is appealed to by congressmen in the reshaping of national policy on immigration... no psychologist of today can complain that his science is not taken seriously enough. (Cited in Samelson, 1979, pp. 107–108).

By the 1920s psychology was an integral part of American education.

Psychology and Positivism

Amongst those identifying with psychology in the 19th century, nearly all proclaimed the view that psychology was a science in the same manner as the physical sciences. Towards the end of the 19th century, an increasingly vocal and authoritative group debated this issue. This included such notables as Francis Galton, Karl Pearson, William James, James McKeen Cattell, John Watson, Stanley Hall, E. L. Thorndike, Lewis Terman, to name a few. There was one idea that they all shared: that science was totally separate from philosophy. While there was some disagreement over what this meant exactly, by the first decade of the 20th century a conception of science that was thoroughly positivist prevailed in Britain and America and was uniformly accepted as the basis of psychological research. The consequences of this development were, as Peter Manicas sums it up, "simply enormous" (1987, p. 185).

Positivist science was based on a theory of knowledge known as empiricism, derived from the 'philosophical writings of David Hume and John Locke, which essentially decreed that knowledge of use to science is based on sensory experience of an observable world. Positivism was a specific conception of how science should proceed. It included the following central ideas:

(1) That all knowledge is gained in science by systematic observation via the senses.

The only relevant test for the acceptance or rejection of a claim is whether or not it is consistent with the facts, otherwise called 'empirical data'.

- (2) The facts or the data are for the positivist theory free and not influenced by moral or political, racial or cultural prejudices. They can be described in an observation language which is devoid of theoretical assumptions presuppositions of any sort.
- (3) Objectivity is established through intersubjective agreement on the facts. That is, a finding is objective in the sense that all good, competent, honest observers agree.
- (4) These methods are what lies behind the progress in the physical sciences. Under the doctrine of the *unity of method*, positivism maintained that the same methods are applicable to study of the social human world.
- (5) The aim of science is to establish universal laws or generalisations. These universal 'truths' are established by observation studies of the facts. Once such truths are established, they generate new hypotheses to be tested by further observation studies.
- (6) Just as in the physical sciences, complex phenomena were broken down to their basic elements or parts—so too in the social sciences. The doctrine of *methodological individualism* essentially decreed that all complex phenomena (such as 'education', the court system, 'the state') could be reduced to their elemental constituents for the purposes of study and explanation.
- (7) Scientific research is *value free*, i.e. neutral as regards political, social or moral issues.

Amongst the different psychologies, some embraced positivism more completely than others. Thus, the radical behaviourists in America, growing in importance under the influence of John Watson and later B. F. Skinner, sought to expunge all non-observable, 'metaphysical' phenomena from the objects of their science. Because they argued that minds and mental states are not directly observable, the behaviourists rejected minds as objects of enquiry and focused exclusively on overt behaviour. The doctrine of methodological objectivism meant exorcising anything not accessible to independent observation.

Positivist methods of science were also encouraged by developments in statistics. Statistical concepts—such as the normal curve, regression and correlation, means analysis, the analysis of variance and significance testing developed by Galton, Pearson and later R. A. Fisher—were to have a great influence on psychological methods. Statistical methodology became the epitome of scientific method and made psychology's construction of knowledge limited to the range of research issues that could be addressed by the statistical world view, a world view that depended on various assumptions and was to increasingly come under attack.

Criticisms of Positivism

The history of positivism this century has witnessed a progressive attack on every one of its central tenets. In the 1940s and 1950s, Karl Popper, although himself maintaining a conservative position in the philosophy of science, argued against the inductive basis of positivist reasoning; that is, moving from a series of single observations to the establishment of *universal laws or truths*. There is a logical fallacy in reasoning from any number of single observations (such as 'this swan is white') to a universal generalisation ('all swans are white'). One cannot, through examining the data, establish general truths about the world which hold for all time (Popper, 1968). This had important

consequences for psychology, for many were in fact trying to do just that. Sigmund Freud, on the basis of case studies, claimed to have discovered the universally valid mechanisms of psychic functioning, rather than simply offering a limited conception of the bourgeois Victorian family form. A little later, Piaget claimed to have discovered the invariant stages of cognitive development; the individual difference psychologists claimed to have located the causal explanation for differences in intellectual capacity; and the behaviourists claimed to have discovered the invariant mechanisms by which human (and animal) behaviour is shaped.

Positivism also came under increasing attack in the philosophy of science by a group of philosophers known collectively as 'conventionalists' who attacked the very basis of the positivist conception—the primacy of facts and observations. It was pointed out that science is not a neutral or impartial activity that proceeds from a detached or independent standpoint, but, rather, a social activity that takes place within a given historical context. N. R. Hanson (1958) made the claim that even simple observations are themselves theory-laden and that the positivist claim to sense knowledge of an observable world is fraught with difficulty. Essentially, Hanson argued, researchers see the world not through pristine clear spectacles which give them an unencumbered view, but through a conceptual framework of background assumptions infused with social, moral and even political values. The very processes of observation, says Hanson, will be structured by the theories we use, by the assumptions that underpin those theories and by the models and concepts employed by the approach.

The importance of background assumptions to research methodology in science was also crucial for Thomas Kuhn whose book The Structure of Scientific Revolutions (1962) now counts as a landmark in the philosophy of science and has had an important influence on research in all areas of the social sciences. The essential core of Kuhn's position is the idea that central to research of any kind is a framework of structuring assumptions or paradigm, which comprise the models, problems, concepts, analogies and values implicit in the researcher's orientation. The paradigm can be seen as comprising assumptions of various sorts: (a) epistemological, that is concerning the nature of knowledge; (b) ontological, that is concerning the nature of reality and of the nature of people; (c) metaphysical, concerning the nature and structure of the universe; and (d) methodological, concerning the procedures appropriate for investigation and analysis. Strongly suggested by Kuhn's theorising was the view that there are no independent criteria by which it was possible to evaluate the merits of one paradigm against another. If this is true, then all paradigms have an equal claim as frameworks of investigation. While this suited some social scientists, who by the 1960s were used to 'talking past one another', or even 'not talking to each other', the problems of relativism and theory incommensurability suggested by Kuhn's writings were to meet with critical attack.

A more sustained contribution to this debate was to come from writers in the continental tradition of critical social theory. In 1971, an important new work was published by the German social theorist Jurgen Habermas. Habermas's book Knowledge and Human Interests (1971) marks a complete break and constitutes a systematic rejection of positivist social science. In Habermas's view, there is a rejection of the idea that science is guided by disinterested or objective interests. Rather, knowledge is always constituted on the basis of human interests or values that have developed in, and been shaped by, social and historical circumstances.

In his classification of research, Habermas distinguishes three main types of *interest* which structure knowledge. These are:

- (1) The technical interest which has interests of prediction and control and is typically concerned with technical control over natural objects. Far from encompassing all of what science does, it constitutes only a limited form of science through which technical solutions to instrumental problems are resolved. While its individualist assumptions cannot adequately conceptualise the processes of social structure, this sort of knowledge is not unimportant. On the contrary, the technical interest produces knowledge of considerable importance for industry, production, health and so on.
- (2) The practical interest. Because social life is symbolically structured communicative action, it cannot be reduced to individualist propositions of physical science methods, but requires a different approach. The practical interest is concerned with interpretation and understanding of the intentions and meanings in communication. While Habermas believes that interpretation provides a valid form of knowledge, he maintains that it is not sufficient as a methodological basis for the social sciences. This is so because the subjective meanings and understandings of individuals ignore the externality of structures—economic, social, symbolic, political—as they impact on people's lives and which distort the processes of communication.
- (3) The emancipatory interest. The only valid basis for social science is what Habermas calls emancipatory—constitutive interests. This interest is premised on the values of freedom and rational autonomy and is critically orientated to existing structures of society. Critical social science must be concerned to expose elements, processes and stuctures in the existing social order which frustrate or block the pursuit of rational goals and must be able to present theoretical accounts which illuminate how such conditions can be overcome. The commitment of critical social science to an emancipatory interest and an idealised conception of social organisation fulfils a crucial methodological function for Habermas, for it enables the social scientist to dissociate from, and maintain a critical orientation to, the structures of the society which frustrate the task of a rational (i.e. non-oppressive) development.

Bo Jacobsen (1985) maintains that traditionally educational psychology resembles much the same kind of knowledge which Habermas calls technical knowledge or knowledge acquired by a technical interest. The commitment to positivism fosters, it is claimed, an erroneous conception of psychology as science and has historically given psychology a hegemony (i.e. control and leadership) over other approaches within the human sciences in terms of both its impact on policy, the monopolisation of resources and its ability to attract research money. Both as a technical methodology and as a cultural ethos, positivism supports an image of the psychologist as somebody who has expert and specialist knowledge. This is so in the broad commitment it gives to the possibility of objectivity and independence of the researcher, in the possibility of theoryneutral observations of a value-free nature and in the general commitment given to impartiality and detachment. Indirectly it supports the view that psychologists of education are specialists who make neutral judgements in order to solve social and personal problems. In short, it is pretending to be scientific when it is not. As its claims to science are no longer justifiable in terms of social theory, psychology maintains this technocratic image by reference to the standing of science within popular folklore and common-sense thought.

The central role of statistical methodologies in psychology can also be attacked in that many of the assumptions of positivism are integral to the statistical world view. Valsiner in fact, claims that through developments in statistics by those such as Galton, Pearson, Fisher, Burt and Thorndike, a whole range of philosophical assumptions of

the 19th century became built into its psychological world view (Valsiner, 1988, p. 13). This is especially so in relation to the primacy of inductive reasoning in science and the importance of the data-set as the basis on which generalisations are established. While reliance on statistical techniques provided an 'objective' way of producing knowledge in a world full of uncertainties, the inductive basis has not stood up to rigorous analysis. Various other assumptions, concerning the nature of causation, the presence of underlying causal mechanisms, the static nature of the universe and the homogeneity of populations, have also been documented as necessary, but contentious, assumptions underpinning statistical theory (Valsiner, 1988). While it is not possible to outline these assumptions in more detail here, suffice it to say that, under the influence of statistics, psychology has tended to overlook unique psychological phenomena specific to place and time and to look for universal truths applying in all times and places.

Individualism and Psychology

While a positivist conception of science has clearly limited psychology's development and frequently been the subject of criticism, it is my contention in this article that what I have called psychology's individualism constitutes a far more serious difficulty. By individualism I mean to refer to the ontological and metaphysical basis of psychology; that is, to the fundamental assumptions it makes about the nature of reality and the consequences these have for educational psychology. Whereas many of the emphases of positivism have been rejected in preference for qualitative approaches, the individualism of psychology was not so easily replaced.

Within the hard core assumptions of psychological research programmes emerging at the turn of the century, all of them had a common element in that they all focused upon individuals, upon individual differences, upon individual development, upon individual abnormalities, 'behaviour problems' or the like. This focus upon 'the individual' today remains at the heart of the crisis of psychology. With the Enlightenment faith in reason and science came a rejection of the view, common to many rationalists, medieval scholars and socialists, that we can perfect individuals only by perfecting society, by replacing it with the view that we can perfect society only by perfecting individuals. Likewise, the view that we can understand individuals only by understanding the form of the society in which they live is replaced by the contention that we can understand society only through an understanding of its individual members.

In the 19th century, Marx and Durkheim both took the view that society is independent to individuals and that individual mind is socially and historically constructed. Against those theorists who argued that the individual is 'pre-social' or biologically constituted, Marx argued that the individual is always already social; that is, the individual is a social being from the first. As he summed it up in the preface to A Contribution to The Critique of Political Economy: "it is not the consciousness of men that determines their existence, but their social existence that determines their consciousness" (Marx, 1968, p. 21). The dual position with respect to the ontological privileging of individual or society is clearly expressed in this quotation.

Durkheim also claimed the importance of society over the individual, arguing that no study of the individual can give us an understanding of society. In his *Rules of Sociological Method* (1933), he argued that, although society is made up of individuals, it is different and distinct from the component parts. If we think of language, or marriage, or of the various legal or moral codes in the world, then it becomes clear, argued Durkheim, that by studying the individual person we could never come to an

understanding of such institutions. Yet without studying these structual features of society we cannot understand the individual either. By the term 'social', Durkheim is referring to those 'general' or 'collective' dimensions of reality as they are expressed in patterns or structures. Certain ideals or value systems, such as Christian thought, can be found throughout society and persist for a long period of time, in many cases more enduring than the individual members of the society. They were there before the individual was born and will be there after he or she is dead. When the individual comes into the world, 'reality' in the form of language, belief systems, schooling etc. is already constituted. It is not an immutable natural state of affairs, but is historically constructed and is different in different societies. Durkheim maintained, in fact, that even something as intimately personal as suicide was a social rather than a psychological phenomenon. In his study on suicide, Durkheim argues and presents evidence for the hypothesis that the cause of suicide is the degree of social and moral integration of the society; it was not something that could be explained by looking at individuals.

While for Marx and Durkheim society must be seen as having existence external to, and independent of, the individuals which constitute it if explanation and analysis are to be adequate, under the hegemony of positivist frames of scientific reference in the 19th century psychology was to be influenced by an altogether different line of thought—a line of thought that rejected structure and society altogether and exalted individuals as being all that was really real.

The ontological priority of the individual was reinforced by a broad spectrum of social and political theory and is closely tied to social, economic and political changes from the 16th century onwards. The Reformation and the attendant protestant religion gave rise to a new spirit of individualism whereby each individual could communicate directly with God and was solely responsible for his (or even her) salvation. With the expansion of empire, the growth of science and the Enlightenment belief in progress, the idea that the individual was master of their fate was further encouraged. Partly this was inspired by the successful methods of the physical sciences which employed mathematical laws, measurement quantification and based itself on a metaphysic of atomism, reducing complex physical phenomena to its smallest component particle. Believing that the social world could be studied in the same way as to endorse generally the search for the truth of life in the individual.

Classical liberal individualism encompassed all aspects of life. In *The Wealth of Nations*, first published in 1776, Adam Smith sought to explain *laissez faire* capitalism as a consequence of the natural competition of the individual in very much the same way, with respect to basic postulates, that Darwin later sought to explain the processes of natural selection at work in the origins and evolution of species. In political philosophy John Stuart Mill was to frame a political conception of liberty to safeguard political freedom within a *laissez faire* approach to capitalism. Others such as Jeremy Bentham and Herbert Spencer were to legitimise 'non-intervention', 'individual liberty' and 'unregulated competition' as being part of the *natural order of things*, reinforcing what was an ascendant view of society as a consequence of solely individual initiatives.

C. B. Macpherson has described this strain of thought in his book *The Political Theory of Possessive Individualism* (1962) and describes how, through a variety of thinkers from Thomas Hobbes to John Stuart Mill, English political and social thought from the 17th century to the 19th century is characterised by the idea of possessive individualism. This idea, says Macpherson, became axiomatic to liberal democratic thought and to scientific movements. In the 19th century it became an underlying and unifying assumption. Its 'possessive' quality is found in the condition of the individual as

essentially the proprietor of his (or presumably her) own person or capacities, owing nothing to society for them. Thus, for theorists such as Hobbes, Locke, Adam Smith, Herbert Spencer, Bentham, Mill and Galton, the individual 'pre-figures' society and society will be happy and secure to the extent that individuals are happy and secure. Not only does the individual own his/her own capacities, but, more crucially, each is morally and legally responsible for him- or herself. Freedom from dependence upon others means freedom from relations with others except those relations entered into voluntarily out of self-interest. Human society is simply a series of market relations between self-interested subjects. For Adam Smith it is guided by an 'invisible hand'. For John Locke society is a 'joint stock company' of which individuals are shareholders.

This model of the person as a self-moving, self-interested, presocial, unitary, rational and ahistorical individual had also been the dominant conception in the writings of the 'father of modern philosophy', Descartes, who in the first half of the 17th century identified the 'Cogito' as the only starting place for reliable knowledge. As testified to in the maxim "I think therefore I am", all one could really be sure about, said Descartes, was one's subjective experience. This became the basis for the philosophical separation of mind from the body and has had an enormous influence in subsequent developments within the social sciences.

Paradoxically, while the impact of individualism was dominant in relation to social, political, educational and scientific ideas of the late 19th/early 20th century, this period actually marked a major extension of the state's authority over every aspect of the individual's life and to every corner of society. The problems of urbanisation, population increases, immigration, war and a major concern with eugenics (MacKenzie, 1979) gave rise to an increasing concern with regulation and control, leading to the state's encouragement for various forms of social research (see Abrams, 1968).

Notwithstanding this paradox, the impact of classical liberal individualism on psychology was secure. It can be summed up with reference to several features.

Psychology took the individual as a unitary rational actor and as the primary object of investigation. It was a science of the single case abstracted from culture. In that social factors were important at all, they were simply seen as contaminating influences.

Biologism was one form of individualism and was central to the psychologies of individual differences and Freudianism. In individual difference psychology, almost no social influences were acknowledged at all, the genetic structure of the individual being seen as determining behaviour and capacity in all important respects.

In Freud's theories, while environmental factors could act to affect development, the derivation and nature of development was determined by biologically shaped drives. The role of society was to serve to repress and constrain, and ultimately channel, these drives into socially useful activities. Freud's implicit theory of social structure was premised on the idea of conflict and aggression between individuals. In this sense he had a similar view of society to that held by Thomas Hobbes: a zero-sum model of competition and mutually excluding trade-offs between individuals motivated by chaotic psychic energies (Ingleby, 1987).

Cognitive developmental psychologies accorded biology a less direct role, but still conceptualised the individual as a unitary rational actor, seeing 'behaviours', 'attitudes', 'emotions', 'language', 'dispositions' and so on as things in the individual and part of the individual's cognitive makeup. Development was seen as a consequence of inner mechanisms. Capacities were seen as individual and as logically distinct from social processes. Without a social perspective, cognitive psychology distorted the notion of development reducing it to a series of cognitive rules.

Behaviourism was another form of individualism. Although the behaviourists rejected biology, stressing the environmental determination of behaviour, the approach was still in accord with the dictates of methodological and liberal individualism. It was in fact, the psychology of the single case par excellence. The focus was still upon the individual as logically distinct from culture (Ingleby, 1987). While individual dispositions could be modified by the environment, the nature of dispositions remains located firmly inside the child's immediate environment and this, as Ingleby puts it, "occludes social structure as effectively as the hereditarians" (Ingleby, 1987, p. 299). In fact, there was no recognition of structural or collective aspects of culture or society as impacting on individuals' lives at all.

It is in this sense, say the critics, that psychology is inadequate for the task of explaining the social nature of development. Because psychology lacks a clearly defined theory of knowledge, it is unable adequately to conceptualise or understand the relationship between individuals and complex social structures. Lacking a social theory by which it can comprehend the externality of the structures of the social world, psychology tends, by default, to draw much of its normative force from conventional wisdom. It frequently incorporates, as Rom Harré (1987) has observed, common-sense solutions to problems which it constitutes under the guise of science.

In social theory, the 'structure-agency' debate is of relevance here. The importance of the issue concerns whether a particular research approach ontologically gives primacy to structure over agency or agency over structure, and social theorists such as Anthony Giddens (1976; 1982) maintain that commitments of a research approach along this dimension will have far-reaching consequences. While one of the central endeavours of social science this century has been to balance or synthesise these poles, psychology, focusing as it does on the single case, has been unable to do so. As a consequence it is macro-blind; that is, it is blind to systems, groups and the collective nature of society to shape individuals.

Several consequences spring from this. One is that psychology has tended to reify the status quo, accepting the existing structures of society as natural, normal and constant features of the individual's environment, rather than as contingent and historically relative. There is one important sense in which psychology could not do anything but see structures in this way, as its individualist ontology precludes their theorisation as social facts. This, says David Ingleby (1987), has led to psychologists advocating spurious norms of development. Notions of 'maturity', 'development', 'ordinal family position', 'the role of the father', 'stages in development' and so on were all seen as constant, immutable features of a timeless environment. The patriarchal family was seen as natural and normal, and historically relative cultural values, underpinned by relations of power, were represented as permanent fixed features of the environment.

The application of the bell-shaped curve of normal distribution, first used by Galton in the 1860s, frequently acted as a benchmark establishing what was *natural* and *normal*. The apparatus of the normal curve had within it deep assumptions of unity by which individuals could be compared on the same conceptual space to the entire population, and for which in the 20th century it has been almost impossible for any individual to escape. The normal curve became a 'regime of truth' by which the present was constituted as *normal* and by which difference was transposed and interpreted in psychological terms.

Within educational contexts, psychology easily became adapted to the interests of the institution rather than the interests of the children. Frequently psychologists became part of the apparatus of normalisation and surveillance, adapting children to whatever

happened to exist in the present. As a consequence, structural features of society were seen to be explained as individual psychological characteristics. The injuries of class or the oppressions of gender came to be seen as 'personality disorders' or 'deficiencies of IQ'; conceptions of middle-class protestant morality, with their emphasis upon 'self-control' and 'gratification delay' became explained as being the 'mature personality'. Far too often, say the critics, psychology, focusing as it does on the individual, asks people to accept a change in their subjective experience as a substitute for changes in objective reality (Sampson, 1985).

Peter Manicas has maintained that the reason American psychology has systematically avoided attention to the collective nature of attitudes and to social structure is inextricably linked to the Cold War and the need to remain politically *pure*. Deviations from research in anything other than individualist behavioural terms were so suspect that even the word 'social' was discouraged as being too closely associated with the word 'socialism'. This resulted, in the 1950s, says Manicas, in several prominent American psychologists with the support of the Ford and Russell Sage Foundations lobbying the American Foundation of Social Sciences to change its name to the American Foundation of Behavioural Sciences.

Without any remorse or conceptual embarrassment then, the human sciences would now unite in seeing themselves as jointly concerned with 'behaviour' and with individuals who could be both mindless and asocial, the 'happy robots' of 'The Great American Celebration', (Manicas, 1987, p 237).

Because of the ontological priority given to the individual, psychology can also be criticised for its idealist orientation to social policy. This criticism especially applies to educational psychology which frequently goes beyond the limits of its application in regard to social, political and educational policy issues. This occurs when psychological solutions are advocated in order to solve or remedy problems which are structural or social in nature. There is a belief that by fixing up individuals, a healthy society will emerge. Examples of this can readily be found in a variety of reports on education that have been produced in New Zealand over the last 20 years. The Johnson Report, published in 1977, is a good example. It starts by listing nearly every serious 'problem in New Zealand today ranging from VD to alcohol abuse and essentially maintains introducing better trained teachers and more school counsellors and psychologists as the way to remedy the situation. The 'Schools Without Failure' project, an in-service training programme for teachers produced under the auspices of the Department of Education in 1984, essentially recommends a similar approach. It advocates the introduction of more psychologists to solve the problem of school failure. Similarly the Curriculum Review of 1985 works to address the issue of conflict in society and psychologists are called upon to produce cooperative orientations to life. Implicit in these reports is the idea that educational psychology can, through operating on individuals, promote transformation in the social domain. Yet it is highly doubtful whether it can. Issues of VD, alcohol abuse, success and failure, conflict or co-operation are not questions of individual attitudes so much as structural features of the environment underpinned by economic, social and educational arrangements. That psychology often gets into such a predicament is a direct consequence of its individualist ontology.

Another way in which the individual-society issue impacts upon educational psychology is to be found in situations where school psychologists are concerned with discipline problems. The issue of what constitutes a 'problem', or 'whose problem it is' involves the psychologist in decisions of a moral, social and political nature. Because in

school situations children usually are referred to the psychologist by the school (or by the school and the parent) in a way in which the child frequently has no choice, the psychologist is often faced with a crucial decision. Does the 'problem' belong to the child or to the school or to the parents? This question has crucial implications for individual rights and civil liberties and is not always easy to answer. In the past, schools have insisted on wholly unreasonable standards of behaviour enforcing white Anglo-Saxon standards of behaviour on children of varying colours, races and creeds.

Similar dilemmas may arise concerning any number of issues: swearing, smoking, sex and the like. Or they may arise over personal behaviour in the classroom or outside of it. What one school may regard as a 'problem', another may be prepared to tolerate. The extent to which teachers and schools are prepared to tolerate personal, racial, religious or class-based differences in behaviour is not an easy issue for psychology to arbitrate. This introduces ethical dilemmas. That many school psychologists undoubtedly handle such dilemmas sensitively and maturely is not the issue. What is at issue is that on these questions psychology is theoretically arbitrary. From the point of view of the child or client, having to depend upon the sensitivity or liberalness of one's psychologist is too much of a gamble and effects the issue of trust.

There is a difficulty too of even locating problems within the individual and the forms of description in language that this entails. Should we speak of a child as having a 'behaviour problem' which locates the problem as being *inside* the child or does the problem exist *in the relation* between the child and school? Labelling theorists use the concept of 'residual rule breaking'. Sociologists following Gramsci classify all sorts of behaviour as 'forms of resistance'. Many of the concepts and words used by traditional psychologies imply the moralism and individualism of the theories from which they have derived.

Social Constructionism

There have always been some who recognised the social nature of mind. Marx and Durkheim were two. In psychology, as we noted above, Wundt had recognised that psychology had a 'limited programme' given the irreducible nature of social facts. At the start of this century, writers like James Mark Baldwin and John Dewey had opposed the main drift of psychology's development. Within mainstream psychology there were moments of disquiet which led slowly during the 20th century to attempts to take 'the social' nature of human interaction into account. For the most part, however, social processes were recognised grudgingly as another source of contamination upon individual development. They were seen within the framework of positivism as 'one set of factors among many', as 'other factors to be partialled out', or as 'intervening variables' in the overall mix.

There are too many initiatives to explain in detail. In the 1930s, the concept of 'socialisation' was introduced into textbooks on child development; later Banton introduced role theory as an approach in social psychology which first represented the idea of social structure as something external to the individual. More recently, Urie Bronfenbrenner, in his book *The Ecology of Human Development* (1979), claimed that the cognitivists had focused too much upon the individual abstracted from culture and sought instead to place emphasis upon research in 'natural settings'.

Two main approaches have developed in response to the inadequacy of traditional psychology. Interpretive approaches (Shotter, 1974; Gergen, 1985) stemming from phenomenology and from American writers like George Herbert Mead, put a central

importance on consciousness. These approaches stressed the importance of human agency. They were also anti-positivist in that they claimed that by focusing upon the individual as shaped by psychic mechanisms, biology, or stimulus-response mechanisms, positivist psychology placed too much emphasis upon causation and not enough on human *intentionality*. Positivism (and behaviourism especially) saw the individual as too *passive*.

Interpretive approaches can be criticised as still being individualistic in that they endorse a *voluntaristic* view of social process, exaggerating the ability of individuals to construct actively their realities and neglecting attention on social, cultural and organisational factors. Interpretive approaches also have affinities with positivism in certain key respects. The methodological endorsement of qualitative research and methods of participant observation frequently commit them to the mistaken belief that they are describing the world as it 'really is'. What, in fact, happens is that they project their own interpretations onto the data constituted on the basis of common sense and conventional wisdom. Thus, ideological notions generated in history (such as IQ testing, for example) come to be accepted uncontroversially as timeless and natural facts.

Social constructionist psychologies represent an alternative to traditional psychology and are of increasing interest. Switching the ontological primacy from the individual to the social, social constructionists of various kinds all work on the basis that humans are essentially social beings. Central to all are the beliefs that the mind is social, by which is meant that the contents of consciousness have an objective social and historical source. Because the mind is social, human thought perception and action must be approached in terms of meanings. The vehicles of these meanings are structures variously called 'codes', rule systems or moral orders, the nature of which is inherently intersubjective. As psychology is the science of mind and mind is social and public, the object of psychology is not the individuals as such, but 'the spaces between them' (Ingleby, 1986); that is, the cultural codes or meaning systems that structure action.

One central figure in social constructionism is the Oxford philospher, Rom Harré. Central to Harré's ideas is the notion of 'moral orders'. Within any group larger than two, the 'moral order' establishes the ways of acting, feeling and thinking that are culturally appropriate. It defines rights, expectations and obligations. It is the moral order, says Harré, that provides actors with 'scripts' and roles. These are enacted on a stage with various degrees of flexibility, enabling roles to be modified, transgressed or altered in the process of interaction (Harré, 1987).

Within social constructionism, then, the meaning of individual action is not something inherent in behaviour (as it is for behaviourists) or something inherent in mind (as it is for cognitivists), but is located in a public realm. What individuals like to think of as 'their attitudes', 'their values', 'their actions', are, in fact, public rule systems or codes which define all possible modes of thought and action. When a person walks down the street he or she acts in ways that are pre-ordinated by established societal rule systems, or conventions, which are embedded in language. For a rugby player, for instance, learned expectations as to how rugby players act, what sort of gender role they should play, will pre-ordain such things as how they walk, what they drink, how they hold their drink, how they speak, what they speak and so on. While the codes regulating action are sometimes highly systematised, they may be reasonably elastic and dynamic within interpersonal or group situations. In this sense, says Harré, the 'moral order' is both restricting and enabling.

Harré has drawn extensively on the marxist psychologist Lev Vygotsky (1896–1934) as a basis for a social constructionist viewpoint. Writing in Russia, Vygotsky developed

a social theory of mind in the 1920s and advanced such a theory in opposition to Piaget's cognitive developmentalism. What Vygotsky maintained was that language and thought originate in the social sphere as a type of communication (speech for others), gradually develop intermediate forms (which Piaget called egocentric) and finally become thought which is a type of speech for oneself. For Piaget the process was the other way round, moving from the autistic to the social.

Different writers broadly sharing social constructionist perspectives have searched out different sociological viewpoints in order to ground their psychology. The authors of Changing the Subject: psychology, social regulation and subjectivity (Henriques et al., 1984) explore the applicability of various sociological theories in an attempt to transcend the individual-society dualism. Henriques and his collaborators reject marxist theories for being too totalistic and all-embracing, focusing as they do on structures as mechanically determining individuals' responses and actions in rigid ways reflecting class interests. The authors opt for post-structuralist French thought. Taking its name from the structuralist marxism it opposed, post-structuralism, influenced by writers like Foucault and Derrida, sees individuals as constituted, i.e. formed by discursive practices with multiple sites of origin and, although discourses act to repress, they also permit multiple possibilities. Thus, psychological science can be seen in post-structuralist terms as a discourse which, rising in the late 19th and 20th century, defined a new way of relating to the world, a new means of administrative control and a new way of defining and talking about people. It produced new boxes to put people in, new labels, new categories and classifications which became inscribed in the practices of daily life, in the organisational structures and so on. In addition it invented new concepts—'intelligence', 'behavioural problems', 'reinforcement schedules', 'hyperactivity', 'ego control', 'stages of development', 'child-centred pedagogy', 'means analysis', 'scaling', 'normal development', 'slow development', etc.-which for post-structuralism are deeply implicated in producing the very reality they claim to discover. Hence, the discourse of psychology formulates a way of organising the world. In doing so, it positions people in relation to the categories and classification it constructs. As Valerie Walkerdine suggests, educational psychology positions children and teachers within educational practices. It produces the very conception of childhood in its modern form, its very 'truths' impose on the people they affect (Walkerdine, 1985).

It is these productive functions of knowledge that Foucault refers to in the concept of power/knowledge. His argument is essentially that modern states do not rely on force, but on forms of knowledge which regulate populations by describing, defining and delivering the forms of normality and of educability (Foucault, 1980). It is in this sense that modern psychology functions as an apparatus which has been instrumental in constructing the modern conception of the subject and the very idea of what it means to be normal. It is a form of bio-power (Foucault, 1975) by which the population is organised and in which productivity and order in modern welfare capitalist society is made possible. It offers us a particular way to gaze at the world. Foucault considers that the human sciences ('the dubious sciences'), although contributing little knowledge about human beings, have attained such massive importance and power in our society that this fact itself is what needs to be explained. Psychology in this conception becomes a 'complex strategic construct' and a 'form of domination'. "What for positivism would be an image of objectivity was only the other side of this domination" (Foucault, 1973, p. 272).

Bo Jacobsen has argued, using Foucault's thesis, that during the last 100 years a major change has taken place in the form of social control in our society. The change

has been from hard, overt control of an authoritarian type in the 19th century to soft, more subtle, partly concealed control of a new type in the 20th. "From which sources do they derive the new terms, concepts, etc., through which they understand and control children" he asks. "The answer is simple and embarrassing: from psychology" (Jacobsen, 1985).

Implications for Educational Psychology

Does educational psychology still have a role? My answer is that it does, but it will have to adapt in several important ways.

Firstly, it needs to recognise that social science is a purposeful human action underpinned by human interests. The commitment to a vision of a better world, a democratic, social and political system is a prerequisite for objectivity in social science. It is not possible to evaluate 'good' educational practice except in relation to an ideal of what 'good' means in socio-ethical terms. In many ways, recent work on remedial learning and in special needs education in recognising the importance of the social, political and administrative contexts is starting to take this into account.

Educational psychology must also recognise the different levels of analysis appropriate to understanding the nature of development. While neurophysiology may study the workings of the mind at one level, it cannot deal with higher mental functioning. Theorising the mind as social will have effects for applications in psychology for it deflects analysis backwards to social structures and directs investigation to the social conditions as they impact on people's lives. This is why social constructionists have utilised sociological theories in order to provide models and concepts by which the social can be understood. This does not mean that the problems of individuals will be ignored, but, rather, they will be viewed in relation to the social structures (expectations, societal values, practices, institutions) that constrain and affect them. In this sense, psychologists must learn to 'deconstruct' the cultural basis of action. Szasz did as much in the 1960s when he pointed out that the problems of sexuality (e.g. adequate sexual performance) were not so much problems of individuals who 'felt they had such a problem', but were deeply embedded ideologies concerning gender functioning in American society (Szasz, 1961).

Social constructionists have turned to a wide variety of sociological theories to ground their psychology. Rom Harré incorporates the work of Erving Goffman's dramaturgical approach, conceptualising people as actors, enacting roles, reading scripts that have been constructed via social interaction. In addition, sociologies such as symbolic interactionism, ethnomethodology, neo-marxism, as well as structuralism and post-structuralism have been appealed to (Ingleby, 1987).

If educational psychology is to adapt, more than a superficial understanding of social theory will be required. To understand individual interactions or the dynamics of learning is not possible in social constructionist terms without an understanding of the nature of school knowledge (the curriculum), the structures of competition, the individualised learning processes within which knowledge has been historically organised and the way the social organisation of the curriculum impacts on class and race and gender subgroups within the community.

In this sense educational psychology will have to recognise the irrelevance of traditional discipline boundaries and reconstitute itself drawing from various areas of knowledge and bodies of research. While practical and technical skills will be important, what is imperative is that psychologists are critically orientated to and reflexively

aware of the dilemmas, paradoxes, contradictions, the hidden assumptions and presuppositions that inhere in various ways of viewing the world, and the central importance of variables such as power as they operate in and through professional practice.

The issue of power is of crucial importance to social constructionist approaches. It is important, in this sense, that educational psychology is sensitive to the effects it has on people's lives. There is some sense to Bo Jacobsen's point that practitioners in the field should ask themselves who stands to benefit from their applications. "What would we miss if [educational psychology] were not there?" he asks. He responds: "The administrative authorities would certainly miss a useful instrument for dividing the population up into large numbers of categories . . . But the ordinary teacher would miss very little. And the ordinary pupil might not miss anything at all" (Jacobsen, 1985).

Issues such as this cannot just be swept under the mat for being 'too negative', or dispatched to the 'too hard' basket. Educational psychology can develop only if it is committed to qualitative improvement to the highest possible level for all children. It will survive to the extent that it develops a concept of the individual as a social being who develops through interaction with others, pursues goals and strives to live in a better world.

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