CHAPTER TWO

POSITIVISM

INTRODUCTION

The development of Positivist theorising derived from a debate within European intellectual circles over the basis of human realities and the challenging of dominant discourses which espoused a view that made sense of the world through the 'power of god' (Desmond & Moore 1991). Debate focused on the tension between "scientific knowledge", as defined by the systematic study of the "natural" world and the "natural order" as defined by the Christian churches. Termed the 'enlightenment' era, positivist theorists argued that scientific knowledge would "take the place of religious dogma" (Zeitlin, 1968).

Members of the Frankfurt school argued Positivism may be seen as an

"amalgam of diverse traditions ... While the history of these traditions is complex and cluttered with detours and qualifications, each of them has supported the goal of developing forms of social inquiry patterned after the natural sciences and based on the methodological tenets of sense observation and quantification." (Giroux, H.A., 1983:14)

The basic tenet of Positivist theory was to develop modes of social inquiry couched within the frameworks of the natural
sciences. The theoretical tools and methods of the natural sciences were drawn upon in the development of a paradigm that would focus on 'facts' and the measuring of 'facts' objectively to be applied to the study of people. Positivism then became a framework through which to explain the human condition in an "objective, value-free and scientific process" (Smith, L., 1991).

Two key theoretical standpoints that may be located within a positivist framework are (i) Biological determinism and (ii) Environmental theories. This chapter will explore the basic tenets that provide the foundations of these standpoints and examine the critical analyses that have developed as a response to the construction of both biological and environmental theories, providing specific examples of ways in which these paradigms have been utilised in Aotearoa for the justification and maintenance of dominant group ideologies.

**CRITIQUES OF POSITIVIST THOUGHT**

The debate surrounding Positivism emerged from a European academic tradition (Smith, L., 1991), possibly the most fervent critiques of Positivism derived from members of the Frankfurt School, in particular the works of Jurgen Habermas, Theodor Adorno, Herbert Marcuse and Max Horkheimer.

Established in Frankfurt 1923, The Institute for Social Research was the "original home" of the Frankfurt School, however the rise of Nazism forced the members to emigrate to Geneva and then New
York, because of their Marxist orientation and the high number of Jewish people in their membership. The influences of Fascism and forced emigration had a profound impact on members of the Frankfurt School and "strengthened their acute feeling that oppression and injustice characterised the world" (Gibson, 1986). The Frankfurt School may not, however, be stylised as a homogenous thinking unit, on the contrary members of the Frankfurt School differed on many issues. However they were united on the centrality of theory (Gibson 1986), and were each actively involved in the critique of Positivism and the instrumentalism inherent in Positivist thought.

The debate surrounding Positivism can be seen in its widest sense as a dispute over the legitimation of contesting bodies of knowledge. The debate is concerned with validity of research, methodology and knowledge and in particular the validity of 'scientific' methodologies as appropriate frameworks through which to understand human society (Smith, L., 1991).

In addressing the work of Horkheimer, Henry Giroux (1983) argues that, through Positivism, knowledge is "reduced exclusively to the province of science" and as such is reduced to methodological frameworks that serve to operate in a mode of description, classification and generalization. In its celebration of 'facts' Positivism assumes there is one quantitative 'truth', tolerating only one experience (Habermas 1976) and in doing so ignores the complexities of 'truth' and the social constructiveness of 'facts' (Giroux 1983).
The Positivist emphasis on 'objectivity' is a claim that Habermas contends, masks underlying intentions of control. Objectivity is legitimated through a reification of the social world through 'laws' of human nature (Gibson, 1986) and as Friedman states

"Reason, under the rule of positivism, stands in awe of the fact. Its function is simply to characterize the fact. Its task ends when it has affirmed and explicated the fact...Under the rule of positivism, reason inevitably stops short of critique."

(Friedman 1981 cited in Giroux, H., 1983:13)

Friedman's analysis unveils the acritical nature of Positivism, within which "objectivity undermines critique", a positioning Adorno, Marcuse and Horkheimer viewed as ideological reinforcement for the dominant group, legitimated by unquestionable 'correct, quantified facts'. Members of the Frankfurt school have challenged the way in which knowledge is legitimated, in particular the way in which knowledge is situated in false dualisms which "dissolves the tension between potentiality and actuality" (Giroux, 1983).

Knowledge within a Positivist paradigm is defined in terms of conceptions of science and in conflict with knowledge in a 'lived' society (Smith, L., 1991) and remains an inadequate paradigm for the analysis of human society.

**BIOLOGICAL DETERMINISM**

A major debate between intellectuals within the 'Enlightenment' era was that surrounding the evolutionary process. Two clear
arguments emerged as contesting discourses, firstly, the doctrines of 'divine' order as fervently advocated by the Church, an order which was determined by 'God' and endorsed within writings of the Bible. Secondly, the concept of evolution, as argued by 'freethinkers', scientists such as Charles Darwin who maintained there existed within nature a process of 'Natural Selection' through which 'all' living things evolved (Desmond & Moore 1991), a view which challenged the very foundation of Christian thought which espoused that man and woman were created by 'God in God's image'.

NATURAL SELECTION

Darwin's studies of the natural world were used to support the development of the notion that natural selection provided an explanation for the social order of human beings. The process of natural selection included a process of genetic adaptation but focused particularly on the concept that the stronger or best adapted of the species would survive (Desmond & Moore 1991).

"Hence that male which at that time is in fullest vigour, or best armed with arms or ornaments of its species, will gain in hundreds of generations some small advantage and transmit such characters to its offspring. So in female rearing its young, the most vigorous and skilful and industrious, instincts best developed will rear more young, probably possessing her good qualities and a number will thus be prepared for the struggle of nature."

The concept of natural selection became synonymous with the scientific framework of 'Social Darwinism', which was premised on the belief of the survival of the fittest. It is from this

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basis that Darwin developed the concept of the social classification of 'Race'.

**THE SOCIAL ORDER OF RACE**

The basis of Darwin's social order derived from the natural selection process. Human beings were categorised in relation to each other on the basis of their perceived level of civilisation and as such a hierarchical system of classification of race was developed. Within such a hierarchy the 'Savages' and 'Negroes' were positioned at the lower or inferior end of the spectrum and the Anglo-saxon in the superior position. Desmond and Moore (1991) in their biography of Darwin noted his theorising of the races established that

"Each race moves along the ladder of civilization, propelled by natural selection, aided by use-inheritance, with selfish instinct giving way to reason, morality and English customs."

(Desmond A. & Moore J., 1991:580)

Biological superiority was, for Darwin, further validated in the colonial expansion experience. His visit to Aotearoa in 1835 led to his proclaiming Maori people as a "fearsome people...a more warlike race of inhabitants could be found in no part of the world...[whose] shifty looks betrayed a fierce cunning, and tattooed face revealed a base nature" (Darwin cited in Desmond & Moore 1991), thereby positioning Maori people on the lower rungs of the civilisation ladder. Darwin's perception of Maori people was couched within the doctrine of the 'ignoble savage' which was in contrast with the earlier 'romantic' Rousseauian view of Marion du Fresne who characterised Maori people as the
'noble savage'. In seeking to validate natural selection Darwin increasingly promoted the British experience as the yardstick by which other races could be measured (Salmond 1991).

Although espousing the inferiority of Maori people in their 'warlikeness' Darwin noted warfare in the colonies was a necessity in that it provided a means by which the coloniser could become familiar with the terrain and adapt, therefore it was considered an essential part of natural selection. The victor in the 'competition' between the races was deemed the stronger and therefore the superior of the two.

In the New Zealand context a distinctive element of British colonial settlement was the desire to establish a "little England" in the colony. This was to be achieved not solely through the expansion of British capitalism but also through "physically transplanting a vertical slice of British Society - economics, politics and ideology" (D.Bedggood, 1980:24). Integral to such ideological transplanting was the social ordering of race, which expressed a logic of the 'advanced' Europeans and the 'inferiority' of everybody else (Spoonley 1988). This logic provided ideological justification for colonisation and the subsequent dispossession of Maori people from their land and resources.

Francis Galton, drawing extensively upon the work of Darwin, in the mid 1850s, went further to emphasise the role of genetics in
intelligence. Garlton, a cousin of Darwin, sought to validate and expand upon the concept of racial hierarchy through promulgating a theory of genetically predetermined structuring of intelligence. Liam Hudson (1972) pronounced Garlton as the ‘founding father’ [sic] of intelligence testing, a vehicle by which racial inferiority or superiority could be ‘scientifically’ substantiated, and thereby legitimate what was biologically preordained. Garlton’s model was summarised in the writing of John Daniels and Vincent Houghton (1972) when they noted

"The Garlton paradigm of a ladder view of society predetermined the climbers moving with different weights given to them at the start of their journey preordaining the final result of the competition."
(Daniels J. and Houghton V., 1972:76)

We are then, within such a world view, each born with predisposed genetic makeup that will ultimately determine our ‘advancement’ up the ladder of society. The weight’s analogy is somewhat ambiguous, however the concept of racial superiority versus racial inferiority is not. Those born with the ‘right’ genetic makeup, i.e. Anglosaxon, have less of a burden to bear and therefore are more likely to sit at the uppermost end of the ladder. On the other hand, however, those that have inherited a lesser or inferior genetic makeup carry a heavier burden and, like their forebears, will remain at the lower rungs of civilisations ladder. Within such a paradigm we each carry particular genetic baggage which preordains, and ultimately enshrines, our positioning.

Modes of ‘scientific’ legitimation emerged to justify race hierarchy. The practice of craniology incorporated the study of
the size and shape of the skulls of different races, as a means by which to relate 'superiority' to brain size. In the mid 19th Century Arthur Thomson, an early medical observer, noted

"It was ascertained, by weighing the quantity of millet seed skulls contained and by measurements with tapes and compasses, that New Zealanders [Maori] heads are smaller than the heads of Englishmen, consequently the New Zealanders are inferior to the English in mental capacity. This comparative smallness of the brain is produced by neglecting to exercise the higher faculties of the mind, for as muscles shrunk from want of use, it is only natural that generations of mental indolence should lessen the size of the brains".
(A.S. Thomson, 1859:81)

More recent advocacy of the Galton paradigm can be seen in the writings of Arthur Jensen (1969,1973,1981). Jensen’s 1969 Harvard Educational review article, "How Much Can We Boost I.Q. And Scholastic Achievement", restimulated International debate concerning biological determinism (Richardson et.al.,1972). Jensen held firmly to the tenets as espoused by Galton, particularly the genetic ordering of races within which rankings could be as 'neutral', 'objective' assessments of human difference (Pearson 1990). His writing articulated emphatically that genetic factors are the most influential aspect of intellectual development, according to Jensen failure of the 'negro' within education was determined predominantly by genetic inferiority. Following in the footsteps of Galton, Jensen utilised the 'scientific' method of Intelligence testing as a means by which to legitimate such claims, stating in 1973

"test scores have been found to be essentially colorblind as prediction of academic performance in College. They 'read through' the veneer of social class background as well"
(Jensen A.R.,1973:51)
THE CRITIQUES

Critiques of biological determinism are based fundamentally in a mode of exposing the underlying assumptions inherent within the theoretical framework. Hudson (1972) argues biological arguments are "essentially ideological...devoid either of scientific validity or educational significance". Hence such arguments which espouse 'scientific objectivity' are exposed as being founded within subjectively constructed ideologies.

Biases within selectivist theories such as social Darwinism become evident when it is identified that those who are placed, consistently, at the apex of the racial hierarchies are in fact those same people that designed the system of classification (Pearson 1990). Moreover, those 'designers' are the recipients of benefits gained in the adoption of such ideologies within society, as they serve to maintain existing hierarchical and power structures, thereby validating the status quo and further ensuring unequal power relations are secured. As there is no proven scientific rationale for genetically based theories there was a need for the construction of some mechanism that could be utilised to substantiate a relationship between race, genetics and intelligence. The I.Q. test became that mechanism.

INTELLIGENCE TESTING

An underlying assumption of I.Q. testing is that they will measure the level of intelligence of each child through a
neutral, unbiased formula. Clearly, however, this is not so. I.Q. tests measure only that which they are constructed to assess. Joanna Ryan (1972) established in her article "I.Q. - The Illusion of Objectivity", that not only are I.Q. tests constructed subjectively, within dominant frameworks, their results are also validated by "External criteria" of which educational success is most common (ibid.). There is seen, therefore, to be a strong correlation between I.Q. testing and educational success. This denies the means by which both these systems are constructed to meet the needs of and benefit particular groups within society.

I.Q. tests as measuring instruments are culturally bound and culturally biased (Smith G. 1986, Nash 1985). They are based firmly within the cultural norms, values, beliefs, experiences and knowledge systems of the group which has formulated the test. A clear example of this may be seen in the work of Archer, Oppenheim, Karetu & St. George (1971).

Archer et. al. designed what was at the time considered a revolutionary I.Q. test, the MOTIS test. The MOTIS test consisted of ten questions drawing upon knowledge that was "purely New Zealand based" and included a strong Maori component, unlike the commonly used OTIS test that had been developed elsewhere. Their findings showed Maori children scored higher on the MOTIS than did their Pakeha peers, a reversal of the situation that exists in OTIS testing. The exercise is one that made explicit the extent to which I.Q. testing is culturally
constructed and thereby weighted to benefit that particular group.

I.Q. tests based on an assumption of genetic determination carry an implicit assumption of the concept of children being endowed at birth with varying degrees of innate potential. Such an assumption implies a notion of 'fixed' intelligence through life which denies the complexities of interactions people experience at both a micro and macro level (Ryan 1972). The debate stimulated by Jensens article brought a strong critique of biological determinism and firmly discredited the utilisation of I.Q. testing as a means of substantiating the ideology of white supremacy. What developed from this debate was a refocusing of thought and an increased level of research in relation to the contribution of environmental factors to the positioning of particular interest groups within society.

ENVIRONMENTAL THEORIES

Environmental theories of the 1970s developed primarily in response to biological determinism. The debate that waged between the theoretical standpoints became popularly termed the 'nature vs nurture' controversy, a debate which was centred within the academy. In disputing genetic determinism as "unscientific" and based upon "insubstantial knowledge" (Ryan 1972, Hudson 1972) theorists challenged the basic tenets upon which it was constructed. However it must be noted that many such critiques also espoused a shift in focus from one of genetic
inferiority / superiority to looking more specifically at the external environment conditions within which people were located.

Environmentalist theories are premised on the assumption that educational achievement is most influenced by the child's home environment, as stated succinctly by Susan Silverman (1965):

"The home environment has been studied as a means of understanding the factors which influence the development of children. Studies repeatedly show that the home is the single most important influence on the intellectual and emotional development of children, particularly in the preschool years."
(Silverman, S. 1965:69)

The home environment and family background became the focus by which to explain differences in school achievement and underachievement, providing the framework through which to categorise children's achievement levels. The categorising of children in such a way allowed for the development of the conceptualisation of those groups of children designated as "underachievers" as being "culturally disadvantaged" or "culturally deprived" (Smith L. 1986, Tosi 1988).

**Cultural Deprivation**

Cultural deprivation theories are based upon an assumption that the overrepresentation of particular groups in educational underachievement in society is due to their lacking of appropriate knowledge, skills, values and language modes which enable a successful experience within the education system. Seeking to establish a definition of cultural deprivation Bloom et.al argued
"we will refer to this group as culturally disadvantaged or culturally deprived because we believe the root of their problems may in large part be traced to their experiences in homes which do not transmit the cultural patterns necessary for the types of learning characteristic of the schools and larger society."
(Bloom et.al. 1965:4)

Further expanding on this definition Maurice Chazan (1976) claimed that cultural deprivation may be considered in relation to material, cultural and emotional conditions in the home. These conditions may be further qualified as follows

(i) **Material deprivation** - Poverty, bad housing conditions, overcrowding, inadequate care

(ii) **Cultural deprivation** - (a) Sensory deprivation: Monotonous, lacking stimulation, dull, dearth of books
    (b) Linguistic deprivation: Limited language, verbal impoverishment, 'restricted' codes
    (c) Lack of Parental interest in child's education

(iii) **Emotional deprivation** - Absence of one parent, lack of warmth and affection

The 'deprived' child in such a paradigm is viewed as lacking the material, cultural and emotional resources to enable adequate preparation for the school experience (Silverman 1965) and enter the education system with 'deficits' that will influence their progression through their schooling (Bloom et.al. 1965). These 'deficits' act to handicap the child and their ability to live a "competent and satisfying life" in society (Johnson 1970, Havighurst 1967).
CULTURAL DIFFERENCE

The "cultural difference" concept rejects the notion of cultural deprivation particularly the assumption that cultural values and norms handicap the child in their schooling experience. Rather than seeing the cultural capital of children as "disadvantaging", "deficit" or "deprived" exponents of this paradigm contend a diversity of cultural difference exists (Ernest, 1967). Cultural difference assumes there is a ‘norm’ that acts as a yardstick against which ‘other’ cultures are measured, with the ‘norm’ being that of the dominant group within society. This paradigm maintains an underlying assumption that culturally ‘different’ children carry deficits from their cultural background in that they are different from the stated ‘norm’ (Jones et al., 1990:138). Furthermore, implicit within the cultural difference scenario is an implication that if all groups held the same culture the inequalities that exist between them would vanish (McDonald 1973).

According to James Marshall (1991) the shift from the concept of cultural deprivation to that of cultural difference was one that emphasised a notion of Pakeha tolerance of non-Pakeha cultures. Although shifting some degree of blame to the education system, this shift maintained a deficit view of Maori people (Simon 1986) and failed to challenge the wider social, political and economic context which perpetuated unequal power relations between Pakeha, as the dominant group, and Maori (Marshall 1991). The term ‘cultural difference’ thereby became synonymous with
cultural deprivation (Johnston 1991).

ENVIRONMENTAL THEORIES IN AOTEAROA

The most succinct usage of cultural deprivation theory Aotearoa is that offered by John Forster and Peter Ramsay (1973). In their article "The Maori population 1936-1966" they proclaimed

"It is generally agreed that his [Maori] low attainment is the result of a combination of other factors. Poor Socio-economic conditions, including such factors as occupancy rates, social attitudes, poor living conditions, and a different cultural upbringing impose severe limitations on the Maori scholar." (J. Forster & P. Ramsay, 1969:211)

Their "Interlocking Spiral of Cumulative and Circular Causation" diagram established a 'cycle of poverty' that operates to perpetuate the low educational achievement of Maori pupils.

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Diagram One: Interlocking Spiral of Cumulative and Circular Causation

- **S.E.S FACTORS**
  - Low Income/status
  - Deprived 'style of life'

- **LOW EDUCATION ACHIEVEMENT**
  - Language problem
  - Poor motivation

- **CULTURAL DEPRIVATION**
  - Limited aspiration

- **DEMOGRAPHIC**
  - Youthful population
  - Large whanau
  - Many dependants
  - High occupancy

- **SOCIAL/CULTURAL**
  - Sibling upbringing
  - Group centred way of life
  - Little contact between children and adults
  - Poor material conditions

Interrupting the 'deprivation cycle' necessitates a change in cultural factors which predetermine Maori participation in the cycle. Change must therefore occur in the social and cultural capital of the child and their family environment, particularly in terms of the statement by D.G. Ball, that it is "the 'Maoriness' of the child which is the greatest handicap" (Ball cited in Forster J. & Ramsay P., 1969:211).

Institutional utilisation of cultural difference theories to explain educational underachievement within New Zealand can be seen in Department of Education documents of the 1970s concerning the education of Maori students (Smith L. 1986). A Ministry publication, "The Education of Maori Children: A Review" (1971) carried this message

"All these reports [i.e. Hunn Report, Currie Commission] attempted to analyse the Maori child's inability to fulfil his [sic] potential in the existing education, in spite of endowments equal to those of Pakeha. They recognised that often a Maori child entered a Pakeha-oriented school less well prepared by pre-school experience than a Pakeha, particularly in the use of language. His [sic] differences in this respect were likely to handicap his [sic] whole educational progress if steps were not taken within the school system. Social and economic conditions including inadequate housing and poor opportunities for employment of both youth and adults, were contributing factors." (Department of Education, 1971:18-19)

Maori cultural experiences and background are positioned as 'other than the norm', the norm being middle class Pakeha culture, the Maori child and her/his environment were seen as deficient and handicaps to future success in the education system.
DEFICIENCIES IN ENVIRONMENTAL THEORIES

Lindfors (1987), in her study of 'Black English' identified deficit theories based within three groups of myths

(i) Myths about the child's language: Black English was seen as 'substandard' 'bumbling' 'slang' 'dull' 'repetitive' 'lazy'

(ii) Myths about the child's background: Backgrounds were said to be 'lacking stimulation' 'too stimulating' 'had few interesting toys' 'too noisy' 'not conducive to learning'

(iii) Myths about the child's cognitive ability: Children were labelled as 'unable to think abstractly'. It was assumed that due to 'deficiencies' in language and background that these children's 'cognitive abilities were underdeveloped'.

There existed, within deficit theories, an underlying assumption that there was a "Standard" English which was considered the 'correct' language form and any deviation was considered inferior and deficient.

Cultural deprivation/disadvantage/difference theories assume there exists a 'norm' in society against which all 'others' can be measured and evaluated. In New Zealand the 'norm' may be generally stated as middle class Pakeha and Maori people are assessed relative to that 'norm'. The emphasis on correcting the cultural background of Maori children is based on the assumption that the environment of the Maori child is a barrier to their
achievement within the school system, that Maori children carry with them particular 'cultural baggage' that impedes their development. Underlying such a theory is the notion that the dominant culture and knowledge are "endorsed as 'the culture' of the state schooling system" (Smith, G., 1986:3).

The cultural difference model provides a simplistic explanation for the underachievement of Maori students in the education system. An underlying assumption is an inference that cultures are "necessarily competitive alternatives" that can be separated out, labelled and boxed into a clearly definable package (Valentine 1972). There is no recognition of the heterogenous nature of culture and a neglect of existence of 'biculturalism', particularly in the case of minority ethnic groups simultaneously developing knowledge of two ways of life (ibid.).

Environmentalist theories assume a 'taken for granted' perception of the structures and institutions into which Maori children enter. Structures therefore remain unquestioned and the power relations between groups unchallenged. In failing to recognise such dynamics environmental theorists such as Forster and Ramsey, in the 1960s, ignore the role the dominant group plays in defining what counts as valid culture and knowledge and how once defined those cultural norms and knowledge are legitimated and maintained through the structures. In order to take such relations into account there is a necessity to look to theoretical frameworks that include structural considerations.
SUMMARY

This chapter has sought to map two theoretical movements located within a positivist paradigm; biological determinism and environmental theories. Positivism as a framework is based fundamentally on an assumption that ‘facts’ may be measured objectively to ascertain ‘universal truths’ about the world.

Within biological arguments two principal concepts are the darwinist notions of natural selection and the hierarchical social ordering of race. These ‘facts’ as presented by writers such as Darwin, Garlton and Jensen are deemed measurable through the ‘objective’ ‘quantitative’ mechanism of intelligence testing.

In a shift from internal i.e. genetic/biological focus, environmental theories place emphasis on external factors, in particular the home environment and espouse concepts of ‘cultural disadvantage’, ‘cultural deprivation’ and ‘cultural difference’. Each of these concepts advance a notion of the existence of a ‘norm’ within society against which all may be measured, again through ‘quantitative’ ‘objective’ means.

Critical analyses highlight that each of these theoretical positions have been generated to justify the social inequalities within society. Positivism conceals the ways in which ‘facts’ are socially constructed and the ways in which they have been constructed, on the whole, by the dominant group, involving processes which are culturally bound and which benefit those in
society that hold the power to define and control mechanisms of measuring and evaluation.

For Maori people both biological determinism and environmental theories have served to perpetuate a system that positions Pakeha epistemologies as the 'norm' and Maori epistemologies as 'inferior'. Biological arguments provided colonising powers with ideological justification for acts of genocide, marginalisation of indigenous peoples, cultural alienation and land alienation, through both physical and symbolic violence.

The emergence of 'cultural deprivation' and 'cultural difference' theories within Aotearoa further entrenched a belief in Pakeha 'superiority' through a taken-for-granted assumption that the system within this country is 'objective' and thereby caters equitably to the needs of all. The failure of Maori children within the education system is explained within this paradigm as being located within the home and family. Environmental theories operating predominantly on an ideological plane, although not solely as seen in the beating of Maori children for speaking Maori in the school grounds, have contributed to an increased exertion of hegemonic violence on the part of the dominant group.

Both biological and environmental arguments have been critiqued by critical theorists as not only highly subjective and scientifically invalid but have also been identified as dominant constructions that serve the interests of dominant groups and
secure their positioning in the social order through concealing the structural inequalities and contradictions that exist within society.