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THE CONCEPT OF DEGENERATION
1880-1910, WITH PARTICULAR REFERENCE
TO THE WORK OF THOMAS HARDY,
GEORGE GISSING AND H.G. WELLS

A thesis submitted for the degree of
Doctor of Philosophy
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by

William Paul Greenslade M.A. (Warwick)

Department of English and Comparative Literature
University of Warwick

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SUMMARY

This thesis deals with the relationship between post-Darwinian scientific thought and selected literary texts by Hardy, Gissing and H.G. Wells to illuminate the concept of degeneration and its implications for these writers in the period 1880-1910. It involves the examination of primary material in the field of biology, anthropology and medicine, as well as philosophical and social writing of the period and other related literary texts.

Chapter One examines the major areas in which degeneration emerges into biological, medical and cultural discussion, reflecting movements within scientific debate itself and broader social, economic and philosophical concerns. In chapter Four this discussion is extended after 1900 and is interpreted in the light of Wells's own development.

In the discussion of its biological and pathological emergence, the growth of hereditary determinism is particularly emphasised as crucial to the variety of applications of the concept. Degeneration reflects the prestige of Darwinian evolution, with its unresolved account of inheritance, a growing sense of economic decline, and a tension between the authority of evolutionary science and changing philosophical and ethical concerns.

The three literary chapters deal with the impact of degeneration on the writers and illuminate aspects of their major work. While all the texts reflect the impact of degeneration, Gissing is revealed to be more dependent on scientific determinism, as in Demos or The Whirlpool, than is Hardy, who in Tess of the D'Urbervilles and Jude the Obscure, exposes the myth of that determinism while appearing to collude with it. Wells's journalism reflects the extent of his scientific endorsement of degeneration—producing in The Time Machine the one fiction about, and constructed around, it.

The powerful conjunction of scientific ideas and imaginative writing, 1880-1910, can be traced to a perception of social, cultural and ethical crisis of the civilisation for which both novelist and scientist aspire to speak.
INTRODUCTION

This thesis is intended as a contribution both to the intellectual history of the period 1880-1910, and to the criticism of three novelists of those years - Thomas Hardy, George Gissing and H.G. Wells. The concept of degeneration penetrates the 'history' and the fiction, but also undergoes its own evolution. This my first chapter attempts to trace, by breaking down the idea into key problematic areas, in an account, broadly chronological, to the turn of the century.

The history of the idea of degeneration in this period is worth study in its own right, but it is the argument of this thesis that some of the most significant fiction of these years needs to be read within this context of thought and speculation. It is apparent that late-nineteenth century debates about the nature of man, and about man in Nature, and the problematic values of civilisation which mediated both, exercised the imagination of novelists to an extent which is difficult to parallel in the history of the English novel.

I have tried to ignore altogether the unsatisfactory critical procedure suggested by 'intellectual background'. The novels I have
given attention to were, in effect, echo chambers resonating and reverberating to signals issuing from laboratories and lectures, from scientific and sociological papers, reports and journalism, in this period. A metaphor of sound and of the unlocalisable consequences of a sound wave, seems more authentic, for what is 'going on' in this fiction, than the metaphor of 'background', where an unbridgeable gap between life and text is implied.

The authority of post-Darwinian science, within the culture, was massive. Yet in the face of increasing political, social and ethical pressures, the concept of degeneration emerged in the late 1870s to sustain and amplify that authority, through a determinism of heredity. If we examine novelists such as Hardy, Gissing and Wells within this frame of reference, and note the extent to which they assimilated a rejuvenated scientism, we may also understand better the critique, which their fiction constituted, of this ideological formation.

Amongst the studies which have influenced my choice of subject, the most important are Samuel Hynes's The Edwardian Turn of Mind (1968), an original astute and, at its date, pioneering synthesis; Gareth Stedman Jones's seminal work, Outcast London (1971); and Peter Keating's Into Unknown England (1976), which has made available an important but neglected tradition of social diagnosis. In addition, in spite of there being hardly any mention of the idea of degeneration in Raymond Williams's The Country and the City (1973), his habit of attention to the surface and depth of literary discourse has influenced my choice and treatment of subject.
I have been fortunate in finding such a comprehensive thesis, before mine, as Martin Wood's 'Darwinism and Pessimism in Late-Victorian Thought and Literature' (Ph.D., University of Nottingham, 1975). My debt is greater than can be measured by any particular reference to it. However, I diverge from Wood in three respects. Firstly, by his schematic treatment of a range of philosophical and literary works, he has subsumed under 'pessimism' material which is shaped by divergent ideological allegiances, or is derived from diverse fields of intellectual reference. Wood undoubtedly underestimates the degree to which scientific discourse can obscure the complexity of ideological positions which scientific language effectively sanctions. Secondly, and as a consequence, I feel that he does not give enough emphasis to the continuities within scientific epistemology and practice. The sheer resilience of positivism is still being felt well into the 1920s and beyond, and it galvanised a whole generation of scientists and non-scientists, optimists and pessimists. Figures such as Havelock Ellis and Wells are not easily classified as one or the other. Thirdly, Wood understates the connecting threads between the pre-1900 and post-1900 periods, leading him to an over-schematising of pessimistic and optimistic moods on either side of the fulcrum of 1900. Again Wells is exemplary - a man who could harbour both extremes, capable of totalising both positive and negative responses to post-Darwinian science.

In recent years there has been a growth of interest in currents of ideas and intellectual formations in the late nineteenth-century - studies of political thought by Michael Freeden (1978), Stefan Collini
(1979), and Greta Jones (1980), come to mind, as do studies of early psychiatrists such as Havelock Ellis, by Jeffrey Weeks (1977) and by Phyllis Grosskurth (1980). The placing of that twentieth-century human science, psychology, in a late nineteenth-century current of neo-biological ideas, has yielded particularly striking insights, as in, for example, Frank Sulloway's recent study of Freud's indebtedness to biological assumptions (1979). Within the history of science, and especially of medicine, the significance of these origins and continuities is still being measured. There has been an increasing interest in the penetration of determinism into the intellectual life of the 'scientific' community, and also a growing emphasis on the deterministic assumptions governing attitudes to sexuality and psychology. Of particular relevance to my study is the exploration of hereditary determinism which precipitated the social practice of eugenics; here studies by Geoffrey Searle (1976), Anna Davin (1978) and Jeffrey Weeks (1981) have been important.

Trends in the history of science have been affected by the recognition of the complexities of scientific language itself. The work of Michel Foucault has been especially useful in directing attention to fields of discourse which embody whole 'ensembles' of beliefs, which can be traced to quite distinct origins despite their contiguity. For Foucault one such discursive field is psychopathology. Here assumptions about personal relationships and institutions form a frame around certain discrete objects of that discourse: the criminal, the mental defective, the neurotic woman, and, one can add, the genius and the artist. Degeneration is one surface of emergence of that discourse in the nineteenth century.
Foucault has argued that these discursive relationships are not passively reflected, but are actively elaborated and reasserted through the forms of language itself. He has much to offer the literary historian, for whom the literary text engages with and yet defies the discursive.

All three major writers under consideration in this thesis have been the subject of sustained scholarly and critical study. In the last fifteen years, Hardy's novels have been given frequent critical appraisal and have been made accessible in well-edited form. The progress in the editing of his Collected Letters and the publication of some of his literary notes have contributed to a more informed understanding of the significance for his fiction of his intellectual influences and contacts. Moreover, the study of the textual variants of some of the major novels has provided surprising insights into Hardy's awareness of, and responsiveness to, contemporary ideas, during the process of composition and publication.

Interest in Gissing has developed very considerably in the last ten years. All of Gissing's novels are at least available again in modern editions or reprints. Pioneering critical studies by Adrian Poole (1975) and John Goode (1978) have brought to the reading of Gissing a much-needed critical sophistication, commensurate with his relatively unacknowledged complexity and importance. The insights from these studies, along with the result of work on Gissing's Diary and other writings, by Pierre Coustillas, Jacob Korg and others, establish Gissing as a major rather than as a minor late nineteenth-century novelist.
In the development of modern criticism of H.G. Wells, Bernard Bergonzi's important work on Wells's early fiction (1961) has been followed by studies such as that by Patrick Parrinder (1970), which has brought out the thematic range of Wells's prolific output. More recently, close attention has at last been given to Wells's scientific and literary journalism, and to his key role in the emergence of science fiction as a distinctive genre.

What is particularly relevant to this thesis is the availability of material for an evaluation of all three writers, within the context of intellectual debate in the period 1880-1910. The understanding of this context is increasingly recognised as central to a proper critical assessment of their achievement as novelists. This study aims to contribute to both enterprises.

In chapter One, the concept of degeneration is analysed into its major problematic areas, thematically, to about 1900. The discussion of the post-1900 issues of national efficiency, social imperialism and eugenics, is related to Wells's own complex development as a writer. In chapters Two to Four I have decided to concentrate on a limited number of major texts, where the concept of degeneration operates most powerfully. This has entailed my ignoring marginal, if well known, works such as Gissing's The Odd Women (1893), or Wells's The Island of Dr Moreau (1896), and putting a possibly unfamiliar emphasis on others, such as Hardy's 'The Dorsetshire Labourer' essay, Gissing's The Unclassed and The Whirlpool, or some of Wells's 1890 essays. In addition, I have to some extent varied the critical procedure to suit
the text: the approach to a familiar and popular novel like *Tess of the D'Urbervilles* is necessarily different from the treatment of a relatively unfamiliar text, such as *The Whirlpool*, where less can be assumed.
CHAPTER ONE  THE CONCEPT OF DEGENERATION

(a) THE HISTORY OF DEGENERATION

In England the first proponents of degeneration as a specifically post-Darwinian idea were zoologists.¹ A Professor of Zoology, E. Ray Lankester, produced the first work on the subject in English.² In a paper delivered to the British Association in 1879, he acknowledged his own debt to the Italian naturalist, Dohrn, who had put forward the hypothesis of degeneration in 1875. Another zoologist, Andrew Wilson, produced an essay on 'Degeneration' in 1881.³

These Darwinian works were the most direct and elaborate demonstrations of an idea which had undergone a complex series of mutations in Western culture from Classical civilisation onwards. Since the late fifteenth century the idea of decline or a falling away from a nominal system of values was, as Peter Burke has pointed out, a frequent preoccupation of European thought; and change for the worse, declinatio, decadentia was invoked more insistently than change for the better, reparatio, regeneratio.⁴ The vocabulary of decline was well placed to respond to the post-Renaissance sense of nature's capacity for decay and corruption, as in the well-known debate on nature between Godfrey Goodman (The
Fall of Man 1616) and George Hakewill (An Apologie of the Power of
God 1627). By the early seventeenth century 'degeneration' and the
adjectival forms 'degenerate' and 'to degenerate', with their
dominant Latin derivation, were in use, according to the O.E.D.

But the history and force of the idea derived from its
considerable susceptibility to the rejuvenation, in any one period,
of perennial and ancient concerns. The post-Renaissance anxiety about
cosmic decline could find a parallel in the late-nineteenth century
obsession with the astro-physical ideas of entropy. More strikingly,
perhaps, the rhetoric of decline and decay which engulfed the subjects
of empire and the city in the late Victorian period find powerful
precursors in much post-Renaissance writing on similar themes, involving
the re-working of classical rhetoric.

Gibbon's Decline and Fall of the Roman Empire charts the fall
of Rome in the shadow of the dramatic economic and political decline
of Spain, reduced from grandeur to insignificance in two centuries.
By the late 1870s the greatest of Empires, the British, seemed to have
reached the height of its influence; and subsequently, for a
generation, there is a striking degree of enthusiasm for classical
rhetoric, by which the age is admonished for its decline in
standards, in the growth of luxury, and in the prevalence of
softness, vice and effeminacy associated both with the decline of
Empire and the chaos of urbanism. One could be forgiven for thinking
that no previous age had so thoroughly ransacked the diatribes of
Lucretius and Juvenal. The metaphorical tropes and rhetorical figures
of decline are, indeed, resonant, spanning centuries.
If one distinguishing feature of late-nineteenth century intellectual life is the assimilation of evolutionary science, it is also worth noting that this buoyant scientific culture made its way alongside older traditions of ethical and social criticism, which tended to extol virtues which the age was held to have lost, alongside the capacities and procedures of the age itself. Part of the fascination of intellectual life in the period derives from the evident interaction of these tendencies, which the career of Francis Galton, classicist by temperament and positivist in methodology, most strikingly exemplifies. For Galton, the idea of degeneration galvanised both his ethical and his scientific ardour, so that it became a notion to live by as well as an hypothesis to test systematically. It is from within the specific tradition of eighteenth-century empirical science that degeneration can be most meaningfully traced to its Darwinian character.

By the early eighteenth century, nature was increasingly seen to bear witness to the full variety and beneficence of divine purpose. This is reflected in the title of the botanist John Ray's *Wisdom of God in the Creation* (1691). The increasingly secular view of nature was to be found in the work of Buffon, who adopted the term 'degeneration' in a significantly scientific spirit. In his *Histoire Naturelle*, the first volume of which was published in 1749, degeneration was a process which applied not simply to man or nature but to all species; a way of accounting for change between species - all of which had their origins in a plan of divine creation. Degeneration signified little more than simply change:
Each family, as well in animals as in vegetables, comes from the same origin... all animals are come from one species, which, in the succession of time, by improving and degenerating, has produced all the races of animals which now exist. 7

Buffon's strongly environmentalist account of 'evolution' laid a conceptual framework on which later evolutionary thought could elaborate, although he still held to divine intervention, to account for the origin of species. But the crucial advance was the discovery of the fact that an organism could be seen to respond in observable ways to environmental conditions - such as differences in climate or terrain. Degeneration had become the propensity of the organism to respond to altered conditions. 8

But Buffon's notion of the differential effects of the environment furnished him with an argument which reinvigorated degeneration as a term to describe man's place in nature and civilisation. 9 By measuring animals, he evolved a thesis which showed that the environmental conditions of the New World of America were less favourable than those of Europe, since animals which had been transplanted to America had apparently diminished in size. However, the philosophers of the American enlightenment, particularly Jefferson and Franklin, were anxious to refute these assertions. For them the capacity of man to adapt to and overcome the variety of natural conditions was proof of 'natural' human equality, and was a distinguishing characteristic of mankind itself. 10

With the onset of the industrial revolution, a dualistic environmentalism had been firmly established. The degenerate races of man, hitherto subject to the influences of harsh climate and
miserable subsistence in the tropics or the Arctic, were contrasted with the industrious 'historical races' of the invigorating climates of Northern Europe. Now the status of the savage was undergoing a significant change. An increasingly moralistic ideology, which drew on anthropological studies, saw the degenerate as deserving his backward environment; when subject to the test of progress through civilisation, he proved himself incapable of adaptation. As industrialisation brought harsher poverty in its wake, reformers and investigators of the poor brought a theory of degeneration to bear on the social question, within a conception of environmental dualism. This, arguably, lasted for a hundred years. As Gay Weber has stated:

the urban slum dweller resembled the savage in his uncouth manner and appearance, his heathenism, ignorance, immorality and idleness. Like a savage, he was redeemable, and his redemption was to be effected by improving his physical environment (drainage etc.) and moral environment, (education, religious instruction, Poor Law reform).

Reformers of the 1830s and 1840s, such as Kay Shuttleworth and Chadwick, rather than attacking the factory system, criticised the living conditions of factory workers: the slum environment was the inevitable product of the innate savage tendencies in man, the result of his unregenerate habits and demoralisation.

Chadwick believed that the poor were morally responsible for the squalor in which they lived. It rendered them susceptible to correction through religious instruction and temperance, rather than through economic and political change; another investigator, William Farr, attributed the geographical distribution of cholera
to working class drinking habits rather than to their low income. This moral determinism has, of course, a critical place within a complex of Victorian attitudes to the poor and paves the way for the 'scientific' Darwinism of the 1880s, based on a notion of inherited degeneracy.

By the 1880s the phenomenon of degeneration was being analysed a generation after Darwin had discovered that natural selection was the key mechanism of evolutionary change. E. Ray Lankester's *Degeneration*, although apparently the first zoological study to highlight degeneration as a phenomenon of Darwinian evolution, offers a typical example of what might be termed the rhetoric of natural selection. That rhetoric is shaped in the minds of men of science and medicine and those influenced by their discussions, in the belief that the operation of natural selection can be demonstrated in all spheres of existence. I shall discuss some important cross currents in the interpretation and application of Darwinian biology in section three and four of this chapter, but first I want, briefly, to look at Lankester's account.
In *Degeneration* (1880), Lankester drew on his research into low forms of vertebrates to claim that natural selection acts on the structure of the organism to produce either balance, elaboration or degeneration. For Lankester, the proper analysis of the operation of natural selection had been hampered by mistakes in the classification of species. He believed there were certain species which belonged with higher species in the evolutionary hierarchy and were, in effect, degenerate or atrophied members of that grouping. The ship's barnacle - the nauplius - which had hitherto been classified with snails and oysters should, he thought, be more properly categorised as a degenerate crustacean. Had its organs of touch and sight not atrophied, the barnacle could be dignified with classification as a shrimp or as a crab. Atrophy was a function of the process of degeneration which Lankester defined as:

A gradual change of the structure in which the organism becomes adapted to less varied and less complex conditions of life; whilst Elaboration is a gradual change of structure in which the organism becomes adapted to more and more varied and complex conditions of existence.

This recalls Herbert Spencer, but with a new and significant emphasis. Spencer, in his celebrated work of popular evolution *First Principles* (1862), had likewise aligned the complexity of
structure with a response to more complex environmental conditions—
demanding greater specialisation of functions both within the
organism and in relation to others; the shift from what he termed
'homogeneity' to 'heterogeneity'. This is what for Spencer
constituted evolution, which proceeded through the unfettered and
beneficent operation of the struggle for existence. Lankester,
however, was anxious to redress this optimism by calling attention
to examples which showed that the struggle for existence had taken
the form of a modification of structure in the other direction.

He points out general conditions under which degeneration might
occur. An organism seeks out 'less varied and less complex conditions
of life' where 'its food and safety (are) very easily obtained' (33).
Lankester's Darwinist argument is that these conditions of safety,
security and ease are hardly conducive to further evolutionary
development, rather they usher in the reverse. Any organism or
species which fails to take up the challenge of the struggle for
existence, as H.G. Wells's Eloi would fail in The Time Machine (1895),
becomes exposed to the inexorable process of decline into simplicity
and other specifically zoological degenerate states: - parasitism,
immobility, excessive reduction in size and vegetable nutrition.
It is no accident that the decadent Eloi are vegetarians. Imaginative
writers like Wells were to transpose phenomena from Darwinian science
into metaphors for the condition of contemporary humanity and the
state of civilisation.

From a reading of Lankester and other contemporary zoological
and biological evolutionary writings, it becomes apparent that these
wider applications of the phenomenon of degeneration were not in themselves novel but were, indeed, first proposed by scientists themselves. For Lankester, the wisdom to be gleaned from the zoological examples he details appears to be quite as important as any local zoological insight, which in any case is important enough. For Lankester to question the efficacy of the struggle for existence and to admit that species may not be eliminated by evolutionary struggle but could support an existence at a degraded level, was, in itself, a suggestive and significant adjustment to prevailing evolutionary orthodoxy. And it is the very scientific authority that Lankester's zoological commentary exerts which lends his wider analysis of contemporary civilisation that mixture of authority and innocence.

He broadens his discussion to consider the development of man as furnishing 'notable examples of degeneration. High states of civilisation have decayed and given place to low and degenerate states'. Moreover, degeneration accounts for the condition of some 'barbarous races'; whilst not all 'savage races' are the 'degenerate descendants of the higher and civilised races' (58). Degenerate races continue to flourish, 'the Fuegians, the Bushmen, and even the Australians' (59).

This is unexceptional popular racist anthropology for the period. But then Lankester considers the state of 'ourselves, the white races of Europe' (59). He considers that:

We are accustomed to regard ourselves as necessarily having arrived at a higher and more elaborate condition than that which our
ancestors reached, and as destined to progress still further. On the other hand, it is well to remember that we are subject to the general laws of evolution, and are as likely to degenerate as to progress (59-60).

Once the possibility of regression is conceded, then evolutionary degeneration can be adduced to explain and account for the insecurities and anxieties of post-Darwinian Victorian man. Lankester proceeds to inject a note of pessimism which is indeed characteristic of other responses, during this period, to the difficulties of the age:

Are all the inventions and figments of human superstition and folly, the self-inflicted torturing of mind, the reiterated substitution of wrong for right, and of falsehood for truth, which disfigure our modern civilisation - are these evidences of progress? In such respects we have at least reason to fear that we may be degenerate. Possibly we are all drifting, tending to the condition of intellectual Barnacles or Ascidians (60).

In this remarkable rhetorical flourish there are echoes of Matthew Arnold's poem of loss of faith, 'Dover Beach'. Moreover, by making introspection and intellectual torment the indices of modernity, Lankester invites comparison with Thomas Hardy's The Return of The Native which was published the year before Lankester's first address was delivered in 1878. Yet Lankester is not troubled as Hardy is by the tribulations of the development of mind (to which slightly later evolutionary thinkers such as D.G. Ritchie and L.T. Hobhouse gave a more critical status in man's evolution). Lankester pursues a far more innocent evolutionary logic. The behaviour of lower-order organisms offers analogies and metaphors by which human achievement can be evaluated and described. Moreover, these analogies are powered by the knowledge that it has been
scientifically proved that man is, indeed, related to the ascidian within the evolutionary family and is, therefore, by implication, as vulnerable to the buffetings of the struggle for existence and the decisive differentiations of natural selection as the lower-order organism.

Lankester affirms this dualistic relationship in his narrative when he moves from analogy, ('we are all...tending to the condition of intellectual Barnacles or Ascidians'), to an evolutionary affiliation, couched in carefully provocative terminology. The effect is to inject just the right dose of alarm by casting the shadow of evolutionary decline, whilst offering the salve of science to re-affirm the possibility of man's continuing evolutionary development:

We are a race more fortunate than our ruined cousins - the degenerate Ascidians. For us it is possible to ascertain what will conduce to our higher development, what will favour our degeneration. To us has been given the power to know the causes of things, and by the use of this power it is possible for us to control our destinies (61).

With its echoes perhaps of Taine on the philosophy of causes, Lankester puts his faith in positivistic science to guide man away not only from intellectual but also racial degeneration:

The full and earnest cultivation of Science, the Knowledge of Causes - is that to which we have to look for the protection of our race - even of this English branch of it - from relapse and degeneration (62).

His use of 'branch' neatly ties racial, national and evolutionary associations into a synthesis which is very characteristic of post-Darwinian naturalistic discourse and surfaces in the work of the novelists and other writers discussed in this and subsequent
chapters. One feature of this language is the continuous traffic between scientific explanation as a metaphor for the human condition and its capacity to suggest that the human condition is indeed a mere extension of lower orders of species. What makes this teleological complex both compelling and resistant to analysis is that, as historians of Darwinism have increasingly recognised, the very terms in which Darwinian evolution presented itself to the mid-Victorian intellectual community, as scientific, are impregnated with a superfluity of linguistic associations. Struggle, fitness, even natural selection itself, contain connotations suggestive to the synthetic procedures of Darwin's interpreters.

This conflation of philosophical, ethical and cultural preoccupations has to be taken into account, if the treatment of naturalistic discourse by novelists is to be understood. This synthesis, above all else, allows the resonances of the concept of degeneration to reverberate through the subject of man in nature and civilisation, in the late-nineteenth century. As I discuss in later sections of the chapter, once this synthesis was itself subjected to sustained attack, then the notion of degeneration was likewise undermined.
Although it is beyond the scope of this study to do anything like justice to the range and complexity of evolutionary debates among scientists, it is within certain emphases and phases of these debates that the late-nineteenth century use of degeneration should be located. But before discussing a decisive mutation in biological thought in the 1880s, it is perhaps necessary to highlight the importance both of Malthusianism and Lamarckianism. These components are vital both to evolutionary and Darwinian thought generally. They give momentum to the pervasive tendency in post-Darwinian thought to draw from nature assumptions and conclusions about the life of man. Both strands of thought within Darwinism were, in different ways and for different reasons, under increasing attack from the late 1870s.

After the publication of *Origin of Species* (1859) evolutionary debate amongst biologists, zoologists and other scientists could not but address the pair of factors which, for Darwin, determined the course of life: the means by which variations between and within species were arrived at, and the nature of inheritance. Darwin's work, as Stephen Gould observes, can be set out by two propositions and a necessary conclusion which follows from them:

1. Organisms vary, and these variations are inherited...by their offspring.
2. Organisms produce more offspring than can possibly survive.

3. On average, offspring that vary most strongly in directions favoured by the environment all survive and propagate. Favourable variations will therefore accumulate in populations by natural selection.16

The crucial discovery was the mechanism of natural selection. But as Robert Young has pointed out, it was the law of struggle legitimised by Malthus, which helped Darwin to formulate it.

The intensity of the Malthusian battle for scarce subsistence was drawn on not to point up the human predicament as later Darwinists were to do, but to furnish Darwin with a convenient natural mechanism for the changes which Darwin was studying in the selection of domesticated varieties. It gave Darwin the analogy he needed to move from artificial to natural selection, and this was the essential step in his reasoning: indefinite variation and natural selection could produce new species.17

Darwin's allegiance to Malthus, as Lankester pointed out, is at the centre of his adoption of 'struggle' to describe the response of an organism in evolution. Malthus's An Essay on the Principle of Population as it Affects the Future Improvement of Society (1798) was pessimistically intended as a cold douche to the environmental optimism of enlightenment thinkers such as Condorcet and Godwin. Malthus claimed that humanity could never progress other than through bitter struggle for a dwindling means of subsistence, since whilst the human population was deemed to grow geometrically, food increased only
arithmetically. 18

Marx and Engels, while in awe of Darwin's discovery of natural selection, 19 were particularly critical of his allegiance to Malthusian struggle. By the mid 1870s (after The Descent of Man had appeared dealing with man whom Darwin had studiously avoided treating in The Origin), evolutionism, particularly as the result of Spencer's influence, was continually drawing parallels between natural and animal organisation. Engels argued in 1875 that the struggle for existence, from Malthus, was actually traceable to the philosopher of competitive individualism, Hobbes (with his pessimistic doctrine of bellum omnium contra omnes) on the one hand, and bourgeois economic theory on the other, and that the struggle-idea was actually characterised by the transference 'from society to living nature'. Engels commented:

> When this feat has been performed...the same theories are transferred back again from organic nature into history and it is now claimed that their validity as eternal laws of human society has been proved. 20

As Young puts it, Malthus limits man's capacity for 'self-improvement and stresses struggle as an almost inescapable impediment to progress rather than as a mechanism for inevitable progressive change'. 21 This captures well the damage wrought by the commonplaces of evolutionary discourse. In 1851, Marx had suggested that the scarcity of food predicated by Malthusians was in part a reflection of the inequitable ownership of land. Cultivatable land was kept scarce, since high rents could be exacted. Improvements in science, Marx argued, could easily bring a great deal of poorer land into use. 22 Nature was, indeed, not a mirror in which the capitalist contemplated his works, but phenomena answerable, and answering to, the wide claims of human
need and technical inventiveness - not divorced from the specific realisation of the labouring and industrial class; who, of course, suffered Malthus's struggle for existence most acutely. As Raymond Williams has pointed out, 'nobody had to invent these as descriptions of nineteenth-century society, they were most people's everyday experience'. For Engels the question of struggle for survival had been erected into 'eternal laws'. He commented sarcastically on the tactics of the Malthusian argument:

Instead of analysing the 'struggle for life' as represented historically in various definite forms of society, all that has to be done is to translate every concrete struggle into the phrase 'struggle for life' and this phrase admits itself into the Malthusian 'population fantasy.'

One of the most interesting responses by an evolutionist to the question of the pressure of population, as a mechanism of evolutionary change, was that of the co-founder of natural selection, A.R. Wallace, who had applied the idea of struggle to man as far back as 1853. But by the early 1880s he had not only appreciated the limitations of the struggle-mechanism, but was now putting forward anthropologically-derived principles of mutual cooperation and voluntarism, as indispensable to the evolutionary process in which the human brain itself became a factor in modifying the environment. By the late 1880s he was a fully-fledged socialist.

It was the assault on the population theory of Malthus, by Henry George in Progress and Poverty (1879), which for Wallace and others crystallised the issue of land reform. This provided the key to the 'riddle of the sphinx of the population question' in Huxley's
phrase of 1890. For Wallace, George had effected an 'advance in political and social science equal to that made by Adam Smith a century ago'. He influenced a whole generation of radical intellectuals in England, (his lecture tour of 1882 attracted considerable publicity). George argued that whilst the population of industrial countries had grown dramatically, more than enough wealth had been created to support the population: 'subsistence was not a fixed quantity or a gift of nature, but a creation of human labor'. George advocated a form of land nationalisation which entailed individual ownership and rents being paid to the state. Marx, however, was scathing; for him George was 'theoretically... utterly backward'. George's proposals did not affect wage labour, and left the capitalist relations of production intact. Yet there is little doubt that his considerable importance, particularly for liberal intellectuals such as Huxley (who resisted him), and Fabian socialists like Shaw (who welcomed him), lay in his assault on the inevitability of the pressure-of-population conception.

It was the elevated status of biological science and its popularisers, Spencer, Huxley, Lankester, Galton and others, rather than the onslaught by Marx and Engels on the appropriation of evolutionary terminology by apologists for laissez-faire capitalism, which commanded scientific, philosophical and political debate to the end of the century. Wallace, Kropotkin, D.G. Ritchie and others, did derive ideologically opposed propositions from evolutionary ideas (I examine briefly the contribution of Morris and Edward Carpenter in a later section of this chapter). Yet it was testimony to the power of the scientific establishment, and the power of evolutionary
determinism in its hands, that only from within the field of biological controversy itself could there emerge, with the challenge of Weismann and neo-Darwinism, sustained mutations which could facilitate new ideological uses of science. Against biological determinism, either in its Lamarckian or anti-Lamarckian guise, and against the impact of Malthusianism, the impact of economic determinism was comparatively weak in Britain.
I want to look at the broad outlines of what was for the first generation of Darwinists, the dominant interpretation of inheritance and variation - Lamarckianism - and the challenge mounted to it by neo-Darwinian biologists led by Weismann. This emerged in England in the late 1880s and helped to create a climate for the resounding rediscovery of Mendel's theories of heredity at the turn of the century. The degree to which Weismann had emerged as a significant force by the late 1880s can be gauged by his lengthy exchanges with Herbert Spencer in the pages of the *Contemporary Review*. Essentially the debate turned on the degree to which natural selection alone was deemed a sufficient mechanism to account for the modification of species.

Darwin had never disguised the fact that natural selection was by itself insufficient to account for all phenomena: as for instance, the origin and persistence of useless characters, the occurrence of divergent evolutionary development under conditions of free intercrossing, and blending inheritance. Of these evolutionary anomalies, the persistence of useless characters is of most direct concern, and was the subject of research by leading figures such as Lankester, George Romanes and others. Darwin remarked in the 1872 edition of *Origin of Species* that natural selection had been hedged around by other explanations in the thirteen years since its publication. However, even in the first edition he had remarked that natural
selection constituted 'the main but not the exclusive means of modification':

Species have been modified, during a long course of descent...chiefly through the natural selection of numerous successive, slight, favourable variations; aided in an important manner by the inherited effects of the uses and disuse of parts; and in an unimportant manner, that is in relation to adaptive structures whether past or present, by the direct action of external conditions, and by variations which seem to us in our ignorance to arise spontaneously. It appears that I formerly underrated the frequency and value of these latter forms of variation, as leading to permanent modifications of structure independently of natural selection. 31

Although Darwin held Lamarck in low regard, there are certain Lamarckian categories at work here. The law of use and disuse relates directly to one of Lamarck's central tenets: that variations between species are determined by the environment, a view which Darwin contested. For Lamarck, they were subject to a law of progressive development: the environment acts on species to effect small variations in a beneficent manner. Species, in turn, respond creatively to their environment - this was Samuel Butler's view in *Life and Habit* (1877).

It was, however, the strength of Darwin's law of natural selection neither to pose any such teleology in the name of progress, nor to import a category of value. This is what fundamentally distinguished Darwin from Herbert Spencer. After he commenced his synthetic philosophy in the 1850s, Spencer's popularisation of a meliorist laissez-faire ideology, through a Lamarckian interpretation of evolution, was the most influential intervention in the field for a generation. His contribution will be considered below.
The law of use and disuse was defined by George Romanes: 'mere increase and decrease of parts are due to inherited effects of greater or less development by altered flow of nutrition'. Environmental change made particular demands on special organs which, when exercised, would develop, creatively. This was transmitted to the offspring; it was an inherited characteristic which was acquired. The popular exemplar was the deer-like animal which, finding ready food in increasingly short supply, would begin to feed off trees, so extending its neck, and through time merging into what was designated a giraffe, one of the more notable inhabitants of the Darwinian menagerie. The converse happened in the case of animals, such as moles, living in darkness; their eyes, if unexercised, would become functionless and ultimately disappear.

The Lamarckian view of evolution conceptually bound a species to its environment. In Spencerian terms a species would survive in a struggle for existence if it was 'fit' – 'the survival of the fittest' was Spencer's phrase. But more ethically-circumspect thinkers like Huxley thought this conflation a travesty. Huxley believed that:

The unlucky substitution of 'survival of the fittest' for 'natural selection' had done much harm in consequence of the ambiguity of 'fittest' which many take to mean 'best' or 'highest' whereas, natural selection may work towards degradation.

But for Spencer the environment, if hard, demanding and rigorous, and determined by the exigences of nutritional scarcity and over-population, would inevitably select out the least fit – those varieties least able to adapt.
But within zoological debates, as I have suggested, species became identified which seemed to have failed in the struggle for survival, but existed at a lower level of organisation - either in a simplified version of a former structure, in the same environmental conditions, or adapted to a life within a less complex environment. This adaptation, whether of organisation, or in response to a simpler environment, was easily assimilated within Spencer's popular 'survival of the fittest' terminology. Organisms actually made themselves 'fitter' by seeking out a lower and more degenerated level of existence. The fictional possibilities of this differential level of adaptation, as I hope to show in later chapters, were very considerable.

Now degeneration became a phenomenon which anti-Lamarckians were anxious to explain in terms other than those which Darwin had employed: the principles of the economy of nutrition and use-inheritance. In the tangled web of controversy between Lamarckians and neo-Darwinians from about 1889 onwards we find the phenomenon being discussed within the wider debate concerning the capacity of natural selection to account for variation in species. Now alternative explanations were being sought: for Weismann in the theory of panmixia, for Romanes in the, virtually identical, cessation of selection principle, which he had stated in *Nature* in 1874, but which had not been widely noticed until Weismann had asserted the same phenomenon independently in his 1889 *Essays*. 35

Degeneration was a central issue in the debates between Spencer and Weismann, with Romanes's judiciously strict editorialising of each (though he was more severe on Spencer). Spencer seemed
particularly irritated by Weismann's attributing a passage that Spencer had written about differential jaw size in 1864, to degeneration, by his panmixia theory. Yet Spencer stuck by his guns, standing by the principle of use and disuse. But for Weismann, degeneration of a structure was only one component of a complex process in which natural selection worked to considerable effect; there were compensating factors - the increase in size of adjacent parts and the higher development of organs which compensated for the degenerating structure. And in direct reply to Spencer, Weismann argued that 'degeneration of an organ does not depend on the transmission of functional atrophy', but that 'there may be degeneration of an organ even when it continues to function'.

Weismann and Romanes differed from Spencer by accounting for degeneration and atrophy without recourse to the law of use and disuse, or the economy-of-nutrition principle. For them, these did not operate, because the organism was neither seen to suffer from lack of food through the struggle to adapt to new conditions, in order to attain it, nor to struggle to adapt to new conditions in order to attain safety. A soft environment in which there was no noticeable struggle for existence, posed considerable problems for any proponent of a model of evolution which assumed a continuous struggle with environmental constraints in the process of natural selection. But it was Weismann's view that natural selection operated the more effectively by inducing atrophy of some organs while speeding up the development of others, even when the prevailing conditions were not immediately conducive to a struggle for survival and adaptation. And Romanes stated in *A Note on Panmixia* the consequences of the withdrawal of selection:
As soon as selection is withdrawn and heredity is simply left to itself, any failures either in the force or in the precision of heredity will be allowed to survive and perpetuate themselves. In the course of many generations these failures will become more and more cumulative. The useless organs will therefore more and more degenerate in size or in structure as the case may be, and this through the mere cessation of the previously sustaining influence of selection. 38

Spencer's embattled role in the debate was testimony to the growing impact of Weismann's ideas in England during the late 1880s. By the mid-1890s a climate had been set in which Bateson, DeVries and others, working to incorporate Mendel's research (neglected since the 1860s), could effect something of an epistemological revolution in biological thinking. From now on the laws of inheritance and variation in species would be placed on a new footing.

Some indication of the extent to which Weismann had dislodged the Lamarckian version of evolution by 1893, can be gauged from a pertinent aside of Havelock Ellis, who as a thinker, writer and editor was as much abreast as anyone of contemporary developments across a whole range of evolutionary thinking. In a letter (presumably replying to a remark that one of his earlier works, The Criminal (1890), had taken a Lamarckian position), he wrote to F.H. Perry-Coste, 'the book was written four years ago, and I should now be more cautious concerning some of the points you mention - especially the question of inheritance of acquired characteristics'. 39

At the same time, it would be misleading to suggest that the impact of Weismann had fully dispatched Lamarckian evolution. H.G. Wells, as we shall see, eventually accepted Weismann with reluctance but not until about 1895. Haeckel, who had been writing
on evolution since the 1860s, remained a Lamarckian to the end, as did William MacDougall, the psychologist, and G.B. Shaw.

Weismann's first lectures on heredity were delivered in 1883, and his essays on heredity also appeared from that date. And it is worth noting that Galton first formulated the practice of eugenics in the same year. The publication of Weismann's collected essays in English translation from 1889 provided the stimulus for wide scientific debate in England. However, Greta Jones has recently pointed out that Weismann's ideas were discussed (slightly earlier) in 1887 at the British Association. The author of Degeneration, E. Ray Lankester, was by now vigorously promoting Weismann. The anthropologist E. Westermarck, newly arrived in London from Finland, recalled that in 1887:

'The inheritance of acquired characters' had at the time of my stay in London [from 1887 onwards] suffered a severe check from Weismann, whose denial of... such characters had an ardent champion in Ray Lankester. It was through him and his assistant, Ernest Weiss, that I first became acquainted with the new doctrine, which impressed me greatly, as the earlier inheritance theory seemed to be without any confirmation in proven facts. 44

Romanes, too, made a particularly cogent contribution to the debate, expressing privately the general view that 'this is the most important question that has been raised in biology since I can remember'. He explained in a letter of 1890 the nature of Weismann's challenge:

This theory of the Non-Inheritance of Acquired Characters, is that nothing that can happen in the lifetime of the individual exercises any influence on its progeny; effects of use or disuse, for example, cannot be inherited, nor therefore, can any adaptation to external
conditions which are brought about in individual organisms. Natural selection thus can only operate in spontaneous variations of germ plasm, choosing those variations, which, when 'writ large' in the resulting organisms, are best suited to survive and transmit.

It was Weismann's distinctive contribution not only to challenge the Lamarckian interpretation, but more importantly to identify and isolate the germ plasm as the bearer of heredity. Romanes pointed out that he and Galton had anticipated the critique of acquired characters by some years: 'that had been a question for me since the publication of Galton's Theory of Heredity' (1875). Romanes's degeneration theory of cessation of selection, chimed with Weismann's panmixia, as Romanes noted in his April 1893 essay. However, it was clearly the publication of Weismann's essays that prompted Romanes's lucid counter-statement against the law of use and disuse.

Weismann claimed that existing theories of heredity were unsatisfactory (the most notable of which was Darwin's pangenesis theory). Starting from the position that acquired characteristics could not be inherited, he claimed that the germ plasm, which contained the building bricks of heredity, was uninfluenced by changes in the body or 'somaplasm'. The germ plasm made a continuous track through the life of an individual and was re-invigorated through reproduction. For Weismann, according to J.R. Moore,

the raw materials of evolutionary change consist solely of the congenital variations that arise randomly in the offspring from the mixture of parental germ plasms. Thus Weismann concluded that the only causal factor in evolution was the one which assures the survival and accumulation of the most beneficial of these variations: namely, natural selection.
In May 1890, Romanes proffered a response to Weismann in terms which the layman could understand, using the example of the eagle to form an implicit contrast with the Lamarckian giraffe:

No matter how many generations of eagles... may use their wings for purposes of flight; and no matter how great an increase of muscularity, of endurance, and of skill may thus be secured to each generation of eagles as a result of individual exercise; all these advantages are entirely lost to progeny, and young eagles have ever to begin their lives with no more benefit bequeathed by the activity of their ancestors than if those ancestors had all been barn-door fowls. 50

By focussing on the mechanism of inheritance through reproduction - the germ plasm - Weismann appeared to strengthen a weak link in Darwin's hypothesis. The value of the use - disuse principle, had been to account for the elimination of certain variations because of supposed environmental pressures; the environment could at least be visualised or spatialised even if its precise effects could not be measured with certainty. However, there was little in Darwin (his pangenesies theory was an attempt to fill this gap), to explain why positive selection should take place. Nor was there an account of selection that was not without reference to the constants of nutritional deficiency or struggle. Moreover, the phenomenon of discontinuous variations was not satisfactorily accounted for. What Weismann appeared to offer was a new freedom - an unshackling from the bind of environmental determinism. The emphasis was now less on the body as a source of variation, and more on the germ itself. And this reflected a growing interest in the precise mechanism of heredity, which Francis Galton and others had been working on since the late 1860s. The key to the riddle of variability in inheritance was now increasingly being sought in the isolated sphere of reproduction.
Weismann received a broadly favourable response from English scientists, through the 1890s. The pioneering work on genetics of Bateson, DeVries and others, leading to the re-discovery of Mendel, was carried out in a new climate which Weismann had helped to create. The new anti-Lamarckian character of biology had important ramifications, particularly in the areas of social policy and political thought. They are of considerable importance for an understanding of the period leading to 1914. Recent welcome studies of these connections have stressed the resilience and longevity of models of evolutionary, and particularly, biological discourse - thus emphasising, in the mutations of scientific thought, the continuity rather than the divisions between the late-Victorian and Edwardian periods. 51

One consequence of Weismann's success and the demise of Lamarckianism was to put the question of the efficacy of social reform, through environmental improvement, on to a new footing. But it has to be remembered that competing social and political prescriptions could be claimed from any single biological formation. The Lamarckian evolutionary model, with its gradualist accumulations of small variations, could be assimilated into an aristocratic view of politics. 52 The tautologies implicit in Lamarckianism - that man reproduces characteristics acquired from the environment for which he was fitted or selected - could confirm a strongly conservative view of society, by which differential environments sustained and normalised class divisions. Alternatively, Lamarckianism gave hope to liberal gradualists and social reformers who could glean the satisfaction of knowing that any improvement effected in the
environment could be passed on as a beneficial acquisition.

Yet a converse case could also be put. To social reformers, by one interpretation, the notion that inherited characteristics could not be acquired from external conditions - the environment - was a profoundly depressing thought; what use was there in attempting to improve social conditions if the process of reproduction was sealed off from their influence and left to the vagaries of individual particles of germ plasm? Equally, there were optimists like Paley, who argued that the continuity of the germ plasm would be established irrespective of the life experience of parents; thus all that was debilitating in the environment, all that told against the poor, for example, could be discounted. Success or failure of social policy by this interpretation could be judged by other than purely environmental criteria, i.e. whether the poor reproduced their poverty or not. Also, the unshackling from the environmental bonding (which Spencerian evolutionary thinking had encouraged) meant that conceptually, there was every possibility for the good material in the working-class to surface, irrespective of environmental constraints.

Paradoxically, the Lamarckian interpretation of Spencer, a thinker who pre-eminently propounded competitive individualism, now appeared less encouraging to individual initiative when placed beside a model of evolution which minimised the restraining influence of the environment. To the objection that man had simply exchanged the determinism of the environment for the determinism of the genes, the eugenics movement in a sense countered with its complementary policies of positive and negative eugenics.
It is perhaps salutary to remember that eugenics, as conceived after the foundation of the Eugenics Society in 1903, took its strength from progressive reformers and socialists as well as from back-woodsmen and racist imperialists. The eugenic movement would not have been possible had not the Lamarckian model of evolutionary development fallen into wide disfavour. The acceptance of Weismann's interpretation was part of a wider conjuncture of social, political, economic and philosophical factors which influenced the culture and, more specifically, the literary culture of the period. And it is my hope to trace how these particular factors were operating as an influence in the major writings of Hardy, Gissing and Wells.
In this section, I shall describe the background to the pathological usage of degeneration, giving special attention to Nordau's *Degeneration* (1895) and its reception. The work of Max Nordau (1849-1923), is in direct line of descent from that of a school of French psychiatrists and pathologists of the mid nineteenth-century, the most significant of whom were B.A. Morel, J. Moreau de Tours and J.J.V. Magnan. It was Morel who introduced the term 'degeneration' into pathological analysis in writings from 1857 to 1860, although he properly attributed the source of the term to Buffon. For Morel, degeneration was a morbid deviation from a perfect primitive type. This deviation was subject to a 'law of progressivity' which compounded deviation through the generations: 'Les dégénérations sont les déviations maladives du type normal de l'humanité héréditairement transmissibles et évoluant progressivement vers la déchéance.' This Lamarckian view of degeneration set the fashion for the next forty years. According to Morel, successive generations of Europeans were being increasingly exposed to environmental horrors which arose from industrial society: epidemics, overpopulation, narcotics, child labour, general poverty and for good measure, the absence of moral controls. All these were symptoms of a degenerate civilisation, and in turn produced specific degenerate effects.
Morel classified degeneration as a disease which produced three categories of symptoms: physical deformity, perversion of the function of the organism, and disturbance of the emotional faculties. The variety of stigma by which this diseased condition could be recognised - pointed ears, criminal deviations, sterility, asymmetry of facial features - were made especially notorious by the Italian criminologist Lombroso, in the 1880s and 1890s. The attractiveness of this symptomatic procedure was considerable. Although it was difficult to demonstrate a precise connection between a single stigma and a particular symptom, it was nonetheless possible to implant each symptom within a single frame of reference, in which a plurality of symptoms and indices of conditions could be loosely identified together. Thus any one feature could signal the operation of a specific field of related features. As Michel Foucault has stated, 'psychiatric discourse is characterised not by privileged objects, but by the way in which it forms objects that are in fact highly dispersed.'

The crucially new element in Morel's thought was the introduction of the element of progress or regress over time, through the generations, by hereditary transmission. And it is this teleological component that lends Max Nordau's analysis its compelling quality. Through a Lamarckian model of evolution, pathological man and a pathological society become mutually reinforcing. For Morel, 'the first generation of a degenerate family might be merely nervous, the second would tend to be neurotic, the third psychotic, whilst the fourth consisted of idiots and died out.' And because nineteenth-century society appeared to manifest degenerate symptoms in ever-increasing profusion, the
civilisation could be declared decaying and actually on the brink of extinction. It was in the field of psychiatric 'disease' that the idea of degeneration and its various applications held sway until the late 1890s, when its value as a concept came to be severely questioned by, amongst others, Freud, and Havelock Ellis. I shall be discussing this later.

Amongst deviants from the original 'type' were specific groups of men and women, thinkers and artists in particular, whom Morel did not account for. Here Moreau and Magnan influentially applied a theory of degeneration to 'geniuses'. Moreau observed that mania was often caused by 'an excess of the artistic temperament', and noted how geniuses and idiots tended to have similar nervous constitutions. Magnan talked of dégénérés supérieurs. All this work lay behind the studies of Lombroso and Nordau, who were to popularise the connection between genius and insanity. To this they added a criminological component that had been current, especially in France, since the late 1850s. The belief in a relationship between genius and insanity had, of course, a long history dating back to Plato and Aristotle.

Few writers can have so successfully goaded their critics into so much deprecating activity as 'the apostle of degeneration', Max Nordau. Entartung was published in Germany in 1893 and created a sensation. It was translated as Dégénérescence (1894) in France and Degeneration in England and America (1895). Degeneration ran to seven editions in six months and was the most spectacular of a clutch of literary success stories of that year. Whilst for the most part
it was condemned, Nordau managed to get himself talked about with unparalleled intensity. Within two years long critiques were commissioned, and enthusiastic denunciation gave way to ironic if cautious dismissal. In some ways the Nordau episode has its own pathology in its double movement, of assertion and withdrawal, of stimulation and lethargic reaction, which Nordau repeatedly attributed to fin de siècle civilisation.

Nordau played a large part in contriving his own success. He had managed it before, when Dieconventionellen Lugen Der Kulturmenschenheit (Conventional Lies of our Civilisation) was published in 1883. 63 By 1896, 55,000 copies had been sold, but after some abject literary failures, particularly in theatre, it was clear that Nordau badly wanted another triumph. 64 Milton P. Foster's exhaustively thorough, though uncritical account of the reception of Degeneration, demonstrates this with a remorselessness worthy of his subject. But he puts one reason for the notorious success of Degeneration well:

To many English and American readers in 1895 Nordau must have seemed like a true prophet. He had written Degeneration during 1892 and 1893 and at that time called attention to pathological abberations in Oscar Wilde's character. The English translation appeared just two months before Wilde was sentenced. 65

A celebrated review of Degeneration by Hugh E.M. Stutfield connects Nordau's description of the degeneracy of Wilde's character with his imprisonment for homosexuality; the innuendo is brilliantly contrived in his reference to:

the direct intellectual progenitors of our aesthetes, whose doctrines Dr. Nordau examines at quite unnecessary length...
recent events, which shall be nameless, must surely have opened the eyes even of those who have hitherto been blind to the true inwardness of modern esthetic Hellenism, and perhaps the less said on this subject now the better. 66

Extraordinarily, petitions issued on Wilde's behalf in July 1896 appealed to the Home Secretary for Wilde's release on the grounds that his homosexuality was a degenerate 'sexual madness' of a type peculiar to 'the literary and aesthetic temperament', precisely as Nordau and Lombroso had demonstrated in their studies of 'degen erates' such as Wilde. Wilde could remind the Home Secretary that Nordau had 'devoted an entire chapter to the petitioner' (it was in fact three pages of one chapter). 67

For Havelock Ellis, writing with the hindsight of thirty years, Nordau was simply a clever German journalist in Paris, who had the journalist's flair to concoct in a popular shape the not very scientific doctrine of 'degeneration' then floating in the air and applying it to contemporary men of letters and art. 68

But Ellis considerably understates his own debt to these ideas, and in particular, to Nordau's master, Lombroso, whom Ellis admired for rather too long. Ellis's own The Criminal (1890) was deeply indebted to him both in analytical method and content. And, far from rejecting the notion of degeneration (it would be naive in fact to suppose he could avoid using it in the 1890s) Ellis incorporated the term in his studies of criminal anthropology and sexual deviation. He did on the whole reject its usefulness when it was applied to artists, and to be fair to him, it is one of his singular achievements to generate
a favourable response to writers whom Nordau specifically attacked; Nietzsche, Zola, Huysmans, and Ibsen. Ellis's own contemporary response to Degeneration, 'The Colour Sense in Literature' (1896), whilst parting company with Nordau, is similarly positivistic in its application of a test of decadence in literature, but comes to different conclusions. Ellis's attitude to degeneration ideas will be considered in more detail later in this chapter.

Nordau's positivistic determinism drew perhaps the most analytically penetrating critiques from two philosophers of the pragmatic school, F.C.S. Schiller and William James. James pointed out that the fallacy of Nordau's approach resided in his attempt to apply indiscriminately pseudo-scientific terms like 'degeneracy' and 'morbidity' to what were in fact distinct conditions of being:

The trouble is that such writers as Nordau use the descriptive names of symptoms merely as an artifice for giving objective authority to their personal dislikes. Medical terms become mere 'appreciative' clubs to knock men down with. Call a man 'mad' and you've settled his social status. Call him a 'degenerate' and you have grouped him with the most loathsome specimens of the race, in spite of the fact that he may be one of its most precious members.

And F.C.S. Schiller condemned the 'semantic unreliability' of Nordau's use of the term degeneration:

Nothing more certainly betrays the pseudo-scientific humbug than the habit of taking up some prevalent technical term and making a great stir by giving to it a vague and indefinite extension of meaning. This is precisely what Nordau has done. In biology the term 'degeneration' has a definite reference to the past history of an organism, and indicates that organs and structures which it formerly possessed have decayed or disappeared.
Or, morphologically, 'degeneration' may be used to designate any change in the direction of less complexity, when progress has been defined as a process tending towards greater complexity. But in neither case is any slur cast on the organism as a whole by saying that in some respects it is degenerate. It is very rarely that progression in some respects does not need to be purchased at the cost of degeneration in others.

Schiller argues in the most cogent of the many rebuttals of Nordau, cited by Foster, that whether the term is used in its biological or morphological sense it presupposes a state from which the object of inspection, be it a civilisation, a poet, or a criminal, has degenerated:

Clearly then the type must be stated from which the degenerate have declined. This is what Nordau assiduously avoids doing - lest it should appear that 'degeneration' in some form or other is coeval with some form of humanity itself, and that the 'type' to which his reasoning logically conducts him must be some providentially extinct form of ape.

It is an essential insight. Schiller and James were among the very few (Shaw was another), who seemed capable of breaking down the insidious synthesis of biological and metaphorical components in the term.

Nordau's system is passively entropic. Pathology enters the space vacated by the synthetic philosophy of Spencer, hitherto the dominant evolutionary model. Spencer put the process of degeneration in dynamic equilibrium with that of progress, in a direct line from the optimistic philosophical tradition of men like Buffon and Montesquieu. It is a mid-Victorian synthesis, a natural philosophy which, of course, the philosophical pragmatists were anxious to discard for good. But Nordau compounds the error of natural philosophy by
retaining the synthesis while discarding the dynamic interplay between progress, decay, evolution and dissolution, for an all-embracing pessimism characteristic of the mid-late 1890s, in which the dynamic can run one way only - towards decay and death.

Degeneration is a wholesale denunciation of tendencies in modern art - particularly in literature. Nordau's targets include Wagner, Nietzsche, Ibsen, Tolstoi, Zola and the French symbolist poets. It constitutes one of the most extraordinary examples of a book which is at once intellectually risible and strangely compelling, methodologically absurd and a logical extension of a particular emphasis of positivistic thought. It is, in both its highly derivative and oddly unique character, perhaps to be seen as one of the last positivistic epics - or to put it less charitably, it is positivism run mad.

For Nordau the artist is credited with virtually no intentionality, he is unaware of form or any conception of aesthetic distance, or of any idea of how irony can be directed at language. Perhaps Nordau's least attractive characteristic is his humourless imperviousness to the ambiguities of language itself.

The artist, for Nordau, produces his art as the brain emits vapours; both the act of production and the artistic product are the manifestation of a pathological condition, and the work of art is the diseased product of that condition. But rather than leave the argument at that level of generality, Nordau, like a deranged literary critic, seeks evidence of degeneration in the individual works of writers (he appears
to have read Ibsen's entire dramatic output), and in particular passages, lines and images from them. In his remorseless search for confirmation of the general in particular works of art he is quite unique. Some brief references to his method may suffice.

He cites at one point a line from Baudelaire's 'Le Gouffre',

\[
\text{"tout est abîme - action, désir, rêve"} \quad \text{72}
\]

The image is not discussed with reference to Baudelaire's intentionality, thus completely circumventing the question of the quality of imaginative apprehension of the emotional states which are imaged. Rather the image of the abyss is interpreted as a literal manifestation of an unconscious, and thus by Nordau's diagnosis, a pathological obsession, which is, in turn, traced back to a condition common to degenerates: 'cremaphobia' (fear of abysses). Its absurdity should need no elaboration, although one is irresistibly reminded of the more fanatical versions of Freudian literary criticism. The highly selective choice of evidence in the hands of a disciplined and remorseless analyst yields a certain numbing authenticity. A single point is hammered home in an endless series of proliferating syllogisms. Nordau's hope may be to beat the reader into a sort of critical submission; it may be part of the work's tactic to render itself unavailable to a sustained reading since each discrete example is merely an illustrative symptomatic confirmation of the presiding tautological thesis.

Notoriously, Nordau looks at the example of Verlaine. The poet's degenerate art is assimilated into a totalising view of the poet as degenerate by pointing up the peculiarities of his physiognomy.
Verlaine is a criminal degenerate because of the asymmetry of his head. 'In the man' Nordau remarks, 'we find, in astonishing completeness, all the physical and mental marks of degeneration'. And Verlaine's poetic style confirms this mental debility: 'the combination of completely disconnected nouns and adjectives which suggest each other...through a senseless meandering by the way... "a slow landscape", "a slack liquèur (jus flasque)"'. Zola, too, suffers from another degenerate condition. By his realistic description of 'womens' linen' he is condemned 'a sexual psychopath': 'this effect of female linen on degenerates affected by sexual psychopathy', Nordau notes (meting out reassurance and threat in equal measure), 'is well known in mental therapeutics'.

To stigmatise artists with the marks of insanity was not, of course, a new phenomenon - it was a favourite tactic of Augustan satire; but clearly in the late 1880s, there had developed a new fascination with the artist as a deviant subject. J.F. Nisbet, drama critic of The Times, made literary figures the focus of 'a long suspected relationship of genius and insanity' in The Insanity of Genius (1891), and Francis Galton's second edition of Hereditary Genius (1892) took account of perhaps the most influential work of its kind (particularly on Nordau himself) - Lombroso's L'Uomo di Genio (1888), which appeared in Havelock Ellis's translation in 1891. And it was Ellis who, to his subsequent embarrassment, perpetuated the association between Verlaine and the condition of criminal degeneracy in The Criminal (1890). For the foremost champion (with Shaw) of modern literature during the 1890s, this proved to be an intolerable error which was rectified by 1896 when his essay 'The Colour Sense in Literature' appeared. And
this idea was omitted from the second edition of *The Criminal* (1901) (the wider implications of this omission are discussed in another section of this chapter).

I want to return to the major influence on Nordau, the Italian criminologist, Cesare Lombroso. Many critics quite properly bracketed Nordau's work with that of Lombroso. *Degeneration* is dedicated to the Italian criminologist and Nordau's methodology, if not the detailed content of the work, is clearly indebted to him.

Working from Turin, Lombroso was the most prolific and the most influential exponent of the pathological manifestation of the degenerate condition for a decade from the late 1880s. The main thrust of his work was in criminal anthropology, to be discussed in another section of this chapter. His analysis of the criminal type took in men of genius, mainly artists and political agitators - notably anarchists. In his exhaustive studies, based on the measurement of physical stigmata of deviant groups, he was able to connect artists with insanity through observations derived from various degenerate conditions. Throughout, the Lamarckian principle of acquired characteristics is paramount. Degeneration is viewed as a pathological condition shared by many deviant Europeans; both of its time and a product of particular inheritance. The condition is explained in *Man of Genius* (1891):

A theory, which has for some years flourished in the psychiatric world, admits that a large proportion of mental and physical affections are the result of degeneration, of the action, that is, of heredity in the children of the inebriate, the syphilitic, the insane,..., or of accidental causes, such as lesions of the head or the action of mercury, which...perpetuate
neuroses or other diseases in the patient, and which is worse, aggravate them in his descendants, until the march of degeneration, constantly growing more rapid and fatal, is only stopped by complete idiocy and sterility. 77

The over-determining condition of degeneracy enables Lombroso to implicate both a whole range of symptoms and a clutch of deviant groups who manifest different varieties of the presiding condition. Although, as I have pointed out, the attribution of degeneracy had been available in its hereditarian formulation since the late 1850s, the novel element in Lombroso's work was the detail and range of behavioural and physical characteristics culled from exhaustive empirical observation:

Alienists have noted certain characters which very frequently, though not constantly, accompany these fatal degenerations...on the moral side, apathy, loss of moral sense, frequent tendencies to impulsiveness or doubt, psychical inequalities owing to the excess of some faculty (memory, aesthetic taste) or defect of other qualities (calculation, for example) exaggerated mutism or verbosity, morbid vanity, excessive originality, and excessive pre-occupation with self, the tendency to put mystical interpretations on the simplest facts, the abuse of symbolism and of special words which are used as an almost exclusive mode of expression. Such, on the physical side, are prominent ears, deficiency of beard, irregularity of teeth, excessive asymmetry of face and head, which may be very large or very small, sexual precocity, smallness or disproportion of the body, lefthandedness, stammering, rickets, phthisis, excessive fecundity, neutralized afterwards by abortions or complete sterility, with constant aggravation of abnormalities in the children. 78

The reference to 'special words' is particularly tantalising.

Here, then, is the whole range of degenerative characters; a catalogue worthy of The Tale of A Tub or of The Dunciad, if the
intention were not so diligently and humourlessly conceived. The numbing effect perhaps derives from the fact that, ultimately, whatever the idiosyncrasies of observed behaviour and physical feature, they are all traceable to the larger condition. If the net is cast sufficiently wide, most peculiar or odd characters, most minority groups, with easily recognisable identifying characteristics, anarchists, epileptics, poets, will be caught, enmeshed and indiscriminately flung on the slab; thus 'the signs of degeneration in men of genius ...... are sometimes more numerous than in the insane'.

Concentrating on a common physical feature such as the skull, Lombroso can condemn artists as insane: 'The capacity of the skull in men of genius as is natural, is above average, by which it approaches what is found in insanity'. Both artists and men of genius suffer from amnesia and double personality. And Lombroso triumphantly reports an anecdote about Schopenhauer, who was observed asking himself questions about his own identity, thus confirming his lunacy. Elsewhere various artists suffer from emaciation, melancholy, megalomania, neurosis and alcoholism, all prime manifestations of the degenerate symptomology.

Within months of the English publication of Degeneration, Nordau had become a familiar point of psychological reference, as revealed by a casual reference in H.G. Wells's The Plattner Story (April 1896); Plattner 'is quiet, practical, unobtrusive, and thoroughly sane from the Nordau standpoint'. Wells was perhaps particularly adept at sceptical allusion to the vogue for Nordau's writing.
The Wonderful Visit (1895) Nordau is indirectly mocked in the person of Dr Crump. The story is a satire on small town parochialism. An angel descends on the village of Siddermorton. Its innocence of mortality and ignorance of physical deterioration and the division of labour provokes the local doctor into pronouncing it a deviant in the manner of Nordau:

A mattoid. An abnormal man. Did you notice the effeminate delicacy of his face? His tendency to quite unmeaning laughter?... Many of this type of degenerate show this same disposition to assume some vast mysterious credentials. One will call himself the Prince of Wales, another the Archangel Gabriel, another the Deity even. Ibsen thinks he is a Great Teacher and Maeterlink a new Shakespeare. I've just been reading all about it - in Nordau. 83

Wells wittily calls up a tactic of degeneracy-peddlers - the use of a scientific diagnosis to stigmatise the unknown, explain the inexplicable and to fix abnormal behaviour as a deviant form, here the mad genius. Lady Hammeryellow believes the angel is a genius but then censures him for overstepping the mark when he shows enthusiasm for a servant. And in the figure of Crump, Wells's exposure of small-time earnestness sounds a more sinister note when he tries to eject the disruptive angel from the village by certifying it as insane. Crump also comically voices the personal frustration of a diagnostician, soaked in Lombroso and Nordau, who cannot find a single suitable degenerate patient for analysis:

I wish Nordau or Lombroso or some of these Salpetrière men could have a look at you. Down here one gets no practice worth speaking about in mental cases. There's one idiot - and he's just a damned idiot of an idiot - all the rest are thoroughly sane people. 84

Another parish doctor comes in for satiric treatment some years later when in The Food of the Gods (1904), Wells has him speaking
eulogistically of Nordau:

'A most gifted and celebrated philosopher, Lady Wondershoot. He discovered that the abnormal is - abnormal, a most valuable discovery, and well worth bearing in mind. I find it of the utmost help in practice. When I come upon anything abnormal, I say at once, This is abnormal.' His eyes became profound, his voice dropped, his manner verged upon the intimately confidential. 85

By this time Nordau had gone completely out of fashion. The school of Lombroso and Nordau was seen as ponderous, pedantic, pretentious and above all pseudo-scientific in its totalising pathological and anthropological determinism. The reaction to Nordau, as I have suggested, had set in quickly enough. By the late 1890s, he was being reviled in scientific quarters and he was condemned by apostles of modernism. Edward Garnett, who was to be so influential in the literary careers of Conrad and Lawrence, wrote in 'Nordau Reconsidered' that:

Degeneration is strictly speaking, a reductio ad absurdum of the utilitarian theory and the life of the middle-classes. All the ignorance, prejudice, limitations of the average man in matters aesthetic were deified there, and set up before his delighted eyes as scientific truths. 86

With Zola and Ibsen long accepted in literary circles, and Nietzsche's work propagated by a growing number of enthusiastic critics, it was not difficult to demonstrate the flimsiness of Nordau's views on art and civilisation. Three lengthy studies of Nordau, in particular, contributed to his early demise: William Hirsch's Genie und Entartung, Eine Psychologische Studie (1895) translated into English as Genius and Degeneration: a Psychological Study (1897), E.A. Hake's Renegeration : A Reply to Max Nordau (1896), and Shaw's essay in Benjamin Tucker's American anarchist journal, Liberty of 1895,
(which was later reprinted as The Sanity of Art by the New Age Press in 1908).

But in being an attack on individual writers, Degeneration also assaults the fin de siècle world itself of which artists are the most dangerous spokesmen. Artists are nourished by an audience or a readership; both artistic producer and receiver are implicated in the same 'condition', the disease of civilisation:

The physician, especially if he has devoted himself to the special study of nervous and mental maladies, recognises at a glance, in the fin de siècle disposition in the tendencies of contemporary art and poetry, in the life and conduct of the men who write mystic, symbolic and 'decadent' works, and the attitude taken by their admirers in the tastes and aesthetic instincts of fashionable society, the confluence of two well-defined conditions of disease, with which he is quite familiar...degeneration...and hysteria, of which the minor stages are designated as neurasthenia. These two conditions of the organism differ from each other, yet have many features in common.87

The audience for Wagner and Ibsen, Zola and Wilde are part of the hysterical condition which artists both trade on and inflame. Just as intentionality is not a part of the degenerate artist's equipment so discrimination is not characteristic of his degenerate audience - which is prone to 'emotionalism' and susceptible to 'imitation'.

Capitalising on B.A. Morel's analysis, over thirty years earlier, Nordau explains that the hysterical fin de siècle condition has been brought about by the inherited acquisition of a pathological condition caused by the changing technological conditions of late-nineteenth century life:
If he do but read his paper...he takes part, certainly not by active interference and influence, but by a continuous and receptive curiosity in the thousand events which take place in all parts of the globe...All these activities...involve an effort of the nervous system and a wearing of tissue. Every line we read or write, every human face we see, every conversation we carry on, every scene we perceive through the window of the flying express, sets in activity our sensory nerves and our brain centres.... the perpetual noises and the various sights in the streets of a large town, our suspense pending the sequel of progressing events, the constant expectation of the newspapers, of the postman, of visitors, cost our brains wear and tear.88

To address an audience of the 1890s, was, according to the symptomatic logic of Nordau and others, to address amongst them, a proportion of degenerates who would necessarily have inherited the degeneracy acquired by their parents. Urban living was in the blood and the genes. The health of civilisation was under attack by the hereditary transmission of decay which had led to fatigue, debility and eventual extinction.

Amid the clusters of self-justifying declarations it is possible to see in Nordau a formulation that had considerable attraction for writers of the 1890s. Gissing's The Whirlpool, to be discussed, is clearly influenced by Nordau's location, within the city, of a territory of breakdown, where the contours of that territory and the map which describes it collapse into each other. Symptoms of the city 'condition', such as hysteria, are inherited, and thus become determinants of the very 'condition' out of which they have been formulated. But this condition is only visible in a detailed miscellany of abnormalities which signals an accumulation of inheritable environmental changes from the recent past, and an
increasingly threatened and tainted future.

For Nordau, as with other contemporary diagnosticians, hysteria and neurasthenia are both observable states of disorder manifested by specific degenerate types - criminals, paupers and lunatics - as well as being generalised symptoms of the prevailing urban condition. Even if the precise stigma of degeneracy vary from group to group, all of them manifest the degenerate condition which, it is teleologically argued, is a product of place, the city, and time - the inherited present.

The city-condition should constantly alert us, in the eyes of the diagnostician, to its threatening proximity; it is a disease which can unsuspectingly strike the city-dweller down. The condition emerges within the stratifications and divisions of normalcy within the city. Whole social groups and types are tactically dispatched to a 'safe' zone of abnormality, which renders them innocuous by depriving them of the power to confuse, complicate or challenge the dominant order. So we find that the man of genius, the lunatic, the anarchist and the independent woman are objectified by the same expedient: the medicalising or naturalising of their distinctive cultural and political challenge. The tactic was to attribute to them symptoms of congenital criminality, hysteria or neurasthenia. The idea of neurasthenia I want to make the subject of the next section.
Neurasthenia, in fact, emerged as a descriptive term in America in response to the growth of the city after the Civil War. It is generally accepted that George Beard was the first to coin the term and he and S. Weir Mitchell amongst others used it to describe nerve weakness and exhaustion in both men and women. He coined the term 'American nervousness' in the belief that American civilisation was 'mobile and industrial and therefore particularly conducive to neurasthenia'. Nerve weakness was seen as the inevitable consequence of overtaxing the nerve supply by engaging in the frenetic pursuit of wealth through business and commerce. Beard believed that it would disappear in the twentieth century when better technical devices would replace the stress-inducing machines of the nineteenth century.

It is significant that the language in which the condition of neurasthenia was stated owes much to the developments in physics and mechanics. From the 1850s Joule and Helmholtz (and earlier, Emile Du Bois-Reymond), had been formulating laws of conservation of energy. The growth of steam-power had revolutionised the potential uses and sources of energy, and nervous organisations, too, came to be described in mechanical terms and thought of as mechanical energy systems. Like a battery, a nervous system expended energy only in proportion to its capacity to store it via a dynamo. When energy had been over-expended, there would occur signs of 'dimming';
and the system would be unable to recharge itself. In addition, experiments which showed that the nerve, itself, had an electric potential and responded to electric stimulation, lent credence to this mechanical model. So that by the 1870s the medical profession tended to treat nervous organisations very much as dubious electrical systems - or failed ones. Electrical treatment was notoriously administered to the brain cortex, often quite indiscriminately.

According to optimists like George Beard, nervous fatigue was the inevitable fallout of a dynamic, forceful society. And it comes as no surprise to find that this analysis intersected with the evolutionary optimism of Spencer who had, in any case, gained a far wider hearing among American professionals than he had received from their counterparts in England.

As Rosenberg suggests, neurasthenia was a disease which was characterised by the Spencerian rhythms of evolution and dissolution:

Neurasthenia was a concept exactly suited to
the interest, particularly evident in America, in Darwinian and Spencerian notions of
biological and social evolution and degeneration. Primitive man was protected from many of the
mental diseases of civilised man by his
natural state..(whereas)..civilised man..
through his evolutionary progress was subject
to 'dissolution'-a sort of collapse of the
evolutionary gains.

For Spencer the evolutionary function of women was to assume their '
'natural' role of motherhood; that is to sacrifice themselves
altruistically in the interests of the preservation of their progeny
who would take up the evolutionary fight in the next generation.
But women were, in addition, restricted in their physical organisation (which itself was less highly advanced than that of the male). If women demanded too much in the way of cerebral activity and independence then 'nature' would exact its price and neurasthenia or hysteria would result. The cure was to abandon celibacy for the 'natural' exercise of the reproductive faculties:

The not infrequent occurrence of hysteria and chlorosis shows that women, in whom the reproductive function bears a larger ratio to the totality of the functions than it does in men, are apt to suffer grave constitutional evils from the incompleteness of life which celibacy implies.

Nature, like civilisation, sanctified such penalties, since, according to Spencer it worked in a way homologous to the electric energy model:

Nature is a strict accountant; and if you demand of her in one direction more than she is prepared to lay out, she balances the account by making the deduction elsewhere.

Women became increasingly double-bound to this evolutionary and teleological view. They were deemed essential to the maintenance of the evolutionary struggle of the race in their role as mothers, but at the same time, women were becoming the object of increasingly organised medical practices. They were diagnosed as suffering civilisation's inevitable stresses and strains. This 'hysterization' of women, to use Foucault's phrase, became more pronounced as the need to regulate fecundity in the interest of racial progress gathered force during the 1890s and beyond. And it is in this period that both Hardy in *Jude the Obscure* (1895) and Gissing in *The Whirlpool* (1897) direct the discourse of specifically female pathology at the central
characters - Sue Bridehead and Alma Rolfe. While Gissing is more mechanical in his adherence to the ideology, Hardy has a more complex relationship to it. I argue, in the respective chapters on these authors, that to isolate this discourse for inspection helps to enlarge the significance of these novels for their time.

The phenomenon of neurasthenia also became an overtly fashionable disease, cultivated by the sophisticated and the urbane. A commentator looking back from the 1920s wrote:

One found it (neurasthenia) everywhere, in the salons, at the theatre, in novels, at the palace. By virtue of it, one explained the most disparate reactions of an individual: suicide and decadent art, adornment and adultery; it became the giant of neuropathology. 103

And Shaw catches this note at its height in the 1890s. In The Philanderer (1893) Cuthbertson suggests to Charteris that for his excessive anxiety about women there is only one excuse: 'You are not fully responsible for your actions. Like all advanced people, you have got neurasthenia'. 104
Whilst the concept of degeneration persisted even into the 1930s in popular literature and racist and eugenic discourse, its scientific credibility came under attack from the mid-1890s. In the work of Havelock Ellis we can determine with some precision how and when degeneration became gradually displaced as a strictly scientific category - and it is in Ellis's negotiations and revisions of Lombroso's influence in the field of criminal anthropology that these mutations can be gauged.

Grafted on to the more familiar idea of regression or atavism was the theory of recapitulation which Lombroso had helped to popularise and which towards the end of the century was a commonplace in popular accounts. Yet this idea had been discussed in evolutionary writing for over thirty years before. As Gissing's early novels testify, it provided a potent and convincing ratification for the exploration of the deviant 'type' in the fiction of the 1880s, as I will show in chapter Three. In essence, the idea of recapitulation was that the life-history of each individual member of a species, the ontogeny, was held to recapitulate, in microcosm, all the successive evolutionary phases of that species - the phylogeny. For the pathologist Henry Maudsley in 1873, recapitulation was central to a theory of brain organisation. Arrested brain development betokened...
an incomplete transition from a lower to a higher evolutionary state:

When we reflect that every human brain does, in the course of its development, pass through the same stages as the brains of other vertebrates animals, and that its transitional states resemble the permanent forms of their brains...(and)...that the stages of its development in the womb may be considered the abstract and brief chronicle of a series of developments that have gone through countless ages in nature, it does not seem so wonderful...that it should, when in a condition of arrested development, sometimes display animal instinct.106

Thirty years later in The Empty House (1903), that eclectic sleuth Sherlock Holmes patronised his colleague Doctor Watson with recapitulation theory, claiming it as his own:

There are some trees, Watson, which grow to a certain height and then suddenly develop some unsightly eccentricity. You will see it often in humans. I have a theory that the individual represents in his development the whole procession of his ancestors, and that such a sudden turn to good or evil stands for some strong influence which came into the line of his pedigree. The person becomes, as it were, the epitome of the history of his own family...Whatever the cause, Colonel Moran began to go wrong.107

Conan Doyle evidently knew his recapitulation theory, but we may infer, from Lombroso. Certainly by the 1890s recapitulation had been marshalled to become the foundation of a deterministic theory of deviancy. Lombroso argued that the criminal type was an atavism, an evolutionary throwback whose stunted development mirrored the phase of evolution of pre-civilised man and that the lawless propensity of the criminal - Colonels and all - derived from an essentially savage evolutionary phase. Whereas the normal adult 'passes on to civilisation as he mounts the phyletic scale in his own growth; the
born criminal remains mired in his brutish past.\textsuperscript{108} The criminal was an evolutionary as well as a social deviant - enabling Lombroso to claim that 'the born criminal...is...literally a savage in our midst'.\textsuperscript{109}

Recapitulation could bolster the increasingly vulnerable Lamarckian degeneration-interpretation, by which the degenerate criminals had emerged over recent generations through the acquisition of the inherited taint (the notorious American criminal family, the Jukes, was used to prove this version).\textsuperscript{110} But if no peculiarity in the family history could be detected, then the criminal's deviancy was explained by the fact that his life-history had incompletely recapitulated the evolutionary history of his species. Not surprisingly, the criminal and the child became intertwined within the terms of this evolutionary determinism. Lombroso could declare that:

One of the most important discoveries of my school, is that in the child up to a certain age are manifested the saddest tendencies of the criminal man. The germs of delinquency and criminality are found even in the first periods of human life.\textsuperscript{111}

Common to criminal and child were the following attributes:

anger, vengeance, jealousy, lying, lack of moral sense, lack of affection, cruelty, laziness, use of slang, vanity, alcoholism, predisposition to obscenity, imitation and lack of foresight.\textsuperscript{112}

Two leading writers on child development, G. Stanley Hall in America and James Sully in England, used recapitulation to explain the irrational in the character of children.\textsuperscript{113}
In the late 1880s, and early 1890s, Havelock Ellis also saw the psychology of the criminal and that of the child as bound up with his teleological view of development. In the 1890 edition of *The Criminal*, in a passage which remained unchanged in the revised edition of 1901, he dealt with a familiar stigma of criminality:

The projecting ear has usually been considered as an atavistic character, and with considerable reason as it is found in many apes, in some of the lower races, and it corresponds to the usual disposition of the ear in the foetus.  

and

In the criminal...there is an arrest of development. The criminal is an individual who, to some extent, remains a child his life long - a child of larger growth and with greater capacity for evil. This is part of the atavism of criminals...Mental acuteness is often observed among criminal children; it is rare among criminal adults. There is evidently arrest of development at a very early age, probably a precocious union of the cranial bones. Among savages, also, the young children are bright, but development stops at a very early age.

Yet Ellis experienced considerable doubt about how far all criminals could be labelled as atavisms; there would be little use in penal reform if so. In the 1890 edition, Ellis did not literally call the criminal an atavism but continually insisted on the analogy. The criminal was essentially anti-social and on a low rung of the evolutionary scale: 'by some defect of heredity or birth, or training, he belongs, as it were, to a lower and older social state than that in which he is actually living'. But then the qualification:

It thus happens that our own criminals frequently resemble in physical and psychical characters the normal individuals of a lower race. This
is an 'atavism' which has been so frequently observed in criminals and so much discussed. 117

In his 1901 edition, however, Ellis adds a section which criticises Fére's belief that a 'pathological...theory of criminality excludes an atavistic theory' and that 'degenerescence and atavism are two absolutely distinct facts'. 118 For Ellis, the criminal's behaviour should now be seen as pathological and thus susceptible to individual treatment; so the concept of atavism (which he now clearly distrusts), can at least be accommodated as part of a pathological condition. For, he continued, 'If, with Virchow, we regard pathology as the science of anomalies, it certainly includes the phenomena of atavism'. 119

The way out of this problem was to continue to use recapitulation as an illustrative comparison while laying more stress on the environmental factors which encouraged behaviour 'common among primitive peoples'. 120 This compromise was sustained in Ellis's discussion of women - who were described in terms analogous to those of the criminal and the child, whilst at the same time their domestic bondage, was held to account for their atavistic behaviour.

In the 1890 preface, Ellis has no inhibitions in acknowledging Lombroso's achievement. He points out that Lombroso first identified the criminal as 'an organic anomaly...weighing him and measuring him according to the methods of anthropology influenced by...pre-eminently Darwin's *Origin of Species*'. 121 Ellis at this stage clearly doubts the lengths to which Lombroso pushes the idea of the criminal as a degenerate type. 'He was led...to over-estimate the
that anthropological parallels between the criminal and the savage can no longer be sustained:

That the criminal often acts like a savage who has wandered into a foreign environment - it is scarcely necessary to remark that a savage in his own proper environment is not an anti-social being - is true. But we must be cautious in arguing that this necessarily means a real atavistic revival of savage ancestral traits. The criminal acts like a savage, for the most part, merely because a simple and incomplete creature must inevitably tend to adopt these simple and incomplete modes of life which are natural to the savage. It is not a real atavism, but mainly, it is probable, only as a pseudo-atavism. 123

It is interesting to note how Ellis attempts to unshackle himself from the literal application of evolutionary regression invoked by Lombroso. Now the criminal is just a 'pseudo atavism'; atavism is virtually a metaphor for merely aggressive behaviour, while for Lombroso, the criminal's atavism is literal proof of his degeneracy. For Ellis, degeneracy has become a condition without foundation, despite its discursive prevalence. In this passage from the 1901 edition, he clearly believes that it is too general to be at all useful:

That the criminal is often a 'degenerate' might be readily granted were it not that 'degeneracy' has become so vague and meaningless a term of popular use that it means little or nothing; Lombroso and others were undoubtedly well inspired when they sought to give greater definitiveness to the conception of the criminal by dividing the vague 'degenerate' class into groups and seeking to discover criminal types. That we cannot use the term 'type' in this connection with the same precision that we use it in racial anthropology is now generally accepted. 124
Degeneracy does not provide an adequate category to explain the criminal, particularly in the light of a growing accumulation of environmental and hereditary evidence. Anthropological generalisation will no longer do.

It was clearly necessary for Ellis to detach himself from Lombroso on other fronts, too, since his early debt was so considerable. As Phyllis Grosskurth notes:

All through The Criminal he seems to go out of his way to take Lombroso to task for his indiscriminate procedures in collecting data, but Lombroso was quoted more often than any authority, so that it is probably fair to say that Lombroso was the main inspiration for the book. 125

And Grosskurth cites an important letter written to J.A. Symonds (with whom he was collaborating on Volume one of Studies in the Psychology of Sex) two years after the first edition of The Criminal appeared:

Nothing too severe can be said of Lombroso's lack of critical judgment, historical insight and accuracy; one forgives it all because he has opened up so many new lines of investigation and set so many good men to work. 126

There is a clear example of Lombroso's influence on Ellis which (no doubt to his subsequent embarrassment) he had to correct in the 1901 edition; that is Lombroso's insistence that certain kinds of artists are criminals. In a chapter of the 1890 edition, entitled 'Criminal Literature and Art', Ellis has five pages in which he aims this association at Verlaine:
A living poet of some eminence, M. Paul Verlaine, furnishes an interesting example of the man of genius who is also distinctly a criminal. M. Verlaine is the chief of the so-called 'decadent' school...at his best he excels in delicate passages of vague and mystic reverie, in sudden lines of poignant emotion. His style, a curious mixture of simplicity and obscurity, is studied with words borrowed from the criminal's argot. 127

But these five pages are significantly omitted from the 1901 edition. In their place are five pages of extracts, not mentioned by Grosskurth, from the autobiographies of an American and Australian criminal. Grosskurth notes that Lombroso's Man of Genius (1891) (translated by Ellis) led him 'to the unshakeable belief that the criminal and the genius were complementary forms of degeneration'. But the truth is rather the reverse. By 1901, Ellis had completely severed the association between criminality and artistic genius. There is no endorsement in the 1901 edition of Lombroso's work (which fed Nordau's Degeneration). And it is clear from 'The Colour Sense in Literature', as I have suggested, that Ellis had come to mistrust altogether the attribution of degeneration to artists. So on this front as well the idea was ceasing to have meaning.

Through the eyes of Ellis, a central figure in the psychiatric, pathological and artistic debates of the 1890s, we can register how degeneration had lost its respectable status. It had been capable of reducing quite dissimilar conditions to the same teleological determinism, but by the mid-1890s more precise aetiologies were required.
In the application of biological precepts to society, the work of Francis Galton occupies a central place. For a generation from the 1870s, but particularly from 1875, he mapped out an elaborate field in which inheritance, a key problem in Darwinism, is pressed into the service of a statistical approach to man's attributes and potentialities. Around this technical practice Galton mobilised a whole discursive apparatus directed towards an ideology of racial fitness. He is the key figure in mediating an hereditarian emphasis of evolutionary thought and social and political practices. This emerges in the early years of the twentieth century to address, specifically, the question of the degeneration of the population - in the form of eugenics.

Galton was an extraordinarily prolific and versatile scholar; his output up to 1900 alone can be measured by at least 300 articles and studies, ranging in content from studies of climatology and meteorology to photography and finger-printing, from anthropology and geography to spiritualism and psychology. But it is only necessary to scan the list of his published works to realise just how obsessively consistent his intellectual procedures are; for Galton subjected all phenomena to techniques of measurement - primarily statistical analysis. He is the great quantifier and measurer of
the period, an exponent of an extreme empiricism allied to a positivistic methodology shorn of its political radicalism. The titles of articles selected at random bear this out: 'Arithmetic notation of kinship', 'The average flush of excitement', 'On head growth in students at the University of Cambridge'.

Man, for Galton, was displayed as collection of faculties - physical as well as mental; the body was to be inspected and measured - the size of the head, the length of torso, the mark of finger-print. By physical measurement man's development and potential could be ascertained. Human attributes were accounted for from the central terms of evolution working through natural selection - heredity and variation. His intention was 'to see what the theory of heredity, of variations and the principle of natural selection mean when applied to man'.

Galton was able to demonstrate that natural selection in man discharged itself according to statistically observable patterns. Or, to put it the other way round, by invoking a mathematically-derived law which turned on the relationship between an average and a deviation, Galton could explain variation as a function of a statistically-derived normal curve - the regular distribution of variations of the statistician, Quelelet. For Galton, the statistical method was little short of a providential path to enlightenment. With positivistic rapture he wrote:

I know of scarcely anything so apt to impress the imagination as the wonderful form of cosmic order expressed by the 'law of Frequency of Error'...It reigns with serenity and in complete self-effacement amidst the wildest confusion. The huger the mob, and the greater the apparent anarchy, the more perfect is its
sway. It is the supreme law of Unreason. Whenever a large sample of chaotic elements are taken in hand and marshalled in the order of their magnitude, an unsuspected and most beautiful form of regularity proves to have been the latent all along.131

Galton believed that chance variations were subject to two laws of heredity which could be statistically formulated - the law of regression and the law of ancestral contribution to heritage. The offspring of any deviation from the norm, whether in physical capacity, or intellectual ability, tended to regress towards an average. But the child was also the product of its ancestral history as well as its immediate progenitors, (Galton borrowed the term from stock-breeders), which was an index of 'the general quality of a particular line of descent'. The child inherited an ever-increasing proportion of characteristics from those ancestors closest to him. As early as in his 1869 paper 'Hereditary Talent and Character', Galton had stated that 'the influence, pure and simple, of the mid-parent may be taken as 1/2 of the mid-grandparent 1/4 of the mid-great-grandparent 1/8, and so on'.133 In his view 'the further his genealogy goes back, the more numerous will his ancestry become'.134 By allying heredity to the question of stock, Galton could trace variation, not to the inheritance of discrete characters, as Darwin had proposed, but to the cultivation of qualities through the specific agency of the family - seen in his numerous studies of the disposition of talent in families such as Hereditary Genius (1869).

As Foucault puts it, the 'aristocratic obsession with caste' was for the bourgeoisie in the nineteenth century recast in the form of 'biological, medical or eugenic precepts':
The concern with genealogy became a preoccupation with heredity; but included in bourgeois marriages were not only economic imperatives... but the menaces of heredity; families wore and concealed a sort of reversed and sombre escutcheon whose defamatory quarters were the disease or defects of the group of relatives - the grandfather's general paralysis, the mother's neurasthenia, the youngest child's phthisis, the hysterical or erotomanic aunts, the cousins with bad morals. 135

Foucault gives us a glimpse of a whole apparatus of familial involvement in hereditary degeneration, which will be examined in relation to Hardy's deep engagement with questions of 'pedigree' and heredity in Tess of the D'Urbervilles and Jude the Obscure. As we shall see, Foucault's play on the emblematic 'escutcheon' - the symbols of nobility exchanged for the marks of familial disease - is precisely the site of Hardy's exploration of the dangerous ambiguities of 'pedigree' in Tess. The title of the novel itself registers the ambiguous 'concern with genealogy'.

But individual and familial variation for Galton would take on a more political significance since he made the cultivation of stock an index of population and, in turn, of the race, as a totality. As Nikolas Rose suggests, it is the relation between individual variation, and population-averages or norms, which produces 'an evolutionary schema...constructed in terms of population statistics', which permits Galton's formulation of the practice of eugenics in the early 1880s. Twenty years later, this emerged into the full light of social and political debate. The statistical law of normal distribution of ability, coupled with a firm notion of stock and ancestral inheritance, produced a practice that could convert a concern for the quality of a variation into a concern for quantity. Hence the overall
quality of the stock was measured by how differentiated qualities of variation were numerically dispersed, through the population, and between constituent populations. All questions of differential birth rate and physical deterioration (which I will examine as a context to Wells's writing after 1901), can be related partly to the emergence of this crucial coupling - of quantity and quality. The quality of the race is constituted by the quantity of those in whom eugenically desirable qualities are deemed to reside; and, as we shall see, this is to legitimise a practice which effectively consigns some values to the scrap heap. In the face of all kinds of oppositional class pressures, the values of bourgeois ascendancy was to be preserved, so that the hegemony, itself, had to adjust to and attempt to head off the threats to its supremacy. This is most evident in assumptions about state-intervention which had grown into full programmes from the 1880s.

Within this complex Galtonian field concern about degeneration is focussed on the question of 'fitness' - a crucial term, cementing the bond between quantitative and qualitative value.

For Galton, the evolutionary development and improvement of man was of almost religious significance; indeed, by his own description, it is an article of faith. In his most important work, Inquiries into the Human Faculty (1883), he wrote:

Man has already furthered evolution very considerably, half consciously and for his own personal advantage, but he has not yet risen to the conviction that it is his religious duty to do so deliberately and systematically. 138
Here in the early 1880s, Galton sets the tone for a whole generation of post-Darwinian spokesmen for evolution, ranging from imperial-minded conservatives through new liberals, to ethical socialists and humanitarians, who were convinced that the process of evolution was in many ways an ethically-valid substitute for the loss of formal religious faith. But for scientists like Galton, evolutionary development was the largely uncharted and exciting territory through which people with quite contrasting intellectual and political allegiances happened to travel.

Evolutionary thinking unquestionably exerted a powerful hold on those who wished to create a better society. The challenge was to be immediately taken up, since society could not improve unless attention was given to the present generation, whose reproductive potential could be seen to have particular ramifications. The laws governing natural selection among lower organisms might be random, highly debatable, and still mysterious, yet man himself could grasp the principle of management of his own species. Galton believed this to be self-evident partly because of man's very supremacy over the lower organisms from which he had evolved:

> An incalculable amount of lower life has been certainly passed through before that human organisation was attained, of which we and our generation are for the time the holders and the transmitters. This is no mean heritage, and I think it should be considered as a sacred trust. 139

And in terms which had an immediate appeal to the post-Darwinian generation of the early 1880s, with a fine command of teleology, he summoned man to battle:
Now that this new animal, man, finds himself somehow in existence endowed with a little power and intelligence, he ought, I submit, to awake to a fuller knowledge of his relatively great position, and begin to assume a deliberate part in furthering the great work of evolution. 140

This is the climate in which, twenty years after the Darwinian revolution had begun, the young Wells, Karl Pearson, Olive Schreiner and Havelock Ellis came to maturity. Young artists and intellectuals of the period were to take on with a rather awesome seriousness the unique responsibility of applying to man concepts derived from the observations of lower species. Through the 1890s Wells, despite his sensational sacrificial offering of man on the altar of evolutionary speculation, was genuinely exercised by the question of man's evolutionary future, and the best means by which he could realise his full potential as a species.

Earlier, in Inquiries, Galton outlined the study of eugenics, which for him and many others was the logical outcome of man's decision to intervene in his own evolution. He described eugenics in a footnote, as treating questions which have a bearing on what is termed in Greek eugenes, namely, good in stock, hereditarily endowed with noble qualities - this, and the allied words, eugenia etc. are equally applicable to men, brutes and plants. 141

'Eugenics' is the best term to describe that which in the case of man, takes cognisance of all influences that tend in however remote a degree to give to the more suitable races or strains of blood a better chance of prevailing speedily over the less suitable than they otherwise would have had. 142

That eugenics and eugenically-orientated philosophies of
motherhood, parenthood, Malthusianism and anti-Malthusianism, birth limitation and racial hygiene, should also be embraced by progressive thinkers, feminists, socialists and liberal humanitarians, is an awkward but pertinent fact that has been too easily overlooked. It is possible that this rapprochement with conservative imperialists on eugenic questions in the years after 1904, can be explained by the evident appeal of ideas of racial improvement: humanitarians were impatient to liberate mankind from persistent poverty and ignorance, and by a turn of the eugenics key they hoped to reveal a brave new world in which biological change could bring about both immediate and lasting benefits to the next and future generations. By this logic there was no better place to start than with today's young couples. Additionally, for women, the eugenic choice of mate was certainly a version of physical and sexual liberation from the tyranny of continuous, mindless childbirth — the view of Margaret Sanger. That racial improvement could be effected at the level of sexual reproduction, meant that eugenics could also focus the energies of those progressive libertarians who wished to articulate the meaning of the sexual act itself. 143

Ten years before Inquiries, in 1873, Galton had signalled a perception which was to enter the demonology of the degenerationists and complicate the Spencerian emphasis of evolution, in which the struggle for existence would necessarily eliminate the less fit species. When applied to man, these biologically derived terms needed considerable modification. The struggle for existence among men, seems, Galton wrote:

to spoil and not to improve our breed...On the contrary, it is the classes of coarser organisation who seem to be on the whole,
the most favoured under this principle of the selection and who survive to become the parents of the next. 144

Either natural selection had been suspended, or it was actually working in towns to the benefit of the less 'fit', the city dwellers. If one indication of fitness was the capacity to breed progeny in larger numbers, then those of 'coarser organisation' certainly qualified. The connection Galton makes between the working class and the capacity of the degenerate organism to survive at a low level of organisation, in a coarse but relatively simple environment, is at work in the writings of a Medical Officer of Health of the day, James Cantlie, to which I shall shortly refer.

But whereas Galton was prepared to condemn the breeding proclivities of the working class, he was more urgently exercised by the quality of stock. He admits that town dwellers, through adaptation to their environment, can actually survive in large numbers and hand on a numerous and vigorous progeny:

Sickly-looking and puny residents in towns may have a more subtle constitution for the special conditions of their lives and may in some sense be better knit and do more work and live longer than much haler men imported to the same locality from elsewhere. 145

It was possible for Galton both to explain the rude vigour of town residents by their fitness and survival capacity, and to invoke, Janus-like, a notion of the degenerate city as a vortex which remorselessly sucked in the rural stock and made it deteriorate. For he was unfortunately saddled with one of his earlier findings which had shown that country families in Warwickshire were considerably more fertile than their counterparts in urban Coventry. 146
The way out of this contradiction was to argue that the rural stock would be damaged if they bred with the town stock. The law of regression to norm would then come into play to show how the vigorous but coarse townspeople would, through reproduction, drag down the level of fertile vigour of country dwellers (who were habitually accorded by the urban middle class the positive qualities of honesty, sobriety, strength and, increasingly, racial health). 147

Whilst Galton's purpose was to show through the laws of heredity that a vigorous stock could replenish itself, and perpetuate its vigour, it was not primarily his aim to voice the fear of swamping by the working-class hordes in the towns in 1883. Galton observed degeneration amongst the inmates of urban asylums and hospitals but he also saw it in the sedentary upper classes:

(that) large class of more or less wealthy persons who flee to the sunnier coasts of England, or expatriate themselves for the chance of life. There can hardly be a sadder sight than the crowd of delicate English men and women with narrow chests and weak chins, scrofulous, and otherwise gravely affected, who are to be found in some of those places. 148

And added scornfully:

If there were a conscription in England, we should find, as in other countries, that a large fraction of the men who earn their living by sedentary occupations are unfit for military service. 149

The traditional antipathy of the middle-class professional man for an idle and decadent leisure-class is coming through here, too. Curiously, the unfit soldier was the subject of this same analysis twenty years later, when, during the Boer War, large numbers of recruits were found to be unfit for service, and military incompetence amongst the officer-class was rife. In 1903, Galton, although by then an old man,
was nevertheless predictably on hand to write to the national press: 'Our National Physique: Prospects for the British Race. Are We Degenerating?' These events and their significance are discussed in two sections of the chapter on H.G. Wells.

Galton's attitude to Malthus shows how detached he was from the environmental tradition of social reform, which looked to improved living conditions for the alleviation of the urban poor. But whilst paying tribute to the 'great and original work' of Malthus, Galton fears that the Malthusian check to over-population would be followed by the wrong stock - the very stock whose fertility should be encouraged:

The doctrine would only be followed by the prudent and self-denying, it would be neglected by the impulsive and self-seeking - those whose race we especially want to have, would leave few descendants, while those whose race we especially want to be quit of, would crowd the vacant space with progeny.

Again, Galton is careful not to identify race precisely with social class; though the term is vague and free enough as an ascription of value, to imply it.
As I remarked at the end of the fifth section, on Nordau's *Degeneration*, the city had, by the 1890s, become the locus for pathological observation and analysis, in which the tendencies of a whole civilisation were screened and judged. If the artist and the neurotic woman were the principal targets for pathological analysis, the poor had for a decade been the object of biological attention as urban degenerates. During the 1880s, the urban question was being redefined to highlight the paupers who comprised the 'residuum' group of the poor; those without regular employment who could not be accommodated within the social order and hence were deemed a perpetual aggravation to it. As Gareth Stedman Jones observes of London:

The theory of urban degeneration provided not an adequate explanation of London poverty, but rather a mental landscape within which the middle class could recognise and articulate their own anxieties about urban existence. 154

The belief that earlier schemes of sanitary improvements had failed, coupled with a censorious attitude to the casual poor, grew stronger with the onset of longer cycles of industrial slump, from 1882-3 onwards. The casual poor were increasingly subjected to a prescriptive discourse which established ideological categories into which they could be easily fitted. 155

The categories of poverty that the sociologist Charles Booth drew up to account for the 35% of the London population in poverty
in the late 1880s (categories A-D), were subject indeed to the same ideological framing as the terms of the Galtonian field. For Booth works with a notional norm: 'I therefore propose to accept the classes E and F together as truly representing the standard of life in England'. The classification employed is measured on a continuum, rather than by a fixed typology; yet the continuum is both fixed and flexible. Booth uses the Galtonian categories of variation and distribution, which can be detected in his classification of the poor.

Booth's classification of those in poverty, D, small regular earners (14%); C, intermittent earners (8%); B, casual earners (11%) and A, the lowest class (1½%), provides a grid across which individuals can slide and fall; yet in the categories which constitute it, the grid both contains and replicates the linkage between economics, fortune, morality and deviancy and the threat to public order.

Consider what Booth says about class B - a relatively large group of casual earners: 'It is not...a class in which people are born to live and die, so much as to drift from other classes'. This indicates, at first glance, a mobile class ever-changing in composition; but then:

Here in class B, we have the crux of the social problem. Every other class can take care of itself, or could do so if Class B were out of the way. Those unfortunate people form a sort of quagmire underlying the social structure, and to dry up this quagmire must be our principal aim.

These are not paupers but 'rather the material from which paupers are made'. 
Despite its transitional status, class B takes on a fixed quality enforced by the ambiguous physical image of mire, (it is both a mass and a fluid), which should be eliminated if it isn't to seep into and rot the solidity of the social fabric constituted by the classes above it.

Class A, the lowest class, which 'consists of some occasional labourers, street-sellers, loafers, criminals and semi-criminals', conduct a life of 'savages'. This class has staked out an autonomous space which is 'hereditary to a very large extent' - breeding degeneration, 'they degrade whatever they touch, and as individuals are perhaps incapable of improvement', but equally they have a disruptive potential: 'the ready materials for disorder when occasion serves'. They have adapted to their degradation, resisting dumbly, the efforts of philanthropy or order, their instinct of self-preservation seeks some undisturbed sanctuary where they can still herd together, and secured by the mutual protection of each other's character for evil, keep respectability at bay. This it is that must be prevented. No sooner do they make a street their own than it is ripe for destruction and must be destroyed. 161

While the typology is fluid, Class A take on a vividly apprehended character of fixed characteristics which derive their effect from the differential ranking of this class against others.

As Rose argues:

The residuum of unemployables becomes the focus of all those forms of vice that infect the towns and flourish in the margins of civilisation - vagrancy, crime, prostitution...linked around the defect in character of the unemployable individual. 163
As distinct from the 'unemployed' (both this term and the term 'unemployment' first appear in common usage in the late 1880s, as a reflection of the growing 'reserve army' of casual and unemployed men), the unemployable is at the margin of civilised influence, as marked out by philanthropy, housing and the labour market - precisely the focal point of Gissing's novel about the Clerkenwell poor, *The Nether World* (1889).

Booth and his collaborators, such as Llewellyn-Smith, were anxious to make precise and sensible differentiations. Nevertheless, for Llewellyn-Smith, both the criminal class and the casual unemployed were subject to language shot through with biological determinism. The criminal was in 'a hereditary class', relatively detached from the limited mobility within the labour market, whereas the unemployed were engulfed by inexorable degeneracy, sucking down those skilled artisans for whom mobility was a defining attribute (they are rural dwellers who have moved into the city). The degeneration thesis was invoked, in part, to explain their downward transition from labourer to casual worker to pauper, 'by the combined causes of personal "unfitness"' and what Llewellyn-Smith called 'industrial dislocations'. The over-determining biological effect of the town saps the strength through the generations resulting in 'a deposit every year from the ranks of labour' to 'form a kind of sediment at the bottom of the social scale'.
The conviction of a degeneration at the heart of Empire, takes on a particularly shrill and insistent significance from about 1883 until the end of the 1880s. It coincides with periods of agricultural and industrial depression, and with the most coordinated campaign of agitation from the unemployed, the trades unions and the labour movement generally, since the third Chartist revolt of 1848. After the recovery of the late 1880s and early 1890s, the immediate sense of threat to the social order ebbs away; but the resilience of the degeneration discourse is sustained and is seen directed at other categories of the population, who continue to present a threat to the fitness of England's now problematic imperial strength.

A significant convergence of ideas and events, available to public discourse, make the year, 1883, singularly proleptic of questions, visible in various forms and at various moments during the next twenty years, which together form a context for the examination of degeneration in Hardy, Gissing and Wells. A distinctive feature of such a convergence was an evident hardening of class arteries and a widening gulf between ideological positions. The social and political issues which these ideologies addressed were becoming re-drawn, along with the character and tenor of the questions posed.

The parliamentary year began with Randolph Churchill observing
the 'marked, continued, and apparently hopeless depression of trade in the country',\textsuperscript{168} whilst his elder brother, the Marquis of Blandford raised the spectre of 'the possibilities of revolutionary change occurring if the collapse of trade and the break up of the parliamentary system happened simultaneously'.\textsuperscript{169} As to the first, the economic depression in agriculture was the occasion and subject of Hardy's 'The Dorsetshire Labourer' article,\textsuperscript{170} whilst the effect of the slump on the urban poor was highlighted in one of the most widely-quoted polemics of the decade, Andrew Mearns's \textit{The Bitter Cry of Outcast London} (which the rising journalist W.T. Stead championed in \textit{The Pall Mall Gazette}). The agricultural and urban questions (along with the Irish question) were amongst the foremost concerns of the first instalments of the short-lived \textit{Radical Programme} devised by Joseph Chamberlain and other disaffected Liberals, grouped around T.H.S. Escott's \textit{Fortnightly Review}.\textsuperscript{171}

Perhaps there were some grounds for the Marquis's fear of impending revolution that year. The Democratic Federation was reconstituted as a socialist organisation (the S.D.F.) and admitted William Morris in January as a 'socialist convert',\textsuperscript{172} that spring he was reading Marx's work. Annie Besant having at last shaken off her membership of the Malthusian League, also joined (she later switched to the Fabians, founded the following year).\textsuperscript{173} As E.P. Thompson states, 'it is possible to date the effective birth of modern Socialism in Britain from 1883'.\textsuperscript{174}

But it was also the year of hardening of Conservative interests. In May, as John Lucas notes, the first issue of a Young England
revivalist periodical, *Merry England*, appeared. The *Primrose League* was formed, and a journal canvassing the Conservative revival, *The National Review*, both were to become formidable organs of Conservative and imperialist ideology by the end of the century. But even more significant was the publication of Sir John Seeley's call to imperialist mission, *The Expansion of England*.

It was also, as previously stated, the year of Galton's influential *Inquiries into the Human Faculty* where he first outlined the new 'science' of eugenics. Twenty years later that idea had become a reality.

All these themes - the 'discovery' of 'outcast' London, the necessity for imperialist mission, an increasing deterministic Darwinism speaking of unfitness and degeneracy, the agricultural distress, and the growth of different emphases of social agitation (through the S.D.F., the Socialist League and the Fabian Society), were at different times central preoccupations through to the turn of the century, and beyond to the mid-Edwardian period - approximately the period of this thesis.

As Stedman Jones observes, the phenomenon of urban degeneration must be situated in the general area of anxiety:

> Between 1880 and 1900, the agricultural depression, the rural exodus, the growing predominance of urban England, the increase in working-class discontent, fears about foreign competition and doubts about free trade were all inter-connected. The theory of urban degeneration is best understood within this complex of middle-class beliefs. 176

In 1906 James Cantlie brought out *Physical Efficiency. A Review of the Deleterious Effects of Town Life Upon the Population of Britain*. 
With suggestions For Their Arrest, (with a preface by Sir Lauder Brunton - to be further dealt with in chapter Four - and a foreword by Sir James Crichton-Browne). Both eminent surgeons paid tribute to Cantlie's medical and environmental proposals for improving the quality of urban race. Crichton-Browne, moreover, reminded the reader that twenty years before, (Cantlie) was 'little heeded' but that 'his warnings are being justified by events and that the market-place is agog for guidance'. Cantlie's original lecture 'Degeneration amongst Londoners', was delivered in 1885, and at the time brought him little more than a satiric riposte from Punch to his scheme for bringing ozone-intensive air into towns via pipes. But apart from affording a glimpse of a great nineteenth-century 'might have been', Cantlie's analysis is significant in that it was among the first to seek, in the physical fitness of the urban working class, the key to the fitness of the nation in its imperial and economic struggle for survival. Wedged in between quite level-headed advice about health, is rhetorical language which was to be widely and endlessly reproduced. For Cantlie, urban degeneration can be attributed to the urbanised being who has adapted dangerously well to a diseased and abnormal environment: 'the close confinement and foul air of our cities shortening the life of the individual, and raising up a puny and ill-developed race'.

Cantlie's mutant species is damned to an urban hell. Under the subterranean gloom, in an atmosphere devoid of ozone and sunlight (both Gissing in The Unclassed and Hardy in The Woodlanders
evoke this environmental sluggishness), urban man parades his stuntedness - recalling, irresistibly, Lankester's zoological description of the conditions under which the lower order vertebrates become degenerate leading to a reduction in size, coupled with a new immobility and a more passive feeding system. Cantlie observes the mental sluggishness of the 'ill-developed race':

The urbanised being is cruelly undemonstrative... if a joke is made the urbanised person neither pretends to see it, nor can he bother himself to signify his disapprobation, beyond it may be a dyspeptic sniggle; there is nothing indicative of any mental expression on his part. 181

Enthusiasm is the characteristic of the older generation; apathy is the tone of youth and the city. But the new imperial order has a lifetime and a mission before it. The future of the Empire depends on this degenerate species shaking itself up:

It was not the young who made this Empire; it was not good behaviour, nor fine manners, nor apathy, nor perfect morals which welded it together. It was ambition, energy, enthusiasm and love of enterprise, which sent our fathers forth to unknown climes and to the brave perils of war and weather. It is beyond prophecy to guess even what the rising generation will grow into, what this Empire will become after they have got charge of it. 182

When revised and edited little more than a year after the publication of the report of the Physical Deterioration Committee, amid a plethora of surveys, campaigns and inspections of the physical and moral fitness of the prestige-dented imperial stock, Cantlie's rhetoric of the mid 1880s must have seemed oddly prophetic.
A second medical man, J.P. Williams-Freeman, took up another familiar theme. While recognising the inefficiency of the city as a locus for efficient natural selection - 'the race is no doubt slowly adapting itself to more complex conditions'[^183^] - he argued that the more the city sucked in the country-bred to inter-breed with city dwellers, the more likely it was that breeding might cease altogether - because of the high infant mortality rate (30% below the age of five in Central London). This argument derives from a traditional view of the innate robustness and purity of the country-bred type: 'The country-bred man is bigger, heavier, slower, more plethoric in temperament, and requiring far more physical exercise to keep him in health'.[^184^]

From Galton's calculations of the differential birth rates between rural families and urban families, he argued that 'physical degeneration and diminished increment in a population point unmistakably to eventual extinction...of the race', and that:

> When one considers that it is these rural districts that are and must be the breeding-place of the Anglo-Saxon race...that it is the pick of the youth both physically and intellectually that leave their native country and go up 'to better themselves' in London and duly the second-rate ones are left behind to supply the future generations, that we have, in fact, in rural England, an exact reversal of the natural law, a survival of the unfittest by elimination of the best, it seems impossible to exaggerate the importance of the question.[^185^]

Williams-Freeman yokes together all those moral and political attributes of city-life, most threatening to the middle class, into an apocalyptic swan song:
The extinction of the Londoner is not effected without an unconscious but forcible protest on his part...Finding himself at a disadvantage in competition with the immigrant... he goes through many stages before he is finally eliminated. Irregular labour, odd jobs, sweaters' dens, prostitution, subsistence on charity, agitation, 'demonstrations' and riots are only some of the struggles of the dying Londoner before he pays the debt of nature. 187

The confusion of the urban degeneration thesis is clear. The Londoner reproduces prolifically but threatens to die out: natural selection operates both to the disadvantage of the city dweller and against the natural order of things by denuding the agricultural order of its healthy stock.

By 1902, the progressive deterioration of the race as witnessed by H. Rider Haggard, seemed to have left a rural landscape, scarred beyond recall:

It is common for only the dullards, the vicious or the wastrels to stay upon the land, because they are unfitted for any other life; and it is this indifferent remnant who will be the parents of the next generation of rural Englishmen. 188

And in evidence to the Royal Commission on the War in South Africa (1903), General Barrett (Inspector-General of recruiting) intimated that the rural supply of 'healthy', that is 'deferential' recruits had all but dried up:

Of course, when you come to recruits enlisted in Norfolk and Suffolk, they are more healthy; but I am sorry to say that every year we get more recruits from the towns and less from the country, because we know that the towns keep getting bigger every year, while the population in the country is getting smaller, and that is rather an unfortunate thing for us. 187
J.B. Haycraft, a Professor of Physiology, wrestled long-windedly with the same contradiction:

we are called upon to see that...(the) increase is derived from the best, and not from the worst, members of the community. It will be most disastrous not only to our Empire, whose strength depends in great measure upon the number of our citizens, but also to the quality of the race, if the most prudent and capable are bred out of and eliminated from the community.\textsuperscript{190}

A further contradiction in imperialist degeneration theory lay in the fact that, whilst the expansion of the whole British population was an index of imperial hegemony (a matter of satisfaction when compared with the static growth of a country like France), the city population with the city 'type' was proliferating all too rapidly. It was a contradiction which eugenists tried to resolve through their complementary policies of 'positive' and 'negative' eugenics, seeking both to encourage the breeding of 'fit' stock and to bring to a halt the breeding of the 'unfit'.

For the urban degenerate, help was at hand in programmes of spiritual and imperial regeneration, offered by the leader and founder of the Salvation Army, William Booth, and in more sinister fashion, by Arnold White and others.

The rediscovery of poverty in London, the heart of Empire, in the early 1880s, prompted amongst high-minded members of the establishment a vision of spiritual regeneration in which social reform and a version of imperialism flowed together (as they did well into the 1900s). In 1890, William Booth made the connexion explicit in the title of his book, adapted from that of the explorer Stanley, \textit{In
Darkest England and the Way Out. Adapting Stanley's reports of his travels through 'Darkest Africa', Booth wrote: 'Civilisation which can breed its own barbarism, does it not breed its own pygmies?'.

Whilst London was offered to the social explorer as a repository of horror, so one 'way out' for the urban pauper, was to the farm colony abroad. At the front of Booth's book there is an extraordinary symbolic tableau-illustration, depicting a sea of trouble, in which paupers, alcoholics and all those in material and spiritual need are floundering. Helped out by members of the Army, some manage to reach the shore. They are cared for and then conducted to the Promised Land, replete with hope and promise. Towering over both sea and land, are the arches of spiritual strength, founded on the solid rocks of truth. It graphically illustrates a dominant imaginative idea of the period; the abyss within is counterpoised by freedom without. Booth had, indeed, found a rather crude iconographic expression for an actual practice.

Arnold White, however, represented a more insidious version of it. Since 1884, he had been visiting South Africa to found settlements for labourers and artisans. As Bernard Gainer puts it, 'emigration was his panacea for the moral, economic and physical maladies of a congested nation'. But for White, the congestion was caused by the influx of alien immigrants, mainly Jewish, who had been entering England in increasing numbers from the early 1880s. 'I vowed', (said White) 'that I would do what I could to stop the influx of foreign paupers'. The alien immigrant quickly became identified with the horror of the rediscovered abyss of London and thus, in the over-
determining myth, posed a racial and medical threat to imperial health from the pauper-ridden, diseased and politically dangerous rookeries.

The alien thus became fully caught up in the net of the degeneration thesis. This may be illustrated by the arguments of one Lord Dunraven, who can be used as an example of how such ideas were taken to their limits. He believed the immigrants were a degenerate species, not simply because they were poor and numerous, but because they could indeed sustain, with a degenerate tenacity, their lower-order organisms in appalling circumstances. Adapting through natural selection in conditions inimical to the native pauper, they dragged him down to their level:

The present immigrants are destitute,...used to an infinitely lower standard of living than the English with whom they compete. They are a lower form of humanity; and occupy a lower grade of existence. They are our superiors in some respects. With a physical endurance of which we are incapable, they can work hours impossible to us. They can feed off the offal of the streets, and live in conditions in respect of indecency, dirt and overcrowding incompatible with existence to an Englishman. In all these matters, their superiority is undoubted; but it is the superiority of the lower over the higher order of organism - the comparative indestructibility of the lower forms of animal life.194

Fears of national degeneration also accelerated the concern of writers for the state of the nation in its unique imperial role. Time and time again commentators drew on the historical paradigm of the Roman Empire to illustrate the possibilities of national decline and decadence; it was adapted to suit the particular ideological emphasis of the critique of English society. For W.H. Wilkins the canker was the invading immigrant population from eastern Europe:
When Rome in the height of her Imperial splendour, welcomed all nationalities who ministered to her profligacy and luxury, it was a sign of the canker which in time ate away the heart of the Empire. So, too, England in the Victorian era - an era of prosperity unequalled even by Imperial Rome - throws wide her arms to receive the destitute, the criminal and the worthless of other lands.  

In 1886, James Froude the historian, drew on a more elegant allusion to call attention to the depopulation of the country by the town: 'Horace had seen in Rome what we are witnessing in England - fields deserted, the people crowding into the cities. He noted the growing degeneracy. He foretold the inevitable consequences'.  

And in the same year Henry James compared the state of the English upper-class to the 'heavy, congested and depraved Roman world upon which the barbarians came down'. But he drew an ironic parallel between the leaders of invading barbarians and the S.D.F. leader of London's unemployed:  

In England the Huns and Vandals will have to come up from the black depths of the (in the people) enormous misery, though I don't think the Attila is quite yet found in the person of Mr. Hyndman.
The perception of contemporary barbarism was given a new and distinctive emphasis by the socialist, Edward Carpenter. In a lecture in 1886, a year which for some promised much in the way of a socialist revolution, he too highlighted the evidence of degeneration in the upper class, yet dispensed altogether with the distancing Imperial analogy to mount a class assault on behalf of the working poor: 'Accumulations of money' in the 'grand houses', are 'similar to the accumulation of fat in an over-corpulent person... England is full of such indigested wealth'. The poor are 'dying for mere want of nourishment' while the upper classes are suffering 'a chronic indigestion from this accumulation of dead matter upon them'.

A year later, in February 1887, Annie Besant (by now a Fabian socialist), debated publicly with the leading secularist G.W. Foote, the question Is Socialism Sound?. She made elaborate use of classical analogy to demonstrate that the fall of the Roman Empire came about through the loss of manhood, weakness and degeneracy, rife in the slave-owning upper class:

The young vigour of the Goths broke down Rome when the sloth made possible by the slave class had destroyed the manhood of those who possessed them. And so in England the upper classes are growing, as the upper classes of Greece and Rome grew, luxurious, effeminate...And for them, living on a vast and degraded population, there is the danger of a similar fall to that which wrecked both Greece and Rome.
Momentarily, the historical analogy, itself, becomes the subject of dispute, for Foote argued in reply that it was the Romans' boredom with war and their employment of mercenary troops, which left them the easy prey to the northern barbarians. 200

Consciously or not, socialist thinkers like Carpenter, Besant and William Morris were each using different emphases of the current imperial rhetoric; and by reversing the habitual terms they could undercut imperialism's exploitative values. From within the terms of the analogy, Morris could expose the conflict between the values of civilisation (not empire) and of barbarism. Through ironic inversion he laid bare instead his deep, underlying commitment to pre-capitalist and thus 'pre-civilised' values. Yet if Morris appeared to speak for the barbarian at the gate of the English ruling class, this was for him an entirely appropriate image. He asserted, after all, in May 1885, that civilisation 'I know now is doomed to destruction'. 201 Embracing barbarism in the spirit of a revolutionary driven by a vision of pre-capitalism, he reclaims the lost Eden:

How often it consoles me to think of barbarism once more flooding the world, and real feelings and passions, however rudimentary, taking the place of our wretched hypocrisies. With this thought in my mind all the history of the past is lighted up and lives again to me. 202

Perhaps the most crucial reversal is embodied in his attitude to history. For Morris, the past was not to be ransacked for an easy self-legitimising imperial parallel. Instead the post-Roman barbarian past should be reconstituted in post-imperial but pre-capitalist history; it was to be persistently and imaginatively re-invigorated as a mode of vision leading to the transformation of the present.
And Carpenter effected a reversal within the civilisation-barbarism bind with a characteristic a-historical mélange of mysticism, ethics and anthropology. His vision entailed a shift to primitivism to regenerate the idea of civilisation with a holism in the manner of Thoreau.

In *Civilisation: Its Cause and Cure* (1889), he establishes this affirmative reversal and reassembly by working backwards through the language of physical degeneration. Civilisation, 'founded' on 'Property', corrupts civilised man to 'break up the unity of his nature. It begins with the abandonment of the primitive life, and the growth of the sense of shame'. Carpenter apes the metaphorical cadences of degenerationists in order to attack the environment for encouraging inactivity and premature senility. At first glance this differs little from the prescriptive ideology of biological determinism:

He deliberately turns his back upon the light of the sun, and hides himself away in boxes with breathing holes (which he calls houses), living ever more and more in darkness and asphyxia, and only coming forth perhaps once a day to blink at the bright god...he ceases to a great extent to use his muscles, his feet become partially degenerate, his teeth wholly, his digestion so enervated that he has to cook his food and make pulps of all his victuals, and his whole system so obviously on the decline...And so with this denial of Nature comes every form of disease; first delicateness, daintiness, luxury; then unbalance, enervation...

Carpenter is likewise apparently guilty of two other sins of much more conservative degenerationist polemic: naivete and exaggeration, both of which stem so often from an absurdly telescoped view of the effect of evolutionary change on man. Man becomes little more conscious than the simplest organism, and can be modified almost as easily. It is also a conscious rhetorical procedure which H.G. Wells uses to great dramatic
effect a few years later. But to be fair, Carpenter's objective is precisely to make man conscious of his own animality and his physical being: Man deteriorates because he is cut off from the primitive conditions which would exert the struggle for existence; not in competition against other men but against nature. Carpenter's own practical simple-life culture, dating from the mid 1880s, (based as it happens on private capital), was one notable attempt to redraw the map of the civilised life. This cultivation of 'barbarism' amongst socialists opposed to the capitalist system, and to the language-values by which the imperialist hegemony was intensifying its hold, was in the tradition of the utopian anti-industrial emphasis of Blake and Ruskin, and could be seen in other writing of the period, such as Richard Jefferies's *After London* (1885).

Socialists also effected another reversal of the rhetorical structure by which wealth and poverty in London were juxtaposed, through the geographical contrast between East End and West End of London. The East End had already been constructed, as we can see in Gissing's 1880s novels, into an outcast landscape, a nether world; there was to hand the metaphor of the dark continent, found most obviously in Booth, represented as a discrete organism, biologically conforming to the law of natural selection. Writers drew on this spatial abstraction to point up the closeness yet separateness of wealth and poverty. Carpenter invoked the 'polite wilderness of the West End', in which the 'dangerous classes' live in 'clotted and congealed centres which call themselves "society" but through which the true life-blood of society does not circulate - in the slow poison of the life there'. He wittily reversed the conventional East and West End
juxtaposition which represent the poles of social norm and deviation: 'if you want to see the origin and explanation of an East End rookery, you must open the door and walk in upon some fashionable dinner-party at the West End.'

By pointing the finger at the West End as the perverse and special case, Carpenter made the far from insignificant point that social attitudes, no matter how humanitarian, were always dictated by certain norms, derived from an ideological terra firma, and then projected outwards into those areas which, most acutely, posed a political and moral challenge to them. It was a contradiction which most of the social explorers of the period were unable to resolve. The East End continued to be seen as the special repository of deviance down to the 1930s and, arguably, beyond.

By contrast, the centres of wealth, culture and privilege tended to be internalised as a perennial source of civilised hope and were left relatively uninspected. Although flawed in many other respects, Wells's Tono-Bungay - (1909), which I discuss in chapter Four, at least attempted a late assault on the West End. And generally it is to the novelists of the period, producing from within the portals of privilege, (James and Meredith), and on its doorsteps (Gissing, Hardy and Rutherford), whom we must look for an inspection of 'civilised' values at the site of their reproduction. The high culture of the period did have its Trojan horse; it was managed by the novelists.
From around the mid-1890s there was a considerable intensification of national and racial self-consciousness as England's preeminence as an industrial producer became more conspicuously under threat, particularly from Germany and America. An article in the New Review of 1896 declared melodramatically that 'on all hands England's industrial supremacy is tottering to its fall, and this result is largely German work'. The period saw a substantial increase in imperial activity - especially in Africa - foreshadowing the Anglo-German rivalry in Europe during the next decade. It is not difficult to find evidence of an increasing chauvinistic, if not xenophobic, spirit in the few years leading up to the second Boer War of 1899 and beyond. The popular literature of the period pinpointed France, Germany and America as the enemy in countless spy stories, tales of sabotage and outright war - in fact a new genre of literature emerged from these obsessions. The last phase of Gissing's career is responsive to this imperialism: both The Whirlpool (1897) and in particular The Crown of Life (1899) take imperialism as a major concern and theme, as had Meredith's One of Our Conquerors (1891). For the preeminent Kipling it is a creative raison d'être.

The social and political concerns of the 1880s were again re-emerging but between different margins which were now set by a new sense of racial self-consciousness. And so it is not surprising that
the language of Darwinism mediates these shifts of concern, notably in writers like Benjamin Kidd and Karl Pearson. Qualities of Anglo-Saxonism were now invoked to the accompaniment of a 'Social Darwinist' repertoire which played up the differentiation between superior and inferior stock, and turned on the definition of qualities and capacity for survival of what was designated the 'fit' races.

In 1894, the journal of the Royal Society of St. George, *The English Race*, was founded (it was changed to *England* in 1939). Its aim was stated in the first number:

There is some fear that the English stock is getting deficient in that healthy and legitimate egotism which is necessary to self-preservation...the Englishman must assert his indefeasible birthright. 211

In 1899 *The Anglo-Saxon Review* appeared briefly at the height of the Boer War under Lady Randolph Churchill, amid a torrent of works on Anglo-Saxonism: among them, Grant Allen's *Anglo Saxon Britain* (1894), B. Davenport's *Anglo Saxons Onward* (1899), Edmond Demolins's *Anglo Saxon-Superiority: to What is it Due?* (1898) as well as an *Anglo Saxon Guide to the 1900 Paris Exposition.*

This Anglo-Saxon self-consciousness was bound up in a quite complex way with what can only be described as a cult of 'ruralism'. The emergence in the mid 1890s of a renewed attachment to the values of the countryside can be traced to the need to preserve a romantic affirmation of England's 'purity' in the face of an ever-encroaching urbanism. This resilient formation can be traced through Edwardian culture into the inter-war period and beyond. The loss of the more efficient members of the rural stock to the vortex of the cities was
a process which was a demographic fact, but was interpreted in the
mid 1880s to be an illustration of the corrupting influence of the
degenerate city environment, acquired through heredity. But by
the mid 1890s the depletion of the rural stock had become elevated
into a threat to the integrity of the English race as a whole: its
imperial capacity being measured by its ability to out-breed the
Germans and the French in 'fit' progeny. I deal further with this
idea in my discussion of the emergence of the idea of national
efficiency in the chapter on H.G. Wells.

Commentators like Wells and the American demographer Ferrin
Weber increasingly saw the city as a dynamic force for upward social
mobility, providing a stimulating and galvanising environment in
which the values of hard work, energy and talent could be efficiently
promoted (Wells's own literary success story exemplified this
strikingly). But at the same time there was a much more powerful
ideological formation at work which continued to identify the city,
particularly London, with uncontrollable anarchic and debilitating
forces which, through continuing high birth-rates (accompanied by a
declining infant mortality rate) and seemingly limitless poverty and
deprivation, exercised a continuing drag on the fitness of imperial
England. Biologically, it was seen as remorselessly extending its
tentacles into hitherto unspoilt rural areas. The incursion of urban
and by extension, mass-culture, into the countryside, was a dominant
theme of Edwardian cultural criticism and literature, as the essays
of G. Lowes Dickinson, Charles Masterman and others show.

The depopulated and demoralised countryside became the focus
of a conservative and imperialist romantic concern with preservation,
and the site of a new literary and cultural aesthetic. For *The Primrose League* (founded in 1883 and with a membership of some 1½ million by 1901), the dullness of rural life was to be regenerated among rural labourers and small farmers, by programmes of education and leisure with an explicit imperialist basis (lantern lectures depicting heroic moments from Egyptian and Sudanese campaigns). One aim was to create a 'fellowship between rich and poor, between squire and schoolmaster, between vicar and blacksmith, between farmer and labourer'. The unmistakable class strategy constituted a mirror image of attempts by the proprietors of the new mass-press, such as Northcliffe, to seek a consensus, over the heads of class interest through appeals to the patriotism of each Englishman.

Through the 1890s it is possible to detect other signs of English patriotism in a conflation of the 'native' and the 'rural' in England; in for example, a growing interest in 'heritage'. *The National Trust* was founded in 1895 and the magazine *Country Life* in 1897. And by the mid-1890s a growing interest in the literary pastoral was evident - highly stylised attempts to recapture the sense of an Arcadia or a Golden Age, such as in the 1890s work of Kenneth Grahame, who published in the aesthetic movement's *The Yellow Book*. The next decade was strikingly prolific in a fiction of pastoral childhood which Grahame helped to make memorable in *The Wind in the Willows* (in which elements of Arcadia are present).

Other literary expressions of pastoralism were connected to the realistic cult of the urban mundane such as Arthur Morrison's *To London Town* (1899) and Arthur St. John Adcock's *East End Idylls* (1897). The mock pastoral voice can be heard, briefly, in
Somerset Maugham's *Liza of Lambeth* (1897) and Gissing's *The Nether World* (1889). There is also a strong pastoral quality to Gissing's oddity *The Town Traveller* (1898) which anticipated the Edwardian lower-middle class milieus and childhood recreations of Wells - particularly *Love and Mr Lewisham* (1900), *Kipps* (1905) and *The History of Mr Polly* (1910). In *Puck of Pook's Hill* (1906), Kipling produced a minor classic of English historical and racial consciousness, mediated through rural pastoral.
With subtle self-regard, H.G. Wells wrote anonymously of Jude the Obscure that it alone 'will make 1895 a memorable year in the history of literature'. Clearly, Wells intended that the year should be remembered not only for Jude and Grant Allen's The Woman Who Did but for his own The Time Machine which was a huge critical and popular success and secured his reputation as the most daring and imaginative writer of the decade. The Time Machine is, as I will argue in chapter Four, the single text in which the idea of degeneration is most vividly gathered up and dramatised. The Time Machine is the fictional apotheosis of an idea which is nurtured within the saeculum of the fin de siècle, but had been growing for at least two decades: that the world was capable of extinguishing itself, and that as the years of the century ticked away so the world's energy was dissolving with ever-increasing rapidity.

This apocalyptic pessimism seemed to reach a height about 1895. It was of course the year of the English translation of Nordau's Degeneration and, in America, of Brooks Adams' Law of Civilization and Decay.

It is significant that both Nordau and Adams offered time and energy as major axes of their map of modern civilisation. The nightmare of a world determined by a hidden and remorseless process
of degeneration, or perpetual renewal and decay, lay in the rendering up of the regularity of time to such a process. How did one determine whether energy was a function of time, or whether time was dependent on the amount of disposable energy? Developments in geology, biology and physics, earlier in the century, had extended the possibility of cosmic and evolutionary time. But by the 1890s, time had become a measure of the rate of human evolutionary progress or degeneration, a running down of energy, and much of the shocking power of these totalising pessimistic myths resided in their fusion of evolutionary development and time. Wells's *The Time Machine* is the most accessible example of a text of that year which annexed scientific authority to lend a strange credibility to myths which embraced both the earth's energy resources, and the longevity of life on earth.

A major influence on Wells and his contemporaries was the physicist William Thomson, Lord Kelvin, who since the early 1860s had been investigating a considerable range of subjects. His work had gone out of fashion for some years, but was rediscovered in the late 1890s; he increasingly appeared to speak to a growing strain of cultural pessimism.

Kelvin wrote on diverse topics, such as marine biology and maritime affairs, but the question of the source and duration of solar and mechanical energy was the centrepiece of his thought, and was of great interest to speculative thinkers like Wells in the late 1880s to mid-1890s.

For Kelvin, there was a universal tendency in nature to 'the
dissipation of mechanical energy'. Kelvin's Second Law of Thermodynamics, stated in 1862, involved:

A certain principle of irreversible action in Nature...although mechanical energy is indestructible, there is a universal tendency to its dissipation which produces gradual augmentation and diffusion of heat, cessation of motion, and exhaustion of potential energy throughout the material universe. 220

This became more widely known as the law of entropy, a concept which was central to the work of the historian Henry Adams, Brooks Adams's brother. Kelvin's work was made possible by earlier discoveries in the late 1840s by Helmholtz, Mayer and Joule which resulted in the Conservation of Energy principle (the First Law of Thermodynamics).

At this stage, Kelvin did not pre-suppose that the sum total of energy would necessarily decline, since he conceded that the amount of matter which could be translated into a thermodynamic property was not quantifiable. Therefore, he wrote: 'Science points to an endless progress, through an endless space, of action involving the transformation of potential energy into palpable motion and thence into heat', rather than to 'a finite mechanism, running down like a clock, and stopping forever'. 221 Here he reflected the optimistic mid-nineteenth century view of infinite evolutionary progress of Spencer's First Principles (1862), in which confidence in unlimited industrialisation was confirmed by the harnessing of the energy potential of matter in the service of the machine. However, Kelvin advised caution: 'unless sources now unknown to us are prepared in the great storehouse of creation' it was likely that in the future,
'inhabitants of the earth cannot continue to enjoy the light and heat essential to their life, for many million years longer'.

His 1862 essay was called 'On the Age of the Sun's Heat'. It was a title which captured his dual interest in the generation of energy and the longevity of planetary life. And it was his concern with the dimension of time as applied to the sun, the source of energy with which to transform matter, which called into question the assumptions of a generation of evolutionary thinkers, who had based their conclusions concerning the time-scale of human evolution on a substantially different time-scale. Kelvin's theory compressed what to Darwin, Huxley and others, was an infinitely long time-span of gradual evolution. The geologists, Lyell and Hutton, upon whom Darwin built, had in the 1820s and 1830s successfully replaced catastrophic theories of the origins of planetary life (as espoused by Cuvier and others) by their uniformitarian hypothesis, which projected backwards a huge expanded conception of time announced by Hutton's celebrated phrase 'no vestige of a beginning, no prospect of an end'. Kelvin's introduction of a time-scale of evolution, 'a vestige of a beginning', which challenged the Darwinian notion of an infinite evolutionary past, meant that man was now a very much later arrival on the scene. He specified an evolutionary time-scale of ten to thirty million years.²²⁴ As Eiseley states, with the triumph of evolutionism 'change had entered the world; time was debatable and open up to scientific examination'.²²⁵ And in the late 1860s this was the ground on which Huxley tried to repulse Kelvin's attempt to telescope evolutionary time, particularly for what this challenge implied for the time during which a gradual transformation of species could be perceived. Kelvin himself recognised the implications of this
telescoping: the limitations of geological period

imposed by physical science cannot of course
disprove the hypothesis of the transmutation
of species; but it does seem sufficient to
disprove the doctrine that transmutation has
taken place through 'descent with modification
by natural selection'. 226

His insistence on the comparatively rapid change in the sun's heat
interposed a teleology into the evolutionary hypothesis which was
ultimately, as Eiseley suggests, to mesh with the increasing emphasis
by the next generation of biologists in the 1880s and 1890s, on
'some mechanism of rapid organic transformation', with the demise of
Lamarckian gradualism. By 1892, Kelvin, although with nothing
substantially new to say, had become more pessimistic. The
followers of Lyell and Hutton, who believed in terrestrial 'perpetual
motion' in which the earth was continually illuminated by the heat
of the sun, 'from infinity of time past to infinity of time future',
were quite mistaken, rather:

Within a finite period of time past the earth
must have been, and within a finite period of
time to come must again be, unfit for the
habitation of man as at present constituted.228

The sun which had cooled sufficiently to allow matter to evolve, would
continue to do so until life could no longer be sustained, when the
world would freeze up.

Evidently by the late 1880s the pessimistic implications of
Kelvin's thought were gaining increasing credibility. Huxley,
himself, in his important and influential essay 'The Struggle for
Existence: A Programme' (February 1888) could now see his way to
mobilising Kelvin in his attack on the necessary progressiveness of
evolutionary development:
Retrogressive, [direction of evolution] is as practicable as progressive metamorphosis. If what the physical philosophers tell us, that our globe has been in a state of fusion, and like the sun, is gradually cooling down, is true; then the time must come when evolution will mean adaptation to a universal Winter, and all the forms of life will die out, except such low and simple organisms as the Diatom of the arctic. 229

Martin Wood has convincingly shown how the language of cosmic devolution, as evinced by Huxley, permeates the fin du globe apprehension of universal doom in the work of John Davidson, George Moore and particularly Camille Flammarion, whose short story The Last Days of the Earth, in which a decadent civilisation is annihilated by cosmic change, was evidently a further crucial influence on Wells. Helped by popularisers such as Balfour Stewart, author of The Conservation of Energy (1872) (reprinted in 1890), Kelvin's popularity grew sufficiently for his early writings to become accessible in three volumes of lectures and addresses, published 1889-94. Contained within them were papers given at influential lectures at the Royal Institution of Great Britain, 'On the Sun's Heat' (21 January 1887), which was reprinted in Good Words (March and April, 1887); and the presidential address to the Royal Society (November 30, 1893), reprinted in Popular Lectures and Addresses (Volume 2, London 1894). Kelvin was elected President of the Royal Society in 1890 and was made a Peer in 1892.

By the early 1890s Kelvin's entropic speculations had assumed an oracular status. They suggested a future in which the course of mankind was wholly unpredictable; not simply subject to the laws of chance variation but possibly admitting huge leaps, through the change in climate, into development, or more likely, retrogression;
a whirlwind of futile effort to maintain the progress of civilisation. The entropic idea posited a correlation between the expenditure of energy and the running down of those various sources of energy. The more civilisation expended, the more exhausted it would become. Invoked in a period of economic self-questioning, supported by a crude version of Darwinian 'force', it helped perhaps to magnify and to speak to the ethical barrenness of the increasingly materialist impasse in scientific thought and clinical philosophy.

The effect of Kelvin's telescoping of evolutionary time, in which discontinuous variations became frighteningly possible, was sensational indeed. Now the possibilities of new and unfamiliar species were seriously entertained, because the external conditions favourable to large-scale transformation of species seemed closer at hand. The future was visualised as a function of the uncertain, devolving present; and this intersected with the realisation of an ending of an epoch—the quintessence of the fin de siècle spirit. John Davidson's 'Testament of a Prime Minister' expressed the sense of cosmic fragility:

For whether earth already to its doom
Reels orbit-slipped, or whether decades hence,
Or next year, or tomorrow, or today
The weight of ice amassed at either pole
Shall change our axis till a deluge wipe
The citied world away. 234
In 1875 Hardy began a procedure which was to last until three months before his death. He began to copy into a notebook quotations by mainly contemporary writers from periodical articles, reviews and books, many of them in a concise and slightly abbreviated form, mostly dated by date of periodical or volume publication.¹

The use to which Hardy put these extracts in the composition of fiction is a particularly complex matter. For whilst some extracts seem merely to reinforce prevailing tendencies of thought, others warrant careful attention as a source of insight into Hardy's fiction.

The notebooks reflect his reading and perhaps should be primarily treated as a record of it. Yet through the major phase of his career as a novelist, 1883-1895, which is the focus of this chapter, significant intellectual preoccupations and shifts in interest can readily be identified, as Hardy reaches out at key moments for texts which offer to facilitate discourses critical to particular phases of fictional composition.
Generally, Hardy accumulates citations with greater diligence in the earlier phase of his career as novelist. In the one edited notebook which covers the period 1875-1884, Hardy collects well over 300 entries during the first year; over 700 entries, 1876-80, and a further 150 entries to 1884. But whilst there are relatively fewer entries covering the next ten years, they are of perhaps proportionately greater interest, insofar as they affirm a noticeably more subtle and discriminating relationship with those literary and philosophical sources, and the intellectual field from which they are gathered; and this, of course, is the period in which four out of his six major novels are composed.

Although the frequency with which Hardy recorded extracts increases from 1888 onwards, it is noticeable that in the period 1884-7, the phase of the composition of *The Mayor of Casterbridge* (1886) and *The Woodlanders* (1887), the flow of literary and philosophical garnering is reduced to all but a trickle. There is one obvious yet crucial reason for this diminution, and an important consequence which stems from it.

From December 1882 until 1886, Hardy, sometimes with the assistance of his wife, Emma, compiled an additional notebook which comprised summarised reports from local and national newspapers, but overwhelmingly from the *Dorset County Chronicle*. In the main, the reports are taken from past issues of the paper interspersed with cuttings from newspapers of the 1880s recording similar events. Then in 1884 he systematically began to record incidents from local life,
mainly centred in Dorset, from 1826 to 1830; and it was at this point that Hardy commenced the composition of *The Mayor of Casterbridge*. In that it serves as the source for the wife-sale the *Facts* notebook is of obvious relevance to a study of *The Mayor of Casterbridge*. Yet the whole project is of symbolic significance for Hardy's practice as a novelist, from the moment, approximately in late 1882, when he began the cuttings record. It marks a new phase in Hardy's creative development, a phase in which he recreates an archaeology of rural life with a grammar and a symbolism both more personal and more significantly inclusive of deeper philosophical and historical themes. Indeed, the noticeable scarcity of recorded references to texts and contemporary scholarly sources in the period, 1884-7, enforces this sense of a major change of emphasis.

This can be simply put by observing that the fictional worlds of *The Mayor of Casterbridge* and *The Woodlanders* are more inclusive and more self-contained: the novels owe less to the intrusion of educated outsider figures carrying with them the obtrusive weight of Hardy's own scholarship. From this point in his career, Hardy's evident concern is with knowledge brought to life within knowable communities; the outskirts of Casterbridge and the edge of the Little Hintock woods stake out the boundaries within which the fiction makes those communities historically and socially knowable. *The Mayor of Casterbridge*, begun in 1884, needs to be read in the context of Hardy's essay of 1883, 'The Dorsetshire Labourer', which is, itself, a key document within Hardy's oeuvre and signals this new phase.

*The Mayor* addresses itself to a society which is no longer as
confident as it was of its economic direction and stability. The threat of competition from abroad, and periods of industrial slump and worsening agricultural depression at home, posed a threat to that alliance of the landed interest and industrial capital which had complemented each other throughout the century and permitted, particularly after the mid 1840s, a period of unparalleled prosperity. Yet subsequently, deteriorating agricultural conditions from the late 1870s released agricultural opposition not seen since the late 1830s. The Mayor, written in the 1880s and set in the 1830s and 1840s, is a novel permeated by the forces of disruption and decline and stands as a fictional valediction to an age of continuity and prosperity cemented by the complementary alliance of land and capital. By 1883 that alliance appeared to have all but evaporated.

The interconnection of disruption and decline is set in motion in Hardy's essay. Central to the predicament of the rural poor is their 'sense of incertitude and precariousness'. Whereas a generation before 'the majority remained all their lifetime on one farm', now the 'labourers...look upon an annual removal as the most natural thing in the world'. Benevolent landlordism is being replaced by a more impersonal relationship, in which the delegated tenant exercises direct authority: 'Far from having a guarantee of a holding to keep him fixed, the labourer has not even the stability of a landlord's tenant; he is only tenant of a tenant' (181-2).

Hardy makes it clear that the antagonism between capital and labour in capitalist industry is now being reproduced in agriculture, as management becomes neo-industrial, and labourers become more conscious
that they are expendable within the labour process. Hardy compares the 'painless passivity' produced by monotonous field work to the 'drudgery in the slums and alleys of a city', which induces 'a mood of despondency which is well-nigh permanent' (171). And female labourers in their enforced mobility have 'acquired the rollicking air of factory hands' (181).

Hardy's 'Dorsetshire Labourer' essay can also be located specifically in the context of the thinking of a group of progressive liberals whose essays were first published in the *Fortnightly Review* during this period. The editor T.H.S. Escott, John Morley, Jessie Collings and Joseph Chamberlain tried out essays in 1883 and 1884 in Escott's *Fortnightly* prior to their appearance in manifesto form in *The Radical Programme* (1885). Although support for it ebbed away, the manifesto seemed to mark a new attempt to redirect the energies of liberalism, away from Cobden-dominated laissez-faire to a more aggressively interventionist attitude both to urban poverty, particularly the housing problem and the agricultural distress, and the ownership of land. Urban and agricultural questions were of course interconnected because of the failure of industry to find employment for the surplus agricultural labour. Particularly after the considerable impact of Henry George's land reform ideas, through the successful reception of *Progress and Poverty* (1879) and his nationwide lecturing tour of 1882, no radical party could afford to be without a policy on land. But by 1883 it was clear that the urban question had also gained a new prominence. It was the year of perhaps the most influential pamphlet of the decade, Andrew Mearns's *The Bitter Cry of Outcast London*. 
Hardy's essay was published in Longman's Magazine in July 1883. In the same month the Fortnightly carried an editorial, probably written by Escott - 'The Future of the Radical Party'. This endorsed a speech made by Chamberlain in Birmingham on 13 June, and proceeded to single out landlords, on whom it was incumbent 'to provide better accommodation for the working classes in town and country'. Hardy had read reports of the speech and a fortnight later wrote to Morley that 'my description...harmonizes with what was said at Birmingham', taking evident satisfaction from the timely appearance of his forthcoming Longman's Magazine essay.

In calling attention, albeit obliquely, to the interconnectedness of the urban and agricultural questions Hardy was, for a short time, in the van of this radical liberal formation. But more important, the particular quality of this social awareness harnessed his new enthusiasm for reconstituting the sub-history of a 'native' rural life. The result was a new and complex fictional landscape which, at the appropriate time, and as never before in Victorian fiction, made the 'urbanising' of rural life, as seen in Casterbridge, show through. And it is a landscape which is shaped by the same discourse called on in the mid-1880s, to structure the landscape of contemporary London.

Yet Hardy's recognition of the relevance of the city to an essay about the agricultural labourer is important for another reason. He remarks that the agricultural order is subject to the same movements of historical change as the more advanced communities of the city; and in so recognising that the agricultural labourer cannot be insulated from progress, Hardy claims for himself as a country
novelist the privilege of revising the conventional authorial
relationship with the agricultural world, against the conventional
way of depicting it. Of the female agricultural labourers he says:

That seclusion and immutability, which was so bad for their pockets, was an unrivalled fosterer of their personal charm in the eyes of those whose experiences had been less limited. But the artistic merit of their old condition is scarcely a reason why they should have continued it while other communities were marching on so vigorously towards uniformity and mental equality. It is only the old story that progress and picturesqueness do not harmonise. They are losing their individuality, but they are widening the range of their ideas, and gaining in freedom. It is too much to expect them to remain stagnant and old fashioned for the pleasure of romantic spectators (181).

Whether he had Richard Jefferies in mind, cannot be said for certain; but a work like Hodge and his Masters (1880) could not have been far from Hardy's mind - particularly as the opening pages of the essay constitute an attack on the collective identity which 'Hodge' embodies. Hardy's comments, moreover, could justifiably be taken as an attack on Jefferies's whole literary method. For it is characteristic of Jefferies to preserve a spectatorial distance from his rural figures while maintaining the illusion of intimacy with them - particularly through the genre of portraiture; he effectively ossifies the subject, whether labourer or the more sympathetic country solicitor or tradesman, as a timeless figure outside the historical process.

So Hardy undermines, here, expectations which the urban reading public certainly had of his own work: the creation of pictures of stolid, static and sentimental daughters of the soil. And in urging upon the reader the claims of the city and of civilisation he is trying to subvert the notion of the 'countryman'. In dissociating himself
from this literary patronage (which is equally a class patronage), Hardy was to let the agricultural labourer go as a subject of immediate literary interest (he takes the subject up again in Tess). But more significantly, Hardy drives a wedge between competing ways of being a spectator. He now reclaims for himself the privilege of attending to traditions which he has lived with and experienced from childhood. Now, as the romantic spectator is outlawed, so with him go those awkward spectators of his earlier novels, George Somerset and Swinthe St. Cleve of A Laodicean and Two on a Tower, whose romantic relationships with landed society-women have enacted precisely that awkward spectatorship that Hardy now identifies in other writers, and which he now rejects.

But the other major occupational group which the essay examines is not so easily put aside:

Villages used to contain, in addition to the agricultural inhabitants, an interesting and better-informed class,...the blacksmith, the carpenter, the shoemaker, the small higgler, the shopkeeper (188).

Many of this class 'had been life-holders who built at their own expense the cottages they occupied' (188). Now as the lives drop, most landowners, 'disapprove of these petty tenants who are not in the estates employ' and 'pull down each cottage as it falls in...the occupants who formed the backbone of the village life have to seek refuge in the boroughs' (188).

Hardy's personal commitment to the class becomes pronounced, his contempt for current rationalisations of their fate, thinly disguised; 'this process, which is designated by statisticians as
"the tendency of the rural population towards large towns" is really the tendency of water to flow uphill when forced' (188). Although he makes a specific plea on behalf of the class of small tradesman dislocated by the depression, the decline into which it has fallen long predates this crisis; it is almost by definition a declining formation. The categorical past tense, 'villages used to contain', suggests this long perspective.

Thus, around the class into which Hardy was born and knew at first hand, there emerge the twin ideas of decline and disruption; they shape his last four major novels and are a major concern of this chapter. Henchard, John Durbeyfield and, in a more precise way, Jude, all belong to this declining and exposed class now mobilised by the writer. Having moved out of it, he now returns to it with the burden of objectifying in fiction his own estrangement both from the declining class of his early formation and the predominating values of the literary culture to which he is aligned as a writer. As Raymond Williams has pointed out, because of Hardy's connections with the 'educated but now owning class he is neither owner nor tenant, dealer nor labourer, but an observer and chronicler...with uncertainty about his actual relation'. I want to return to the implications of this estranged role in my discussion of Tess of the d'Urbervilles.

There is a final point to be made about the essay. The tradesman class is, in an incoherent way, a potentially disruptive formation. Hardy may mourn the passing of a way of life, but he is sufficiently hard-headed to detect their subversive potential:
Every one of these banished people imbibes a sworn enmity to the existing order of things, and not a few of them, far from becoming merely honest Radicals, degenerate into Anarchists, waiters on chance, to whom danger to the State, the town, nay, the street they live in, is a welcomed opportunity (189).

From within the liberal ideology Hardy can see how an uprooted, declining, mobile and disaffected class can generate a way of life which operates outside the terms of respectability and, moreover, exposes the limitations of the safe ideological position which denies that class coherence or intentionality. At the same time, the class is exiled within economically and socially unacceptable conditions and thus made to cohere as an exiled or 'banished' formation. The declining and disruptive class of dispossessed tradesmen is an important presence in The Mayor of Casterbridge and Hardy's subsequent fiction.
(b) THE MAYOR OF CASTERBRIDGE: URBS IN RURE

The economic context of The Mayor of Casterbridge which charts Farfrae's business dominance over Henchard has been well documented. J.C. Maxwell has pointed out that Hardy, by setting the bulk of the narrative in the middle - late 1840s, chooses 'the latest period at which the uncushioned dominance of price fluctuations depending on home harvest...still persisted'.

The ascendancy of Farfrae projects out of the novel a period of 'levelling' of free-trade and growing prosperity and agricultural stability. But to contemporary readers this period had passed; in other words, Hardy calls up the absent 'gap of time' associated with mid-Victorian prosperity, by the deliberate historical location of the fiction within a period of instability and social dislocation, and which can speak to the contemporary agricultural slump of the 1880s. Broadly speaking, this 'absent' historical phase can also be characterised as a period in which an alliance of manufacturing and landed interests succeeds in dominating subordinate classes by winning their consent, and turning the working classes away from thoughts of revolt and reform.

So in returning to the period from 1826 to the mid 1840s, Hardy evidently wanted to recreate a volatile period of poor economic conditions and fluctuating harvests, but which had not yet been reached by the 'repertoire' which constituted the mid-Victorian ascendancy, the alliance of old and new class interests. As
Richard Johnson puts it, the mid-Victorian working-class were faced by a double armoury, 'the ideologies of deference and self-help, High Tory Anglicanism and militant Dissent...Chadwick's and Peel's newly professionalized police and the gentry justice'. And as the 'Dorsetshire Labourer' essay records, the domination by consent, and the economic foundations on which this hegemonic order was built, were collapsing and with them the certainty of domination by consent.

The town of Casterbridge is the arena in which the gladiatorial struggle between the rival corn merchants Henchard and Farfrae is waged. But this is not to say that that arena is all of a piece. It can be also viewed as a medium for a plurality of discrete meanings, signified by the moral and cultural spatialisation of the town.

A declared bankrupt, Henchard stands at the lower of the two bridges which Hardy is careful to distinguish as the gravitation points of two different groups of failures at Durnover (Fordington). Henchard falls into the category of 'miserables...of a politer stamp':

They included bankrupts, hypochondriacs, persons who were what is called 'out of a situation' from fault or lucklessness, the inefficient of the professional class...The eyes of this species were mostly directed over the parapet upon the running water below.

Farfrae, now in every way Henchard's vanquisher, drives up and Henchard reminds him of the significance of the place:

I am going where you were going to a few years ago, when I prevented you and got you to bide here. 'Tis turn and turn about, isn't it? Do ye mind how we stood like this in the Chalk
Walk when I persuaded 'ee to stay? You then stood without a chattel to your name, and I was master of the house in Corn Street. But now I stand without a stick or a rag, and the master of that house is you (235).

That earlier Chalk Walk meeting is made memorably concrete through landscape - here the top part of the town. As the two men shake hands the configuration of landscape offers, in a moment of poise, the possibilities for both of them:

The young man's hand remained steady in Henchard's for a moment or two. He looked over the fertile country that stretched beneath them, then backward along the shaded walk reaching to the top of the town (92).

Henchard's descent with Farfrae back into Casterbridge is now ironically echoed by his topographical descent from the prosperity of Corn Street to the low-lying bridge. Excluded from the town houses higher up he now stands inconspicuously yet still incongruously within the slum domain at Durnover, the parish of Casterbridge which contains the exiled Mixen Lane, 'a back slum of the town, the pis aller of Casterbridge domiciliation' (197). And Henchard's re-employment of the morally bankrupt Jopp, who has joined the Mixen Lane community, is itself a 'last resort' to wrest back from Farfrae his financial dominance; he was unaware, as Hardy puts it, that 'characters deteriorate in time of need' (198).

Mixen Lane constitutes a separate and distinctive terrain of secrecy, waywardness and unofficial and illegal activity:

It was the hiding-place of those who were in distress, and in debt, and trouble of every kind. Farm-labourers and other peasants, who combined a little poaching with their farming, and a little brawling and bibbing
with their poaching, found themselves sooner or later in Mixen Lane. Rural mechanics too idle to mechanize, rural servants too rebellious to serve, drifted or were forced into Mixen Lane. Vice ran freely in and out certain of the doors of the neighbourhood; recklessness dwelt under the roof with the crooked chimney; shame in some bow windows; theft (in times of privation) in the thatched and mud-walled houses by the sallows. Even slaughter had not been altogether unknown here (261).

Yet within Mixen Lane there is also a more respectable class which has fallen on hard times, 'families from decayed villages - families of that once bulky, but now nearly extinct, section of village society called "liviers" or lifeholders - copyholders and others' (262).

While both formations are consigned to this territory of unrespectability, the class differentiation between the semi-permanent agricultural proletariat and the small-tradesman class, which Hardy makes in his essay, is reiterated in the novel; but now with more emphasis on the distinction between the respectable tradesmen, uprooted from a traditionally legally-honoured way of life, and the proletariat, whose deviant culture is continually stressed - 'vice', 'shame', 'theft', 'slaughter'.

If the respectable inhabitants wanted to move on and out, there is little sign that the proletariat would wish to, for they have evolved their own alternative traditions based on a cunning mutual aid. We recall Charl's denial of Constable Stubbard's accusation that he was in the middle of town at the climax of the skimmington ride. His fabricated story elicits Nance Mockridge's instinctive corroboration at the Peter's Finger Inn: 'I've been here this last half hour, hain't I, Nance?' (286). The 'rusty-jointed executors of
the law' (286), are no match for this efficiently organised sub-
culture whose members can judge finely how far to step outside the
law without incurring interception. Mixen Lane is literally lawless.

It is a sub-culture with its roots in the period of the late
1820s which Hardy recreated from newspaper extracts of the period,
to which I have already referred. The extracts suggest an unstable,
often violent world, permeated by poverty, domestic deprivation
and tragedy, and exquisite satires of circumstance. The 'brawling
and bibbing' of the farm labourers of Mixen Lane, for example, has a
factual source in an extract recorded in 1884 from the Dorset County
Chronicle of 24 January 1828:

Bockhampton band. Fordington mummers. Lock,
Lucas, Jas, and Geo Burt indicted for creating
a riot on 24 Dec 1827...Hostility between
Fordington mummers and Bockhampton band,
because the latter had sprung up as rivals
to the former and plucked from them a portion
of their (laurels?) and profits...This hostility
ripened till on Xmas eve... 14

And there is a report on the decline of Weyhill Fair, both an indication
of the general decrease in prosperity and greater economic mobility,
from the Dorset County Chronicle of 15 October 1829:

Weyhill Fair - By 12 o'clock only 40 wagons had
passed through Andover gate - in former
abundant years, 400 have passed it by same
hour. 15

Weyhill is Hardy's 'Weydon Priors', the location of the fair
at which Henchard sells his wife Susan to Newsome (this startling
episode has its origin in notebook entries from the period). When
Susan passes through Weydon Priors with Elizabeth Jane,
eighteen years later, she notices that
it is a shadow of its former vitality:

The new periodical great markets of neighbouring towns were beginning to interfere seriously with the trade carried on here for centuries. The pens for sheep, the tie-ropes for horses, were about half as long as they had been (53).

The furmity woman now serving an inferior brew has also fallen on bad times, (Elizabeth Jane observes that 'it isn't respectable' to speak to her) (54), and her downward mobility is registered by her next appearance in the Casterbridge court on a vagrancy charge (where she reveals that she knows about Henchard's past) and inexorably down to Mixen Lane and Peter's Finger. She is another character caught up in a process of economic and social dislocation, mirrored in the decline of a particular popular tradition which by the time Henchard, himself, revisits Weydon Priors has disappeared altogether.

The 'facts' testify to a world which through increasing centralisation, more regular law-enforcement and greater access by railway, was rapidly disappearing even as Hardy was a young boy. And there is other scattered evidence to show that this more unregulated, desperate and primitive world is a crucial reference point in the recapturing of the sub-history of a rural Wessex which he needed to reconstitute only by describing it as past. The 'facts' of that world are permeated by a sense both of decline and of disruption, which is taken up and assimilated by the discursive language available to Hardy during the 1880s, and speaks of dislocations made articulate by that discourse. This is explicit where Hardy allows the official and unofficial worlds of Casterbridge to intersect. It is a key sequence, spanning Chapters 36-9, and orchestrated around two
interrelated events - the visit of the 'royal personage' to Casterbridge, and the Skimmington Ride.

Chapter 36 records how the love letters between Henchard and Lucetta, which Jopp has let fall into the hands of Mrs Cuxom and the company of Peter's Finger, become a 'good foundation for a skimmity-ride' (264). The following chapter contains the visit to Casterbridge by royalty, the climax of which is Henchard's ironic up-staging of the mayoral duty which Farfrae 'performs', which then provokes the physical confrontation between Henchard and Farfrae in the next chapter (38). Chapter 39 describes the skimmington ride itself, Lucetta's realisation of its significance, her fit and her death - Farfrae having been lured away on a false errand by the tradesmen of The Three Mariners.

The bizarre juxtaposition of The Royal Visit and the skimmington ride is recognised by Mixen Lane itself. Jopp, indeed, voices the general feeling: 'As a wind-up to the Royal visit the hit will be all the more pat by reason of their great elevation today' (274). It is a kind of agit-prop theatre. The target is the unfortunate Lucetta who, at Farfrae's side as the mayor's wife, is acting out the 'official' play in which Henchard's 'performance' is the merest ironic counterpoint. The official play is one which attempts to involve the entire community of Casterbridge in its ritualised display. The arrival of the monarch is one of those events which the dominant order can use to incorporate dissent and disaffection, while continuing to speak for a whole community, although the economic order has patently not benefitted a section of the town's inhabitants. The
event is of 'such magnitude that its influence reached to the lowest social stratum' (268) and the corporation of the town 'as a representative centre of husbandry' (268) thanks the Prince for his services to 'agricultural science and economics' by his 'designs for placing the art of farming on a more scientific footing' (268).

But the event, at the same time, stirs the lowest social stratum into action with the preparations for the skimmington ride. Just as the Corporation acts a part in assuming to speak for the whole town, within which there are clearly competing interests, so the inhabitants of Mixen Lane by their presence at the spectacle, pretend a consent which they are simultaneously planning to undercut and demolish by their own act of ritual.

The rude intrusion of the primitive ritual of the skimmington ride can, I think, be plausibly read in the context of the divided and increasingly polarised society of the early 1880s which the novel addresses. The world of Casterbridge, permeated by growing social distress, is conceived by Hardy as a representation of the dislocations which contemporary discourse can make explicit. Within these chapters, which insistently register both social disruption and divided ideological allegiance, Hardy conceives Mixen Lane as his contemporaries saw outcast London in the 1880s.

I have described in chapter One how writers repeatedly invoked the duality of the 'respectable' and 'unrespectable'. The 'official' world of the observer of degeneracy is pitted against the 'unrespectable'
social formation of the poor and the deviant, who are made to inhabit a territory cut off from the values of civilisation and, in many ways, beyond its terms altogether. As we have seen in 'The Dorsetshire Labourer' essay, Hardy sustains the analogy between the agricultural and urban poverty. And in The Mayor he reaffirms the urban analogy by drawing on contemporary scientific discourse, which frames the city as a territory activated by a Lamarckian Darwinism. The very proximity of a tract of inherited degeneracy is perceived as a threat to the organism of the whole society, through sustained and reproduced degeneracy.

Mixen Lane is a 'mildewed leaf in the sturdy and flourishing Casterbridge plant' (261). The image of 'blight', here, conveys biologically the idea which this phase of the novel enacts; the economic forces making for progress inevitably exact a high price from the surplus labour dispossessed by a 'progressive' scientific agriculture. But the biological analogy conveys a relationship in which the degenerate poor of Casterbridge can spread their influence (the official plant is not immune). The metaphor conveys the sense that the influence is passive and parasitic. It is a mildew which can spread to the body of the main plant rather than a self-assertive growth of a different plant in opposition to it. It is rather through the invocation of a symbolic form, a kind of primitive theatre, that Hardy actually enacts a resilient subversiveness. Lucetta's exposure can only be symbolic. Her husband and Elizabeth Jane live on to re-affirm, in Farfrae's prosperity, the equable order of economic progress, and figure comfortably in the consensus order
which Casterbridge outwardly demonstrates to the royal Prince.

Hardy's delineation of a blighted and degenerate social space within the totality of the environment of Casterbridge finds striking echoes in other fiction and polemic of the immediate period. While Hardy was writing *The Mayor*, Lucas Malet's novel about the effect of female degeneracy on an established county family, *Colonel Enderby's Wife*, appeared in 1885. One scene from it, describing the walk by Mrs Rarrell on a philanthropic mission, and what she encounters, produces a homologous effect to Hardy's description of Mixen Lane:

[She] took her way by back streets to a quarter of Tullingworth that lies across the river, along low ground between the canal and a range of dreary brickfields. This region presents a marked contrast to the rest of the smart, pleasure-loving little town. It is a moral Alsatia, to which, by the law of social gravitation, all the human refuse of the place finds its melancholy way. Mean one-storied houses open on to narrow, black wharves and ugly cinder-paths, where bargemen and labourers loiter at dreary corners, and ragged shrill-voiced children angle for sluggish minnows in the slimy water, while the smoke and stench of the burning bricks fill the thick air. Dirty little shops maintain a feeble existence, with an attenuated show of attraction behind the panes of their dim windows. Only the public-house rises prosperous, cheerful, defiant above the dingy squalor of unpaved streets and lanes. Such places are altogether too common on the outskirts of even flourishing well-to-do places like Tullingworth for it to be incumbent on one to make much fuss over them. 17

We find the blighted leaf on the 'flourishing' town - an area morally tainted, a territory on the outskirts of a town on low ground, cut off here by a river - the river in *The Mayor* marks the dividing line between town and open country, which the poacher has to cross
where the process of 'gravitation' (we recall Hardy's river image in the 'Dorsetshire Labourer' essay) defines figuratively the economic and moral descent of 'human refuse', as if being swept down by and further polluting an already dirty stream. The pub displays an ironic fitness amid a repository of feeble life; but the biological discourse here is a substitute for the closely-observed culture that Hardy gives us.

Another homology can be found in a contemporary novel: Gissing's The Unclassed (1884). Litany Lane, like Mixen Lane, is alive with disease and infection. Tuberculosis wreaks its revenge on Woodstock, the slum landlord, who is the representative of capitalist hegemony under attack in the novel. (I extend the discussion of this point in the following chapter). The 1884 edition of Gissing's novel emphasises the communal component of the urban slum enclave; the focus is Mrs Sprowl's pub where we meet the degenerate Slimy. There is nothing on a comparably melodramatic level in The Mayor. But there is a similar sense of the possibilities of influence on the dominant class, in the spread of rumour which will culminate in the skimmington ride, and the death of the mayor's wife:

The ideas diffused by the reading of Lucetta's letters at Peter's Finger had condensed into a scandal, which was spreading like a miasmatic fog through Mixen Lane, and thence up the back streets of Casterbridge (273).

The connotations of fog and disease recall how Carlyle and Dickens saw in the spread of pestilence a strange assertion of retributive brotherhood: disease will strike you indiscriminately, no matter what your class, (although both Dickens's Esther Summerson and Gissing's
Abraham Woodstock are sufferers from a very selective attack of pestilence, from Tom all Alones, and from Litany Lane.

Just as the London of a social commentator like Charles Booth preserved the dualism of east end and west end, of civilisation and barbarism, so there is a representation in The Mayor of that crucial distinction between the respectable and unrespectable, the deserving and undeserving poor - a distinction much beloved of philanthropic organisations such as the C.O.S. 20

Hardy reproduces this distinction in his characterisation of the allegiance and values of the class of small tradesmen downwards. There is an important social division between the regular drinkers of the two inns of the town, Peter's Finger and, further up in the High Street, the more respectable Three Mariners. This is the inn where Farfrae makes his first favourable impression in Casterbridge. The two inns focus precise differentiations:

The company at the Three Mariners were persons of quality in comparison with the company which gathered here; though it must be admitted that the 'lowest fringe of the Mariner's party touched the crest of Peter's at points (262-3).

The respectable group (they are called the 'philosophic party' at one point) Longways, Coney, Buzzford and Billy Wills, are dealers, glaziers and factors, and they are differentiated from and contrasted with the unrespectable proletarians - Nance Mockridge, Mother Cuxsom and Charl who draw in the disaffected Jopp and the furmity woman. And it is within that phase of the novel, where the values of the integrated, official world and those of the oppositional, outcast culture are juxtaposed, that the competing allegiances of the two groups are
revealed. The morning of the Prince of Wales's visit, the clientele of The Three Mariners display their respectable credentials:

there was hardly a workman in the town who did not put a clean shirt on. Solomon Longways, Christopher Coney, Buzzford, and the rest of that fraternity showed their sense of occasion by advancing their customary eleven o'clock pint to half-past ten (269).

Later that day, once the implications of the skimmington ride become clear, the values of the respectable and unrespectable are decisively wrenched apart as Hardy calls on an explicitly Darwinian language at the moment of gathering social and moral crisis:

this mixed assemblage of idlers... [including Coney, Buzzford and Nance Mockridge]... fell apart into two bands by a process of natural selection, the frequenters of Peter's Finger going off Mixen Lane-wards, where most of them lived, while Coney, Buzzford, Longways, and that connection remained in the street (273).

And the next action of the 'respectable' group sets them further apart from the subversive values held by Mixen Lane. They attempt to mitigate the personal consequences of the now inevitable skimmington ride by arranging for Farfrae to be sent off on a false mission.

As I have suggested in chapter One, a growing sense of social dislocation and crisis focussed on London during the 1880s. Powerful visions of Darwinian determinism were available for writers to ease the anxieties of the propertied classes, and to help account for the persistence of poverty, unemployment, the failures of industry and the end of the consensus of the mid-Victorian period. These echoes from the city reverberate more powerfully in Hardy's imagination than has been recognised.
In the structuring of the fictional location of The Mayor, Hardy had assimilated a language more usually found in fiction of the city, of which Gissing's novels, to be discussed in the next chapter, are striking examples. Yet it was the buried, disruptive world of the late 1820s which spoke most eloquently to Hardy's sense of agricultural dislocation and decline in his own time. In resorting to historical distancing, Hardy, in fact, writes a novel nearer in spirit to the work of his contemporaries than might at first be thought.
The environment of The Woodlanders, centred on Little Hintock, assumes, as several critics have pointed out, its own autonomous life, cut off from outside influences, 'one of those sequestered spots outside the gates of the world'. The woodlands as an environment, the location of the lives of the central characters, become in effect an alternative or unofficial subject of the novel - growing alongside and around the characters but exposed to the quite distinctive and special rhythms of organic evolution.

Hardy's frame of mind when preparing for The Woodlanders led him to explore the subject of organic nature as a subject in its own terms. Indeed, the novel offers itself, in part, as an exposition of experimental ways of writing about organic nature, for alongside evolutionary discourse Hardy also experiments, both with the literary pastoral and the mode of portraiture. Specifically, nature as a subject is the focus of a vibrant variety of contrasting aesthetic presentations and perceptions; the contrast between portraiture and pastoral, for example, is explicitly an issue targeted at Giles, Grace and Marty about how to interpret or 'read' natural phenomena. This is a new and important development in Hardy and is, as I want to show, a necessary prelude to the more complex treatment of the subject of nature in Tess of the D'Urbervilles.

As readers, we are aware not only of the intense force of the
natural order, but of the relationship between man and nature as to some extent a relativistic one. Hardy offers no single principle (such as a Spencerian synthesis or a neo-Darwinist view) but a plurality of ways in which man can be accommodated within nature and can himself accommodate it.

It is a complex question which Hardy faced head on in Tess of the D'Urbervilles. In Tess, the question of the relationship between the social and the natural order is radically examined, but in The Woodlanders, Hardy lays the foundations for that epistemological adventure by experimenting with what amounts to a series of elegant essays on the representation of specific natural phenomena which are, for the most part, not symbolic or metaphoric of the larger question of man in nature.

It is not a question of seeing in the discourse of evolutionary struggle, a metaphor for the struggle between Giles and Fitzpiers (though at a simplistic level one clearly survives through adaptation while the other fails completely). There is, in fact, only one occasion where Hardy suggests such an analogy, (and even here it is tamed by the mythic). Hardy's aim is to show that one way in which the woodland can be characterised is by dramatising the mysteries of organic growth, regulated solely by its own laws.

In perhaps the best known description of the woodlands, Hardy crowds out the human passage through the woods of Giles, Grace and her father Melbury, by the very plentitude of natural objects and the elaborate style of their depiction:
They went noiselessly over mats of starry moss, rustled through interspersed tracts of leaves, skirted trunks with spreading roots whose mossed rinds made them like hands wearing green gloves; elbowed old elms and ashes with great forks, in which stood pools of water that overflowed on rainy days and ran down their stems in green cascades. On older trees still than these huge lobes of fungi grew like lungs. Here, as everywhere, the Unfulfilled Intention, which makes life what it is, was as obvious as it could be among the depraved crowds of a city slum. The leaf was deformed, the curve was crippled, the taper was interrupted; the lichen ate the vigour of the stalk, and the ivy slowly strangled to death the promising sapling (82).

The subject 'they' is soon buried beneath a cluster of natural objects, with the verbs of motion, 'went', 'rustled', 'elbowed', pushed to the head of each clause, drawing attention to the natural objects themselves. The tree trunks assume a vivid, anthropomorphic life through the striking simile - 'roots like hands wearing green gloves'. It is a beautifully ornate passage.

The focus then moves from younger to older trees. The key simile, the 'lobes of fungi' as 'lungs', brilliantly heralds the deformed degeneracy of this anti-pastoral conceit: the depraved slum-dweller inhabiting a dark, airless gloom (connoted by the lung-like fungi). Hardy taps here, as elsewhere, the contemporary discourse of urban blight - of darkest London (described in chapter One), and the intrusion of this image of urbanism decisively detaches the natural object from the possibility of an anti-urban invocation of 'nature'. The fungus, as the city slum, is subject instead to the same rigorous process of organic dissolution.
There are variations within the picture of pointless growth. We have the elaborate and ornate moss, parasitic but essentially harmless, and the more combative, throttling, lichen and ivy and their victims—the stalk and the 'promising sapling'. Each object, whether ornately decadent or rapaciously efficient, parades its degeneracy as an index of success in the struggle for existence, in conditions of oppressive and gloomy futility. The woodland is like an inner sanctum of the vast edifice of the natural world, its objects monuments only to their own deformed existence.

The struggle for existence is graphically anatomised in an earlier scene, in a chapter which opens with a glimpse of the nocturnal struggle for existence among animals. Although it is little more than an aside, Hardy illustrates with great economy and intensity the incursion of the natural and the organic into the fibre of the man-made. The rapacious ivy, with its promiscuous and destructive quest for purposeless life, is the central subject.

In the early morning sun-less gloom, a blaze of firewood lights up Melbury's outhouse:

In the hollow shades of the roof could be seen dangling and etiolated arms of ivy which had crept through the joints of the tiles and were groping in vain for some support, their leaves being dwarfed and sickly for want of sunlight; others were pushing in with such force at the eaves as to lift from their supports the shelves that were fixed there (57).

Again we are aware that there is no other spectatorial viewpoint by which this process is perceived. It has assumed its own authority.
The focus narrows to the roof-tile and the eaves against which the ivy presses. The struggle for existence wins for itself, in a heightened moment of authorial perception, its own distinctive rhythms and cadences. Here is a mode of representation which, like a film camera, represents the long process of evolutionary struggle by speeding up the film of struggle so that biology becomes synchronised so as to become available to perception.

The sense of struggle for the sustenance of light (an echo here of contemporary philanthropic and religious discourse) is self-defeating since the more promiscuous of the growths become deformed, 'dwarfed and sickly', while others have a rude vigour, 'pushing in with such force'. Deformed nature both deforms and is deformed. The teleological energies of strangulation are vividly and concretely stamped, an exemplary case of Hardy's artistic aim stated in 1886, (the year in which *The Woodlanders* was written for serialisation), 'to intensify the expression of things...so that the heart and inner meaning is made vividly visible'.

To this end, Hardy is prepared to some extent to accommodate the naturalist technique of Zola. He certainly demonstrates, in his desire to make objects yield their 'heart and inner meaning', something of the naturalistic novelist's technique; as John Lucas puts it - the novelist as scientist 'recording, reporting, listing'. Hardy differs from Zola however in an important respect: he realises that whilst organic life may yield itself as an observable process - albeit in an intensification and artificial framing - human life is far more intractable.
It is worth comparing Hardy's description of the incursion of organic nature with some twelve quotations from Zola's novel La Faute de L'Abbé Mouret (1874) together with eleven quotations from Germinal. All were copied into Hardy's '1867 Notebook' which he was compiling - though only intermittently - until the late 1880s, (it is reproduced by Björk as an appendix to the text of Volume One Literary Notes with notes on sources in the 'Notes' volume). La Faute de L'Abbé Mouret did not appear in English translation until October 1886 under the title of Abbé Mouret's Transgression. Björk states that Hardy read the English version, either in 1886 or 1887. It is impossible to date more accurately - but 1887 would appear to be more likely. Hardy's reading of Zola may just post-date the composition of The Woodlanders, which was completed for serialisation in October 1886; the volume version was ready the following February. However, two extracts copied from Abbé Mouret resemble Hardy's The Woodlanders both in tone and local detail:

The rust hued lichens gnawed away at the rough plaster like a fiery leprosy. The thyme followed on and thrust their roots between the bricks like so many iron wedges.

Another extract reads:

The old parterre was now but a riotous mob...where intoxicated Nature had hiccups of verbenas and pinks.

Hardy's evident interest in Zola reinforces the sense that in The Woodlanders he is experimenting with a naturalistic rendering in his prose of the rhythms and counter-rhythms of organic evolution, like Zola, foregrounding what is usually taken as natural background.
His reading of Zola probably precipitated one of the Talbothays Dairy scenes in 'the Rally' phase in his next novel, *Tess*.

Hardy's aim to encapsulate the autonomous life of organic evolution culminates in the scene where Grace experiences the 'devilry of a gusty night in a wood' (319), and Giles, in his fastidiousness, remains outside at a distance from his hut, in which Grace is sheltering. The woodland is Giles's antagonist: 'sometimes a bough from an adjoining tree was swayed so low as to smite the roof in the manner of a gigantic hand smiting the mouth of an adversary' (320). The next morning Grace looks out and sees trees, in jackets of lichen and stockings of moss. At their roots were stemless yellow fungi like lemons and apricots, and tall fungi with more stem than stool. Next were more trees close together, wrestling for existence, their branches disfigured from wounds resulting from their mutual rubbings and blows. It was the struggle between these neighbours that she had heard in the night (322-4). The life of evolution is made perceptible, it can be felt by the ear and eye of the unseen victim, Giles. This is perhaps the only place in the novel where the struggle of nature is offered as a metaphor for Giles's futile struggle for life; Hardy intends the evolutionary struggle to carry the weight of the human predicament, as Giles's dissolution takes him (in Jean Brooks's words) 'down the evolutionary scale to death'.

Yet it is significant that Hardy frames the terms of evolution, not by a presiding Darwinian vision, but by the mythic mode. The almost totemistic and ritual order which is asserted by Giles's slow
descent back to nature is rather at variance with the Darwinian 
note of 'unfulfilled intention' - of purposeless law, which 
has been sounded in earlier woodland descriptions. Hardy tries 
to reconcile one mode to the other; so that the sheer futility of Giles's 
capitulation is rather less shocking than if the discourse of 
evolutionary struggle had not been tempered by the counter-rhythms 
of ritual.
Hardy's last four major novels are connected, it can be argued, by a common thread; that of the status of tradition. What Hardy understands as native and local - experience which is grounded in custom and place - is recovered from lore and balladry and deeply bound up with childhood and memory. As in The Mayor, this process of recovery is displaced by other influences: by the work of intellectual discovery, the strength and range of which can be gauged from Hardy's literary notebooks.

Raymond Williams has suggested the nature of the double perspective emerging from this displacement:

Without the insights of consciously learned history and of educated understanding of nature and behaviour he cannot really observe at all, at a level of extended human respect. Even the sense of what is now called the 'timeless' - in fact the sense of history, of the barrows, the Roman remains, the rise and fall of families, the tablets and the monuments in the churches - is a function of education. That real perception of tradition is available only to the man who has read about it, though what he then sees through it is his native country, to which he is already deeply bound by memory and experience of another kind: a family and a childhood; an intense association of people and places, which has been his own history. To see tradition in both ways is indeed Hardy's special gift: the native place and experience but also the education, the conscious enquiry. 30

Certainly, Hardy's last novels express the presiding sense of disintegration and decline of ways of life; and 'a way of life' is seen to be exposed, explicitly, to the forces of economic and social
change. And this way of life is seen from within a non-native perspective coloured by political radicalism, moral libertarianism, evolutionary positivism, philosophical relativism, and artistic self-consciousness and commitment.

In Tess and Jude, and foreshadowed by The Woodlanders, the 'native' object threatens to become overwhelmed and engulfed by the sheer intensity of the new social and intellectual preoccupations; which means that a straightforward distinction between the native and the learned begins to evaporate. So that a traditional cliché about Hardy, such as the mourning for a lost way of life, is only one sentiment in a total process objectified by the analytical voice in Hardy. As we can see in The Mayor and Tess, the question of decline, which is sentimentally espoused by the privileged spectator, has inserted into it a whole new trajectory of disruption and violence to the social order, the family and the individual body.

Building on Williams's statement, I would argue that in Tess, both the authority of the educated and the native voice become subjected by Hardy to ideological and social determinisms, which reveal the indulgent quality of the unsound 'wisdom' which both the native countryman and the educated spectator give voice to: on the one hand, the apparently timeless belief in the stability and continuity of pedigree, on the other, the fatalistic acquiescence in beneficent or perverse providence through the cultivation of age-old superstitions and myths. In Tess, in particular, both the 'native' and 'educated' view of this truth are exposed to Hardy's radical scepticism.
In the first recorded piece of research which Hardy undertook to prepare for the emerging novel, the native and educated perspectives appear to be equally weighted:

In the afternoon by train to Evershot. Walked to Woolcombe, a property once owned by a — I think the senior-branch of the Hardys...The decline and fall of the Hardys much in evidence hereabout... Becky S's mother's sister married one of the Hardys of this branch, who was considered to have bemeaned herself by the marriage. 'All Woolcombe and From Quintin belonged to them at one time', Becky used to say proudly. She might have added Up-Sydling and Toller Welme. This particular couple had an enormous lot of children. I remember when young seeing the man — tall and thin — walking beside a horse and common spring trap, and my mother pointing him out to me and saying he represented what was once the leading branch of the family. So we go down, down, down. 31

Hardy seeks out a physical location which is powerfully suggestive of the loss of an influential branch of his family, and he rediscovers this loss rather as he would archaeological remains, 'decline and fall...much in evidence hereabout'. Indeed the idea of decline is the framing idea of the subject of family history. These living descendants are both the flesh and blood realisations of their forefathers, but they are also objects which powerfully signify an absence of nobility, a standard from which they have fallen. The man with the horse and trap is perceived as having a lowly social position, but he also represents the passage towards loss through the historical link he has with his noble forefathers. He both lives as subject and lives out the objective process: the trajectory of downward mobility. In the act of identification by Hardy's mother, both the family tradition and the class position are displaced and fused into a presiding conception of family decline.
It is a very Hardy-like epiphany, and one which occurs time and again in *Tess*; not, though, as an undistilled authorial truth as it is in the *Life*, but as an apparent truth, the myth of which comprises the realisation of our reading of Tess's experience. The novel, while it does not dispense with the idea of family decline, does reveal through the pitting of truth against experience, the ideological foundations of this conception. By exploring the theme of family decline both from the privileged, educated perspective of a man like Angel Clare and also from within the experience of a struggling tradesman family like the Durbeyfields, Hardy can insert his radical critique of an exploitative social order. It is an order which is sustained by an ideology which insists on seeing nature and society as harmonious and mutually supportive.

The world of *Tess* is permeated by static and ossified orders of truth, emerging sometimes as law, custom, convention, myth or even mere truism. Within these codes, the ideas of heredity and ancestry have a dominant place. Both assume a reconciliation between the social and the natural which Hardy opened up to inspection with a new relativistic insistence, the scientific determinism of this conflation. But he also exploits these deterministic ideas for other specifically strategic purposes, to be examined later in this chapter.

While Hardy was clearly personally obsessed with the decline of his own family, the whole question of family decline was one which
continued to exert considerable fascination in the late nineteenth century. The rise and fall of families is evidently a reflection of changes in the patterns of ownership of land and property, which was of consuming and enduring interest to the Victorian middle-class readership. Hardy's earlier novel *A Laodicean* (1881) had Paula Power, the daughter of mid-Victorian engineering capital, bailing out the de Stancy pedigree. And, even as *Tess* was being worked on, Hardy channelled his romantic attachment to noble families into his stories for the *Graphic*, *A Group of Noble Dames*.

An allied source of romance was the antiquarian pursuit of origins, the establishing of family connections through records and documents. As Hardy has Paula Power observe: 'that notion...of being a family out of date is delightful to some people'. The pursuit of ancestry, and pedigree, was apparently quite widespread. One P. Fancourt Hodgson wrote in *How to Trace Your Own Pedigree or A Guide to Family Descent* (1889), that in public libraries 'genealogical works and M.S.S. are more consulted than any other class of literature', and claimed that 'legitimate family pride is on the increase'. The pursuit must be:

- either to prove a right to estates, unclaimed money or to a title of honour; or...to trace the varying changes and chequered fortunes and, perchance, to bring to light the heroic acts and sacrifices, of our own ancestors.

As I have outlined in my discussion of him in chapter One, for Francis Galton, the identification and cultivation of good pedigree was a cornerstone of his new eugenic programme for national and racial 'fitness'. He argued, in a *Fortnightly* article in 1883,
the need for medical family registers which would reveal 'in a
general way which are the families naturally fated to decay and which
to thrive'. 34 And in the crucial Inquiries into the Human Faculty
which appeared the same year, Galton extolled the virtues of a
'thriving and long-lived family' in determining the relative merits
of youthful applicants for a post. 35

The hunting for pedigree might certainly comprise the harmless
antiquarian pursuit of tracing genealogies, as instanced by Parson
Tringham in Tess, or it could be transmuted into a programme of
élitist science legitimising a social organism of inferior and superior
components, and hardening class arteries. It is interesting that this
duality is present ambiguously in the single term - pedigree. 'Pedigree'
is a genealogy, a descriptive term, but also an index of quality. It
seems to be a peculiarly English conflation of history and ideology,
which has continued to sustain the dwindling champions of national
and racial identity to this day. And within this conflation the
agency of the family, that mediating institution between the individual
and the state, is always central.

As I have indicated earlier, Hardy was well read in contemporary
scientific literature. By the late 1880s, his reading reflected both
the growing interest in hereditary determinism and the increasingly
pessimistic and élitist tenor of positivist discourse. From Galton's
Inquiries, Hardy had recorded in 1883:

Galton on the defects, evil, and apparent waste
on our globe

We perceive around us a countless number of abortive
seeds and germs; we find out if any group of a
thousand men selected at random, some who are
crippled, insane, idiotic and otherwise incurably
imperfect in body and mind, and it is possible that this world may rank among other worlds as one of these. 36

And from the positivist Cotter Morrison, a more commonplace anxiety about the degeneration of the population: 'the great problem of population - as things go now it is the feeblest, the least moral and most worthless classes of the community who multiply the most rapidly'. 37 And Hardy also recorded the alienist Henry Maudsley:

On how very small a minority of men the boasted progress depends actually; how entirely the intellectual possessions of the race have been gained and are maintained..... the extinction of a few hundred persons..... might throw the world back into intellect. barbarism. 38

The tenor of these scientific pronouncements chimes with Hardy's own growing pessimistic sense which was crystallising through the 1880s. One can compare a copied quotation of 1880 from one of the most important early influences on Hardy, Leslie Stephen, to gauge Hardy's own progression from an optimistic faith in slow, orderly evolutionary progress. Because of Darwinism, Stephen wrote:

We are no longer forced to choose between a fixed order imposed by supernatural sanction and accidental combination capable of instantaneous and arbitrary reconstruction [but] recognise in society, as in individuals, the development of an organic structure, by slow secular processes. 39

By the late 1880s, this Lamarckian view of evolution was becoming rapidly discredited. Hardy's note-taking reflects the activity of evolutionists running for cover at this period, as I have outlined in the discussion of the impact of Weismann in chapter One. Now that the social organism needs to protect itself from the influence of the blighted, degenerate variations (which natural selection had failed to eliminate and which threatened to overwhelm
it), new determinisms of inheritance and heredity, as the dominant factor in evolutionary change, are becoming the order of the day.

The subject of family ancestry and pedigree is at the very centre of the design of Tess. But the nature of the questions the fiction puts to this subject are quite different in their implications from any previous fictional treatment, although Hardy has briefly attempted it earlier. In The Woodlanders, Melbury respects Fitzpiers' ancestry, but as with much else in the isolated backwater of Little Hintock, his attitude is seen as old-fashioned and innocent. Hardy comments:

That touching faith in members of long-established families as such, irrespective of their personal condition or character, which is still found among old-fashioned people in the rural districts, reached its full perfection in Melbury (182).

Whereas Mrs Charmond takes quite a different view:

What mysterious merit might attach to family antiquity, it was one which her adaptable, wandering, weltbürgerliche nature had grown tired of caring about - a peculiarity that made a piquant contrast to her neighbours (90).

While Melbury's naivety is of no great importance, the Durbeyfields' 'touching faith' in pedigree is a decidedly dangerous illusion, which kicks the narrative into life and downhill into tragedy - the theme indeed becomes, as Juliet Grindle states, a 'corner-stone in the structure of the novel'. But that tragedy is also precipitated because Durbeyfield is both feckless and poor.
Tess's family is exposed to the lure of the myth of pedigree precisely because the family is so economically vulnerable. Melbury is at least protected by a modest sufficiency of wealth. John Durbeyfield, the higgler, is of that group of small tradesmen which is of recurrent interest to Hardy in his last novels. And it is in Tess that Hardy draws on his own documentation. In Chapter 51, describing the exodus of agricultural workers from the farms at Lady Day, he quotes from 'The Dorchester Labourer' essay on their plight. Tess herself has experience of both social groups anatomised in the essay. The small-tradesman's daughter experiences the hardships of the day-labourer at Flintcomb Ash.

The decline in the Durbeyfields's way of life is an interaction of social and personal circumstances; in part they bring it on themselves. In an unstable world, neither their fatalism nor their credulousness can be afforded; the myth of pedigree to which they adhere contributes largely to their disintegration.

On the other side, Angel Clare, the educated voice in the novel, looks at the question of pedigree and ancestry with a bewildering variety of attitudes. The educated view of tradition which he represents is mercilessly exposed by Hardy - Clare is, in fact, a 'slave to custom and conventionality'. We can see how Hardy mobilises the idea of ancestry to represent no one single viewpoint, but a variety of perceptions. Early on we are told that 'the material distinctions of rank and wealth he increasingly despised'. He claims, when speaking to his father as he prepares the ground for the acceptance of Tess as his wife, 'politically I am
sceptical as to the virtue of their being old...but lyrically
dramatically, and even historically, I am tenderly attached to
them' (195). And having assured Tess, shortly before the marriage,
that pedigree means nothing to him, once he knows of her ancestry
he openly avows that this fact will help him to win his parents
over, but later he turns that advantage against her, accusing her
of being 'the belated seedling of an effete aristocracy' (259).
It is not until it is too late that he realises the mystification of
whole designation:

Why had he not known the difference between
the political value and the imaginative value
of these things? In the latter aspect her
d'Urberville descent was a fact of great
dimensions; worthless to economics, it was
a most useful ingredient to the dreamer, to
the moralizer on declines and falls (364-5).

The damage, of course, has been done. Clare the 'dreamer' and
'moraliser' has done the damage by continually speaking for her. Tess
becomes an object of Clare's naming: whether what he calls her is
romantic or fanciful, it is a mis-reading which stems from the
romantic spectator in him. He observes of her, near the onset of
'The Rally' phase, 'What a fresh and virginal daughter of Nature that
milkmaid is' (148). Apart from the more obvious irony here, the
statement rebounds ironically on Clare himself, through the dense
pattern of conflicting and deliberately contrasting associations of
the idea of nature in the novel. In one sense, he unconsciously
anticipates his shock at her fall from a state of grace and of nature
when he later tells her that it is Alec who is 'your husband in nature,
and not I' (268). But both these perceptions, one at the rally and one
after Tess's confession, are the product of the educated view of
tradition which is subjected to consistent and radical exposure throughout the novel; hence Clare's declaration 'I thought...that by giving up all ambition to win a wife with social standing...I should secure rustic innocence' (263-4). Not only does that educated voice romanticise, but it falsifies. Tess both understands and reacts to the naming:

He called her Artemis, Demeter, and other fanciful names half-teasingly, which she did not like because she did not understand them.

'Call me Tess', she would say askance; and he did (158).

Moreover, Tess contests his patronage of her when he speaks about her past, although, of course, she fails, fatally, to disabuse Clare of his idealisation of her:

'But my history. I want you to know it —...'
'Tell it if you wish to, dearest. This precious history then. Yes, I was born at so and so, Anno Domini —'
'I was born at Marlott', she said, catching at his words as a help... (216).

Here is an ironic reversal of Clare's fondness for legends and stories and ancestral history. For as Tess's own history comprises a personal story which she needs to tell, Clare's instinct is to reduce that 'history' to the dry data of a biographical entry in an unwritten annal of the rural life. Clare's 'history' is her 'story'. And what she goes on to tell him encapsulates her difficulty, as she prises out her story from within the shell of the ancestral connection. But she is only able to utter meaningless and mythical history in relation to that ancestry which, by yet another ironic twist, has of course become part of the unexpressed story of her life. Clare's
reaction is thus partly explicable given the terms of patronage which he has himself set up, and to which he expects Tess to conform: "A d'Urberville! - Indeed! And is that all the trouble, dear Tess?" "Yes", she answered faintly' (216).

The 'trouble' is both hers and his: what she has suffered by that 'title' and Clare's educated romanticism about her identity. But Tess's assertion here is particularly significant. She replies to Clare's accusation that she continues to display her ancestry, 'the belated seedling of an effete aristocracy', with an assertion against the idea of privileged birth. Tess claims equality with other girls of the district who also bear the traces of lineage in their names, saying that she is not unique:

Lots of families are as bad as mine in that! Retty's family were once large landowners, and so were dairyman Billet's. And the Debbyhouses, who now are carters, were once the De Bayeux family. You find such as I everywhere: 'tis a feature of our county, and I can't help it (259).

In Tess's retort, Hardy voices the other side of his interest in family history - a sceptical attitude to the attribution of significance to the lowly social position of the descendants of well-known local families. We are back to Hardy's own recollection at Evershot of the obscure descendant of a branch of the Hardy's with the 'horse and common spring trap'. But his romantic endorsement of the affiliation on that occasion finds in Tess's protest an eloquent and common-sense rebuttal. Both the educated and the native point of view are interpolated through what Ian Gregor calls the 'calculatedly ambivalent play on "nature" which runs throughout the novel'. 42
For John and Joan Durbeyfield, the family name 'came by nature' (64). When Tess arrives home, pregnant by a man whom she isn't to marry, Mrs Durbeyfield concludes, 'Tis nater, after all, and what do please God' (111).

In each case the invocation of nature is appropriate in context; expressing a faith in a beneficent and providential force and a resignation to biological fatalism. That any definition of 'nature' cannot but invite immediate qualification as soon as a single interpretation is placed upon it, is a result of Hardy's sustained ironic treatment, which has the effect of pointing up the partiality of any one interpretation - Clare's, Alec's, or the Durbeyfields'. But Hardy had behind him Mill's Essay on Nature and T.H. Huxley's essays, particularly from 1888 onwards.

Hardy almost certainly read Huxley's 1888 essay, 'The Struggle for Existence : A Programme', the first of a group of essays anticipating the propositions of his most famous single lecture of the decade, 'Evolution and Ethics' (1893). In the essay, Huxley proposed a distinction between the province of man which was subject to ethical and moral control and the province of nature which was not. Following Mill, Huxley argues that 'nature' at its broadest could represent 'the sum of the phenomenal world' so that 'society like art, is therefore a part of nature', but he then distinguishes 'those parts of nature in which man plays the part of immediate cause as something apart; and, therefore, society, like art, is usefully to be considered as distinct from nature'. For Huxley 'society differs from nature in having a definite moral object',...
whereas 'non-ethical man - the primitive savage, or man as a mere
member of the animal kingdom - fights out the struggle for
existence to the bitter end'. Ethical man, on the other hand,
devotes his best energies to the object of setting limits to the
struggle'.

For Huxley, the Malthusian law of population is crucial to
his view of the non-ethical character of nature. As mentioned in
chapter One, he wrote in an essay of 1890, 'On the Natural
Inequality of Man', that it is

the real riddle of the sphinx to which no
political Oedipus has as yet found the
answer. In view of the ravages of the
terrible monster, over-multiplication, all
other riddles sink into insignificance.

There are certainly moments when Hardy seems to endorse this
pessimistic outlook, which finds ethical man continually defeated
by the personal and economic consequences of reproduction. Tess's
own child, Sorrow, signifies such a disruption. She is 'that
bastard gift of shameless Nature who respects not the social law' (124).
The economic plight of the Durbeyfield household is attributable to
the inexorability of Malthusian 'law', derived from the lack of
synchrony between social arrangements and sexual instinct. Hardy
questions here Wordsworth's beneficent understanding of "Nature's
holy plan" (49) but, ironically, the 'plan' can be interpreted as
the chaotic but inevitable outcome of Malthusian 'law'.

Yet Hardy treated the Huxlean dualism with some scepticism.
Huxley's winning of a secure foothold on behalf of humanity, in the
face of the almost overwhelming chaos of nature, can also be turned the
other way round. In Chapter 41 Tess's identification of her own fate with that of the wounded pheasants, allows the birds to stand as a clear symbol of her own victimisation; however, the nature-society dichotomy is effectively turned on its head, to expose, ironically, the very arbitrariness and meaninglessness of such an opposition.  

Hardy in *Tess* puts questions to a social order which Malthusian law cannot explain away; and this depends on Hardy's ability to show in the novel that the relationship between nature and society cannot be fixed by one inspection of it. No one perspective is sufficient to account for the whole reality of that relationship. Indeed, how can the barren order of Flintcomb Ash be spoken of in the same terms as the beneficent Talbothays dairy? Yet both crystallize images of the natural order. What the novel seems to resist is any simple sanction or law which would lend a stability to the relationship between human purpose and the natural order. The novel indeed exposes that stability as factitious.

Hardy resists both Spencer's evolutionary determinism and Huxley's recasting of evolutionary ethics, and instead adopts a more relativistic epistemology. Just as Talbothays is negated by Flintcomb Ash, so Tess's 'natural' qualities are negated by her 'defiling'. And the question of her 'purity' is put on the title page relativistically; how you interpret 'a pure woman' depends on where you are, and what your angle of moral perception is.

In 1891, the year of the volume publication of *Tess*, there appeared an article by E. Lynn Linton, 'Our Illusions'. A passage
from it helps to illuminate this relativistic concern of Hardy's, echoing the spirit of *Tess* in a remarkable way:

A graver illusion than any of these lies in those counsels of perfection which form part of the mythic morals inculcated on the young... Even verbal truth itself would sometimes be more dishonouring than a lie... Try any virtue that can be named, and the result is the same. Each and all change according to the angle, like shot-silk or a Brazilian butterfly's wing. There is no such thing in the whole of life as the one inchangeable absolute. And what is relativity but the illusive character of law? 49

By 'illusory' it is understood that Linton means the 'illusory' quality of 'law', which is subjected to the 'angle' of perception of the onlooker and judge. Her phrase, 'each and all change according to the angle', could be taken as a summary of one of Hardy's aesthetic and moral concerns in *Tess*: to expose the meaninglessness of any supposed 'law' relating Nature to the actual experience of life. It is Hardy's concern to see the objects of that discourse, as John Goode puts it 'from all angles that are possible'. 50

Not only is Tess, herself, subjected to this relativistic aesthetic, but her passage through the novel is organised to head-off the charge, which is still being made, that she can be seen as a biological phenomenon. It is particularly important to register that Tess cannot be reduced to a biological phenomenon, although that is certainly one way in which she is seen. For there is a tendency amongst critics who are keen to trace the influence of scientific ideas on Hardy, to read the novel as one more example of Hardy's Darwinism in practice.
Peter R. Morton has called attention to the influence of August Weismann's neo-Darwinian ideas on Hardy. As discussed in chapter One, by the late 1880s Weismann's attack on Spencerian evolution was gaining substantial ground. Hardy knew of his work and found much of it congenial, for example, Weismann's most controversial idea, that the continuous track of hereditary influence is independent of the life-history of the organism. I shall describe Weismann's impact, with reference to *Jude the Obscure*, in the next section of this chapter.

But Morton risks reducing the elements of conscious rebellion and of assertiveness in Tess to the working-out of the hereditary taint inherited from her family. Even if this was a felt response to the totality of the expression of Tess's consciousness, which can hardly be the case, then a neo-Darwinian reading of the novel would at the very least have to show that Hardy's manipulation of the heredity theme, (stimulated certainly by reading Weismann and contemporary discussions about him), is in part a response to the overt censorship which he encountered, early on in the novel's genesis. The discourse of inherited degeneracy became virtually the guarantor of the novel's very existence, as I describe in the next section. Morton has not weighed this evidence, but has taken the unitary text of 1891 as a remorseless demonstration of scientific determinism.

The kind of mis-reading that follows can be illustrated by Morton's interpretation of a passage where Tess, in answer to Clare's suggestion that she might take up history as a course of study, replies:
what's the use of learning that I am one of a long row only - finding out that there is set down in some old book somebody just like me, and to know that I shall only act her part; making me sad, that's all. The best is not to remember that your nature and your past doings have been just like thousands' and thousands', and that your coming life and doings 'll be like thousands' and thousands' (153-4).

On the surface, Tess voices her loss of individuality to a mechanistic process over which she has no control and which will do her no good to contemplate. According to Morton, 'Tess is forced against her will to remember (her past)'. But this sidesteps the issue, and ignores the specific sources of the ideological and economic determinants which lead Clare and Alec to reconstitute the past as a stick to beat her with.

Tess's plea is rather for autonomy and an escape from the perpetual discourse of definition to which she is subject, whether from her family, Clare or Alec. It is precisely a revolt against the determinism of the continuous effects of the hereditary taint - of acting a 'part'. Whilst she may read herself as a creature of determinism, it is surely naive to suppose that she endorses that ideology. For there is an undertow of irony in Tess's invoking of the standards by which others have read and will continue to read her. This is an assertion which, while it may be framed by a sense of hereditary and historical determinism, constitutes, in context, a stand against such determinism, and a radical assertion of the autonomy of the self in face of the pre-determined name, and the lie of the genes.

It is worth noting that Morton doesn't mention the one passage
in the novel which most closely reworks Weismann's terms:

The season developed and matured. Another year's instalment of flowers, leaves, nightingales, thrushes, finches, and such ephemeral creatures, took up their positions where only a year ago others had stood in their place when these were nothing more than germs and inorganic particles (156).

Here, the isolation of the site of reproduction in the Weismannite germ-plasm only heightens the awesome power of the reproductive cycle. In its sheer randomness, this stark and potent reappearance of life, owing nothing apparently to purposeful Lamarckianism, is, surely, neo-Darwinism at its least reductive.

The evolution of *Tess of the D'Urbervilles* from notes to novel is a complex process which shows the imprint of contemporary ideas on a text in an unusually explicit way - as strategies in a battle of literary production. In *Tess* there is considerable evidence from a manuscript source that through alterations and modifications to the novel, hereditary determinism is brought into play at the intersecting point between the production and reception of the text. The project of the novel meshes with another project, that of making the novel acceptable for publication. *Tess* can be seen not just as a single text, but as a series of texts which mark out a whole process of composition. The process tells us something about how Hardy can call on contemporary discourse in the period 1889 to 1891, to withstand pressures making for the novel's still birth.

According to the *Life*, Hardy was preparing for *Tess* at the end of September 1888. By the next February, he was 'well under way' and by September 1889 half of the manuscript entitled 'Too Late
Beloved' had been delivered to the firm of Tillotson who read it and promptly cancelled their agreement with Hardy later that month. Two more rejections followed in November from Murray's Magazine and Macmillan's Magazine. Hardy then moved quickly to secure an agreement with The Graphic and by the end of November 1889, finalised the financial arrangements and the starting date for serialisation, July 1891. Hardy negotiated the American serial rights with Harper's magazine in January 1890. By the end of October 1890 the whole of the manuscript had been delivered to the Graphic. Tess of the D'Urbervilles was serialised from 4 July 1891 to 26 December 1891, and published in volume form on 30 November 1891.

The period of active preparation and composition then lasts a little over two years from Autumn 1888 to Autumn 1890. The period from the end of November 1889 to October 1890 is, as J.T. Laird shows, particularly decisive in the evolution of the novel.

Laird claims to detect an ur-novel from the manuscript, which can be identified by five layers of composition. The first two are contained within the 'ur-novel' which Hardy submitted, half completed, to Tillotson in September 1889. The third, fourth and fifth layers can be identified in the manuscript after Macmillan's had rejected the novel on 15 November 1889. Hardy explained that he engaged in an 'unceremonious concession to conventionality' which entailed modifying and subtracting existing passages, and adopting overall a system of marking which would record deviations made for the serial by an inking system which retained passages for
subsequent inclusion in the volume form. Hardy, however, gives
the impression in the *Life* that all such passages were subsequently
restored in the volume form. But Laird claims that:

> what these various statements in the *Early Life*
> fail to mention are the many, and substantial,
> permanent alterations that entered the manu-
> script of the novel during the period between
> 25 November 1889 and the autumn of 1890. 63

It is clear from Laird, that from November 1889 onwards,
significant shifts of interest can be detected which throw
considerable light on the distribution of specific thematic interest
in the text and also on the play of discursive formations available
to Hardy. Some close attention to the evolution of the manuscript of
*Tess* helps to pinpoint points of tension, and the strategic use of
contemporary discourse which Hardy employed to validate his vision
of *Tess* while easing the pressures against its creation.

Perhaps the most important change that takes place in the
revision and adaptation after 1889 is in the development and
sharpening of the possibilities of decline and hereditary influence.
John Durbeyfield is made to enact his degeneracy as an explicit
vestige of a worn-out family. The opening of the novel was
re-modelled in L3 after November 1889 as follows:

> On an evening in the latter part of May a middle-aged
> man was riding home from Stourcastle market by a lane
> which led into the recesses of the neighbouring Vale of
> Blakemore. The animal that carried him
were nickety, and then was a bias in his — that was a feeble old white pony whose neck protruded from inclined him to be left of a straight line somewhat his shoulders like the arm of a gallows an empty butt.

He occasionally gave a smart nod, as if in confirmation of the same opinion: yet he, though he was not thinking of the empty basket was strapped up under his arm & speckled worsted

over of anything in a basket 64 where exposed by the bucket that showed was slung upon his arm.

His capacity for drunkenness and his deference are added features here. And the description bears an overall resemblance to the extract from the Life previously discussed. Durbeyfield's degenerate physiognomy is an added feature:

Throw up your chin...
...Look up at the sky a moment, so that I may catch the profile of your face better. Yes, that's the T'urberville nose & chin... 66

The effete passivity implicit in this attribution of degeneracy implicates Tess. Her 'submission' to separation from Angel is described in the manuscript at the L5 stage as 'a symptom of that indifference to results too apparent in the whole D'Urberville family'. This became in the 1892 edition 'that acquiescence in chance too apparent in the whole D'Urberville family'. Crucially, Tess's resistance to circumstances is toned down, and she is made to be far more the victim of the influence of heredity. When, during the threshing sequence, Tess lashes out at Alec who has been pursuing her doggedly and is now continuously present to take advantage of her demoralised state and physical weakness, Hardy makes an interesting change of emphasis for the first edition, from the manuscript. The manuscript reads 'The leather glove was heavy and thick as a warrior's and
it struck him flat on the mouth. Alec fiercely started up from his reclining position'. Whereas the first edition contains an inserted comment, 'Fancy might have regarded the act as the recrudescence of a trick in which her mailed progenitors were not unpractised'. And the more sinister aspects of her heredity are introduced in new scenes. At the farm-house at Wellbridge on the wedding night, the d'Urberville portraits on the wall are introduced in the Graphic, Clare's remark about 'those harridans on the panels upstairs' appears in the first edition, and the comparison between Tess and the portrait of the woman in the Caroline bodice in the second edition. These details add to the over-all sense of foreboding but are nevertheless rather gratuitous, displaying a certain pandering to a taste for the melodramatic, and adding little to our understanding of Tess's predicament.

The fact is that, with the evolution of the text, some of Tess's actions are subject to textual revisions which have the important effect of displacing her own subjectivity and objectifying her through discourses which make her subject to other conventions through which she can be more acceptably assimilated as a victim and an object of purity. Mary Jacobus argues that after Hardy's manuscript had been three times rejected, he submitted Tess to 'a sustained campaign of rehabilitation'. In order to purify her, Hardy strengthens the heredity theme to make her less responsible for her actions: her parents are not simply feckless, but degenerate. In addition, the characterisation of Clare and Alec becomes, in different ways, far less sympathetic. Jacobus argues that the character which
evolved in the ur-novel appears generally younger, more unformed and spontaneous and less sensitive to Alec's advances. Alec has contrived to get Tess to clasp his waist while frenetically driving the gig in the first section of the novel. Tess of the ur-novel exclaims "Safe, thank God!", she said...*with a sigh of relief*. The revision reads, 'Safe, thank God! in spite of your folly!' said she, *her face on fire*. After she allows her hat to blow off, thus contriving to get out of the gig, she refuses to get back up again: "No Sir", she said, firmly and smiling!, whereas the later Tess reveals 'the red and ivory of her mouth in defiant triumph'. As Jacobus concludes, 'The original relationship is thus both more straightforward and more intimate'. Tess's later defensiveness indicates a heightened consciousness of sexual threat as well as a heightened passivity before a colder Angel and a more dastardly Alec.

From L3 onwards, Tess becomes more firmly stamped as a scion of the d'Urberville family; it dictates both her tendency to violence and her passivity, and also endows her with more modest, noble qualities. While in the evolution of the text, Tess is increasingly associated with the d'Urberville inheritance, she remains continually sceptical about any good it will do her. This is an important motif which is present in L2 and is not significantly amended in later layers. What does, however, emerge in the final version is a sense of the deep irony of her affiliation. Although the cult of pedigree is shown to be mystifying in the light of Tess's experience, Hardy tactically uses the notion from L3 stage onward, to portray
Tess as a more victimised bearer of pedigree, rather than to project her in the direction of greater autonomy and self-awareness.

Whereas in 1889, in the ur-version of the novel, there is little sign of the determining influence of heredity working through a decayed family, nine months after the first edition was published, Hardy gave an interview to a literary journalist, Raymond Blaythwayt, in which he stated:

The murder that Tess commits is the hereditary quality, to which I more than once allude, working out in this impoverished descendant of a once noble family. That is logical. And again, it is but a simple transcription of the obvious that she should make reparation by death for her sin. 78

By 1892, Tess seems to have entered the domain of public reception as a character in her own right. She has created a magnetic field which draws in reviewers, readers and apparently Hardy himself. It seems as if Hardy needs to subject her to a form of special pleading, and the highly topical discourse of hereditary determinism can be mobilised to that end. But Hardy's text, despite the concessions to public taste in the way of determinism, is able to transcend this positivism by having Tess refuse its terms and its conclusions.
From its opening *Jude the Obscure* refuses any sense of rural rootedness. Young Jude is uprooted from one rural community to be dumped onto another, where following the death of his mother, his great aunt takes him on sufferance.

I've got him here to stay with me till I can see what's to be done with un, though I am obliged to let him earn any penny he can. 79

Jude's use value to her is minimal, as it is to Farmer Troutham. In the fields it is 'the meanly utilitarian' harrowlines which deprive the terrain of 'all history'. Here, Hardy invokes a buried history with its 'echoes of songs from ancient harvest days', its 'spoken words' and 'sturdy deeds' to enforce its irrelevance for Jude, and to point up Jude's own buried history.

One of its aspects is evoked in the early conversation between Aunt Drusilla and her neighbours about Jude. Jude is present, as both subject and object of the conversation; and he emerges from the anecdotal biography as a unit already spoken for:

The boy is crazy for books, that he is. It runs in our family rather. His Cousin Sue is just the same - so I've heard; but I have not seen the child for years, though she was born in this place, within these four walls, as it happened. My niece and her husband, after they were married, didn't get a house of their own for some year or more; and then they only had one till - Well, I won't go into that. Jude, my child, don't you ever marry. 'Tisn't for the Fawleys to take that step anymore (38).
The gossip meanders rather menacingly from an innocuous comment on the boy's craze to that of his 'Cousin Sue' and the suppressed family tragedy. Jude's still buried past is elicited not as a narrative of a lived history but as one discrete link in a chain of family misfortune which now offers itself as a possible prognosis; history is rewritten as a community myth, with its fusion of observation and prescription. Aunt Drusilla's words are a warning that the family condition, if reproduced, will inevitably replicate suffering; therefore Jude shouldn't marry, in other words, breed.

It is, of course, in all its predictive and explanatory power a harmful myth arising from within a fossilised rural culture, expressed in this déraciné Berkshire village. And these narratives contain a signifying power similar to the balladic stories which Hardy had habitually recorded from conversations and articles in the local newspapers, throughout his career.

The tragic inheritance of the Fawley family can be simply stated. It is composed of two incidents of marital breakdown. Jude's parents separated, his mother drowned herself and he is brought up by his father. Sue's mother separated from her father, taking the young Sue to London where she brought her up. In addition, there is a more distant tale about one of the Fawley ancestors who was gibbeted for trying to steal a coffin containing the child of her broken marriage. As Aunt Drusilla ruefully observes after the failure of Jude's marriage with Arabella:

The Fawleys were not made for wedlock: it never seemed to sit well upon us. There's sommat in our blood that won't take kindly to the notion of
being bound to do what we do readily enough
if not bound. That's why you ought to have
hearkened to me, and not ha' married (94).

The determinism of the community myth provides a crucial
mould into which Hardy is able to pour more powerful contemporary
modes of scientific determinism. As I have argued with regard to
the heredity motif in Tess, there is in Jude a similar conjuncture
of folk wisdom with contemporary scientific determinism. This
rural folk wisdom can speak to an extremely elaborate and sophisticated
discourse of contemporary hereditary degeneracy, to which I want to
give special attention in this section of the chapter.

In Jude this discourse is offered as a diagnosis, by which the
experience of the lives of Jude and Sue and their articulation of their
lives and experiences can be read off, as it were, as confirmation of
their degeneracy. In different ways, they would both appear to confirm
everything which the hereditary curse predicts and the authority
of the whole scientific discourse itself.

It is possible, however, to read the text in a double way. We
are urged to assimilate the degree to which Hardy works with and
elaborates the language of the discourse, but at the same time we
want to refuse the reductive conclusions to which its logic for Jude
and Sue inevitably tends. One reason is that Hardy ascribes a degree
of autonomy to Jude and Sue. This arises through Jude and Sue's
articulation of that determinism as one element in their self-conscious
inspection of their own identities and the terms of the social order
which denies them.
As in the case of *Tess*, although with a different emphasis, to keep before us this double sense of Hardy's use of the discourse helps us to penetrate his evidently problematic relationship with the contemporary public and its mediators – the publishers and literary reviewers, who themselves both articulate and generate the intellectual frame of reference, or field, into which Hardy has entered and reenters with *Jude*.

And as with *Tess*, the novel is shaped to a considerable extent by such subtle literary strategies. The deterministic discourse serves to shield the novel from moral censorship by emphasising the fatalistic and doomed components of his characters; (this can be seen in Hardy's revisions and subsequent authorial ex-cathedra comments). But more integral to the text itself, as I want to show, is the fact that the mere articulation of the consciousness of degeneration and unfitness becomes an important vehicle for the uttering of the charged language of suppressed sexual feeling, brought into play by Jude's and Sue's inspection of their own degeneracy.

Hardy's relationship to that intellectual field is worth some elaboration. From the evidence of his reports of contacts with significant contemporary figures, it is fairly clear that by the time he came systematically to prepare for *Jude* in 1892, his interest in the uses of heredity to account for a variety of psychological and pathological conditions was considerable. There is enough scattered evidence to show that Hardy was an acquaintance of several important figures in the world of contemporary science, medicine and pathology.
Moreover, he had formed relationships with writers who moved freely between the worlds of art, journalism and popular science - ubiquitous men of letters like Grant Allen, Edmund Gosse, and Edward Clodd - to whom few subjects touched on in the Nineteenth Century or the Contemporary Review would have seemed irrelevant. By the 1890s Hardy is, to a considerable extent, on speaking terms with this world.

Among his acquaintances was T. Clifford Allbutt (cousin of H.A. Allbutt whose controversial Wife's Handbook, 1887, the first widely available source of contraceptive techniques, was the subject of a famous prosecution). Allbutt moved from Leeds to London where he became a Commissioner in Lunacy. In 1891, the Life records that Allbutt took Hardy on a visit to a private lunatic asylum 'where he (Hardy) had intended to stay only a quarter of an hour, but became so interested in the pathos of the cases that he remained the greater part of the day'.

It was Allbutt, four years later in 1895, (a month before the publication of Max Nordau's Degeneration), who subjected the current anxiety that the nation was suffering from 'new and inscrutable degenerations', to relatively cool appraisal. Allbutt considered the cases of insanity with which he was professionally familiar to be 'a result of physical degeneration and of hereditary transmission', whereas 'other nervous maladies' were attributable to the frenetic environment. And in a catalogue of maladies and speculative causes, Allbutt imitated something of the neurotic tone which he identified in contemporary civilisation - resembling the remorseless prose style of Nordau:
to turn from insanity ordinarily so called, to other nervous maladies - to nervous debility, to hysteria, to neurasthenia, to the fretfulness, the melancholy, the unrest due to living at a high pressure, to the whirl of the railway, the pelting of telegrams, the strife of business, the hunger for riches, the lust of vulgar minds for coarse and instant pleasures. 86

This catalogue could easily stand as a prospectus for Gissing's *In the Year of Jubilee* (1894) or *The Whirlpool* (1897), and it is echoed throughout *Jude*.

Allbutt attributed these dispositions to 'the intellectual acuteness of many of these sufferers', an insight central to Freud's diagnosis of his hysterical patients in the early 1890s. 87 The disaffected and restless figure stigmatised by neurotic degeneracy is again present at one level of Hardy's portrayal of Sue.

Another acquaintance of Hardy's was James Crichton-Browne, who has been a Commissioner in Lunacy in the West Riding in the 1870s and was, when Hardy knew him, a specialist surgeon in London. Hardy met Crichton-Browne in August 1893 - the month during which Hardy began the full-length composition of *Jude*. Their conversation concerned a standard evolutionary comparison between men and women, and between types of women who exemplified gradations of development from nature to civilisation, as revealed in their sexuality. Hardy recorded that:

A woman's brain, according to him, is as large in proportion to her body as a man's. The most passionate women are not those selected in civilized society to breed from, as in a state of nature, but the colder; the former going on the streets (I am sceptical about this). The doctrines of Darwin require readjusting largely; for instance, the survival of the fittest in the struggle for life. There is an altruism and coalescence between cells as well as an antagonism.
Certain cells destroy certain cells; but others assist and combine. Well, I can't say. 88

Hardy and Crichton-Browne seem to have been discussing the subject of differential fertility by class. Yet Hardy noticeably resists the teleological view which attributes social behaviour to differing stages of evolutionary progress, a view barely disguising moral and class prejudices. It would have been indeed surprising to find Hardy assenting to this evolutionary-naturalist position. But then it is unlikely that definitions of women, which by the mid-1890s had become an almost habitual topic for biologists, alienists and pathologists, could not have been couched in one emphasis of evolutionary thought—one thinks of *The Evolution of Sex* (1889) by the progressive sexologists Patrick Geddes and J. Arthur Thomson, and Havelock Ellis's *Man and Woman* (1894). I have discussed this biological way of describing women in chapter One, and the theme is developed in relation to Gissing's *The Whirlpool* in the next chapter.

Both Allbutt and Crichton-Browne were present at a conversazione at the Royal Society in May 1893, where Hardy recalled talking about the exhibits to Sir R. Quain, Dr. Clifford Allbutt, Humphrey Ward, Bosworth Smith, Sir J. Crichton-Browne, F. and G. Macmillan, Ray Lankester, and others, without (I flatter myself) betraying excessive ignorance in respect of the points in the show. 89

Of this group Lankester is probably the most significant figure. A deleted entry from the Life shows that Hardy had met him the previous month at the Savile Club, along with the surgeon Lauder Brunton, (whom I examine in chapter Four as an exemplary case of the medical social-imperialist, in the post-Boer War period):
Dined with Roy [sic] Lankester at the Savile, and met James Knowles, Sir H. Thompson, Dr Lauder Brunton and others.90

Lankester was the author of *Degeneration* (1880), which, as I have discussed in chapter One in the section on The Rhetoric of Natural Selection, directed at zoological phenomena the concept of degeneration and questioned by extension the evolutionary potential of man. By the 1890s, after producing many other zoological studies, Lankester was considered to be 'the leading British authority in zoology'.91 But by the late 1880s he had stepped into the limelight of biological debate because of his trenchantly anti-Lamarckian and pro-Weismann stance on the inheritance of acquired characteristics. For Edward Westermarck, the Finnish-born anthropologist visiting London for the first time in 1887, 'It was through [Lankester] and his assistant, Ernest Weiss, that I first became acquainted with the new doctrine, (of Weismann's) which impressed me greatly'. Lankester was 'an ardent champion' of Weismann's ideas.92 Lankester had fairly extensive acquaintances among writers, including the young H.G. Wells and Conan-Doyle.93 It is very unlikely that Hardy would not have been familiar with the Lamark-Weismann controversy in which two of the leading protagonists, Spencer and Romanes were members of the Savile and the Athenaeum. On the occasion (recorded in the *Life*), of his talking with Lankester at the Savile in October 1894, the subject was not Weismann, however, but whether women were susceptible to hypnotic commands from men:

We talked of hypnotism, will, etc. He did not believe in silent influence, such as making a person turn round by force of will without communication. But of willing, for example, certain types of women by speech to do as you desire - such as 'You shall, or you are to',
marry me', he seemed to have not much doubt. If true, it seems to open up unpleasant possibilities.  

This snippet confirms the continuing and obsessive mid-1890s interest in female psychology which others shared with Hardy and it perhaps is reassuring that Hardy does not appear to share the rather clubbish tone of Lankester's reductive speculations.

The Savile in particular seems to have been a stimulating base for Hardy. His membership of it from 1878 until 1909 brought him into informal contact with several leading scientific figures, Spencer, Maudsley, Romanes, Allbutt, the inebriety-expert H.D. Rolleston, and Lankester himself. All were Savile members during the late 1880s and early 1890s.

Whether or not they were Lamarckians or supporters of Weismann's views, their writing displays how central the idea of heredity was in determining the behavioural predisposition of men and women. Rolleston, for example, contributed a chapter on alcoholism to a massive medical compendium first produced 1896-9 and edited jointly by himself and Allbutt. Rolleston noted that the hereditary trait may be traced in a very large proportion of alcoholic cases. Drunkenness not only breeds alcoholic tendencies but produces a decidedly neurotic taint and a strong predisposition to insanity: conversely, the offspring of neurotic or insane parents may be particularly susceptible to the effects of alcohol...thus drunkards beget 'neuropaths' or 'degenerates' and neuropaths again may have drunken offspring.

The extent to which Hardy took hereditary determinism for granted can be judged from his own intervention into the debates surrounding the woman question - debates which almost inevitably involved the institution of marriage and its responsibilities. Hardy made perhaps
the most considered yet radical contribution to a symposium on
sex education called 'The Tree of Knowledge' published in the
New Review of June 1894. Among the participants were Max Nordau,
who urged that women should receive 'physiological teaching' in
order to counteract the defiling of their 'mental purity' by
'wild fictions, based probably upon morbid art, detestable
literature, suggestive plays and inconsidered drawing-room and
table talk.' Other contributors were Hall Caine, Walter Besant,
Sarah Grand and Israel Zangwill.

Hardy was at this time almost exactly in the middle of composing
the full-length version of Jude which was eventually completed in
March 1895. His sophisticated contribution shows how immersed he
was in the question of marriage, its responsibilities and its
relevance to the wider claims of personal relationships in general.
Yet it is very significant that Hardy appears to take for granted the
hereditary factor. On the question of sex education before marriage
he advocates 'a plain handbook on the natural processes' but also
'similar information on morbid contingencies'. He believes that a
prospective wife should also know 'of the possibilities which may
lie in the past of the elect man'. Hardy's confident response on
this question suggests how deep-rooted an idea the inherited tendency
had become: an ever-present bias or propensity capable of breaking
out at any time in the lifetime of the subject or in his progeny.
Given this idea, Hardy implies that the marriage partner should be
forewarned of the telling signs.

Such advocacy of a medical early-warning system for transmissible
defects constituted a very enlightened approach to the subject. Hardy
was in accord with those like Havelock Ellis, Olive Schreiner and Margaret Sanger who advocated open discussion of sexual relations and their place in and outside marriage, and for whom information and medical expertise were essential components of an honest recognition of the biological variations in man. As their later attraction to eugenic questions shows, the adherence to the power of biological or genetic inheritance was unshaking. And in this they were not out of step with all contemporary discussion on the subject.

The respectable message of the symposium was that the institution of marriage could be bolstered if couples were forewarned about the reproductive processes and signs of degeneration in their prospective partners. Marriage as an institution was of course a key issue of the late 1880s and 1890s. It was reflected in Grant Allen's influential article 'The New Hedonism' (March 1895), and his plea for purity in his novel _The Woman Who Did_ (1895), as well as in a host of novels on the so-called 'marriage question', for example Sarah Grand's _The Heavenly Twins_, 1893, which Hardy owned and had read, and Mona Caird's _The Daughters of Danaus_, 1894. But Hardy's comments revealed considerable scepticism about the desirability of marriage. He suggested that marriage should not be assumed to be the only fit way of organising sexual relationships between men and women, and delicately probed the assumptions beneath the questions he was asked.
As your problems are given on the old lines so I take them, without entering into the general question whether marriage, as we at present understand it, is such a desirable goal for all women as it is assumed to be; or whether civilisation can escape the humiliating indictment that, while it has been able to cover itself with glory in the arts, in literatures, in religions, and in the sciences, it has never succeeded in creating that homely thing, a satisfactory scheme for the conjunction of the sexes.  

The full irony of the phrase 'satisfactory scheme' can only be measured when put alongside Hardy's exposure of the contradictions of compulsory passion in *Jude*.

I have suggested earlier in this chapter that the extent of Hardy's reading has been underestimated. As the literary notebooks make perfectly clear, the range of sources upon which he could draw for *Jude* is considerable, and certainly needs more investigation. Among scientific sources one can adduce Weismann's *Essays on Heredity* which Hardy read in 1890, Havelock Ellis's *The New Spirit*, (1890), Lombroso's *Man of Genius* (1891) (translated by Ellis). Hardy mistakenly recorded the 'The Insanity of Genius' which he may have confused with J.S. Nisbet's book of the same name (1889). J.O. Bailey has suggested that Hardy may have read Galton's periodical studies of family degeneration, and the American study by R.L. Dugdale of the notorious degenerate Jukes family, although there is no evidence of this. It is, of course, possible that Hardy may have read Havelock Ellis's account of Dugdale's study in *The Criminal* (1890), but again this cannot be proved. Equally, Hardy may well have been familiar with the tenor of Galton's periodical
writings. More recently, a good if overstated case has been made out for the influence of Maudsley's *Natural Causes* and *Supernatural Seemings* (1886), which Hardy recorded in his notebooks in 1888.\(^{109}\)

Other key non-scientific contexts for *Jude* would be Schopenhauer's *Studies in Pessimism* (1891) recorded by Hardy in May, 1891,\(^{110}\) J.A. Symonds's *Essays Speculative and Suggestive* (1890) recorded in 1891;\(^{111}\) Ibsen's *Peer Gynt* (W. and C. Archer's translation), recorded in May, 1893;\(^{112}\) Sarah Grand's *The Heavenly Twins*, (1893), recorded May 1893;\(^{113}\) Walter Pater's *Appreciations*, recorded in 1890;\(^{114}\) and George Egerton's *Keynotes* (1893), recorded in January 1894.\(^{115}\) His nose for the distinctive text in this period is acute indeed.

With such evidence of Hardy's engagement with the literature of degeneration, and of his familiarity with the intellectual society that produced it, it would not be difficult to identify *Jude* as a determinist, or even a eugenicist, fiction - a 'tract for the times'. Nor would it be difficult to see *Jude* and Sue as specific instances of the degenerate condition. - But as has been shown in the discussion of *Tess*, at this late stage in Hardy's experience as a novelist, there is an inherent improbability in any such straightforward relationship, in his writing, between ideology and fiction. It is the contention of the remainder of this chapter that the configuration of levels of meaning in *Jude* is deceptively complex, and that Hardy is ironically detached from concepts that he appears to be committed to. Hardy could quite truthfully state that his book concerned the 'doom or curse of hereditary temperament', whilst behind this mask of contemporary discourse he preserved his freedom to promote more 'unutterable' themes.
The dynamic of the novel, to a significant extent, is located in this space of meaning.

It is important, first, to dwell on the objectifying discourse which surrounds and involves Sue. She is capable of challenging the language of her objectification, and yet at particular dramatic moments in the novel, she is unable to escape this designating discourse. It is likely that in order to allow Sue to undertake the subversive task of exposing the 'contiguity of nature and society', which 'constitutes the ideology of marriage', Hardy must characterise her as a neurasthenic woman.

Sue is clearly intended to approximate to this neurasthenic type: a new woman, she exemplifies the degenerate condition of modern civilisation. We notice how often Sue and civilisation are identified, and it is no accident that she has been brought up in London which for contemporary observers was the nodal point of the civilised, nervous condition discussed by Allbutt, Nordau and many others during the 1890s. Her nervous disposition is continually insisted upon. 'She is of a nervous temperament' (116); 'All was nervous motion' (113). As a child she is diagnosed as 'a pert little thing...with her tight-strained nerves' (132); a 'fine-nerved, sensitive girl, quite unfitted by temperament and instinct to fulfil the condition of the matrimonial relation with Phillotson, possibly with scarce any man' (235). Hardy presents her as inherently unfit for marriage: the discourse of neurasthenia attributed sexlessness to the 'new woman', with whom the neurasthenic was closely identified. And it is Sue's rather than Jude's pathology that struck a familiar chord with the reviewers. For Hardy's friend, Edmund Gosse, Sue was a 'poor, maimed "degenerate",
ignorant of herself and of the perversion of her instincts'.
Her presentation constitutes 'a terrible study in pathology'.

And R.Y. Tyrrell asked:

To what end is all this minute registry of the fluctuations of disease in an incurably morbid organism? Why dwell on this fantastic green sickness? Marriage laws do not suit Sue's warped and neurotic nature...She has no sense of the dignity of womanhood and motherhood, and so all her relations with the other sex become impure in her morbid imagination.

The character of Sue so conformed to the existing discourse of female pathology that it was partly through her pathological status that the novel, itself, was appropriated as a study in pathology. This, in turn, became a criterion of its failure as a work of art. Gosse commented on the intervention of 'the physician, the neuro-pathist' who 'takes the pen out of the poet's hand'. Tyrell wrote that 'Mr Hardy's powers have undergone a sad deterioration...or he has determined to try the patience of his public...(with)...in lieu of a novel a treatise on sexual pathology'. Only Havelock Ellis seemed capable of penetrating the fashionable terminology of neurosis (to which he had himself contributed), to identify Sue's complexities with the complexities of modern civilisation:

Sue is neurotic, some critics say; it is fashionable to play cheerfully with terrible words you know nothing about. 'Neurotic' these good people say by way of dismissing her, innocently unaware that many a charming 'urban miss' of their own acquaintance would deserve the name at least as well. In representing Jude and Sue as belonging to a failing family stock, I take it that Mr. Hardy by no means wished to bring before us a mere monstrosity, a pathological 'case', but that rather with an artist's true
instinct...he indicates the channels of least resistance along which the forces of life most impetuously rush. Jude and Sue are represented as crushed by a civilisation to which they were not born, and though civilisation may in some respects be regarded as a disease and as unnatural, in others it may be said to bring out those finer vibrations of Nature which are overlayed by rough and bucolic conditions of life. There refinement of sexual sensibility with which this book largely deals is precisely such a vibration.121

Jude's reactions in the immediate aftermath of the breakdown of his marriage to Arabella can help, I think, to bring out these perspectives. Illuminated by the 'fundamental error' of their 'matrimonial union', Jude confronts the logic of the inexplicability of 'having based a permanent contract on a temporary feeling which had no necessary connection with affinities that alone render a life-long comradeship tolerable' (93). Jude gains insight here - realising the sheer unconnectedness between the two elements which the ideology of marriage puts into a logical connection - 'temporary feeling' and 'permanent contract'. But where we may be able to see Jude's realisation of this disjuncture, as an example of achieved understanding, he is nevertheless forced to confront the alternative logic of the hereditary myth. The myth offers a determinism which can bypass his efforts to wrench apart the terms of marriage, and can objectify the subject - Jude at the moment of his leap towards self-awareness - as the subject of the family logic. Arabella herself voices it:

Going to ill-use me on principle, as your father ill-used your mother, and your father's sister ill-used her husband?...All you be a queer lot as husbands and wives; (93).
But Jude's sense of the hereditary logic, which annexes his subjectivity and disposes, if the logic is pursued, of his achieved understanding, is reinforced by his great-Aunt whom he straightway visits. He learns from her two-thirds of the account of his troubled family history. She reiterates the folk myth which Jude would seem to have confirmed: 'There's sommat in our blood that won't take kindly to the notion of being bound to do what we do readily enough if not bound' (94).

Aunt Drusilla returns to Jude his own heredity as a narrative and a diagnosis - the terms of the myth. She is, of course, the one person at this time who could explain his past as a lived history with values by which he can live, but she does not. She is soon to die, her myths intact but still powerfully resonant. Jude now contemplates suicide by drowning:

> It was curious, he thought. What was he reserved for? He supposed he was not a sufficiently dignified person for suicide. Peaceful death abhorred him as a subject and would not take him (94).

This very Schopenhauerian consideration, in its obvious narcissism (Jude gazes not so much at the pool as at his own imaged self as victim) is also expressive of that decadent consciousness commented on by John Goode: Jude's habit of indulging, with ironic detachment, images of reality which preserve an ideal vision of a coherence denied him.123

But the effect of the failed suicide attempt is, in a way, appropriate, since it means the failure of the attempt to annihilate that sense of otherness which makes up the diagnosed self. Jude can
contemplate his life only at a distance, as a process and phenomenon. His ironic pose is both posture and the curious realisation of the self confronting its determinants. He now ironises and interpolates the very deterministic Darwinism in which the degeneracy of alcoholism is expressed:

> What could he do of a lower kind than self-extermination; what was there less noble, more in keeping with his present degraded position? He could get drunk. Of course that was it; he had forgotten. Drinking was the regular, stereotyped resource of the despairing worthless. He began to see now why some men boozed at inns (94).

The force of 'stereotyped' carries with it Jude's voluntary submission to institutionalised self-pity, as well as signalling to himself the terms of degenerate behaviour as specifically a function of both heredity and class. To annihilate the self through drink signifies indeed the presence of the symptomology. The subject is displayed in all its determinacy - as a work of ironic despair.

Hardy, then, makes Jude confront the implications of his hereditary endowment. It is surely, then, a naive reading to interpret Jude's behaviour as simply degenerate. But that is how it was interpreted; by Gøse, for example: 'Jude, a neurotic subject in whom hereditary degeneracy takes an idealist turn, with some touch of what the new doctors call megalomania'. But it is completely characteristic of Jude and Sue to inspect their own motives. Jude, for example, locates his causes of failure in a spectrum of reasons. Returning to Christminster on 'Humiliation Day' Jude tells his audience:

> It was my poverty and not my will that consented to be beaten. It takes two or
three generations to do what I tried to do in one; and my impulses - affections - vices perhaps they should be called - were too strong not to hamper a man without advantages (336).

A little later in his peroration he declares 'I was, perhaps, after all, a paltry victim to the spirit of mental and social restlessness, that makes so many unhappy these days' (336). But Sue counters this determinism:

'Don't tell them that!' whispered Sue with tears, at perceiving Jude's state of mind. 'You weren't that. You struggled nobly to acquire knowledge, and only the meanest souls would blame you!' (336).

Earlier, on leaving Christminster with his academic aspirations abandoned, he fears that

his whole scheme had degenerated to, even though it might not have originated in, a social unrest which had no foundation in the nobler instincts; which was purely an artificial product of civilisation. There were thousands of young men on the same self-seeking track at the present moment (149).

Jude can define himself as a victim or a product as well as a subject, so drawing attention to what has victimised and produced him - the 'mental and social restlessness' and 'social unrest'. In doing so, he exposes the circularity of the contemporary diagnosis, in which sexual innovation and Allbutt's 'intellectual acuteness' are classified as degenerate.

Jude's own exposure of patterns of determinism also takes the form of questioning the very evolutionary process itself. Jude greets the prospect of taking his own and Arabella's son Father Time:
The beggarly question of parentage - what is it, after all? What does it matter, when you come to think of it, whether a child is yours by blood or not? (288).

What indeed? And yet it is the hereditary factor, the blood connection - 'sommat in our blood' - persistent in the novel, which maintains its grip on Jude and Sue's consciousness. Jude's declaration is a direct assault on the tyranny of the blood relation. Jude continues:

All the little ones of our time are collectively the children of us adults of the time, and entitled to our general care. That excessive regard of parents for their own children, and their dislike of other people's is, like class-feeling, patriotism, save-your-own-soul-ism, and other virtues, a mean exclusiveness at bottom (288).

In its implications this statement is perhaps as revolutionary an assault on bourgeois ideology as one can find in Hardy. The effect of Father Time's haunting presence, however, is to point up the continuing antagonism between the natural and social law which ushers in Father Time's Malthusian punishment. The effect of that scene is to attack (as the opponents of the Malthusian League had to do) the economic and moral practices grinding Sue and Jude down. Yet Father Time is invoked at this moment as a utopian abstraction, an idealisation which, like other fantasies and dreams in the novel, such as Jude's dream of Christminster, cannot be realised within the respectable morality of Biles and Willis. Their Utopian logic works for the destruction of the family system by focussing the process of generation itself. Sue embraces the image of a child shorn of its hereditary and family ties, emptied of accumulations of family and
hereditary determinants - by enthusiastically welcoming that the child may not be Jude's: 'And if he isn't yours it makes it all the better. I do hope he isn't'. Jude answers her, 'Well, you must assume about him what is most pleasing to you, my curious little comrade!' (288). To perceive the child as an object of pleasure helps to sustain the child as an image of Sue's projection. It is an aestheticised object of delight, sited within the repressive individualism of the family, adrift from the moorings of its inheritance.

The very terms of evolutionary development are now made the subject of Jude and Sue's aestheticising:

He projected his mind into the future, and saw her with children more or less in her own likeness around her. But the consolation of regarding them as a continuation of her identity was denied to him, as to all such dreamers, by the wilfulness of Nature in not allowing issue from one parent alone. Every desired renewal of an existence is debased by being half alloy (195).

The Galtonian law of ancestral contribution to heritage lies behind Jude's recognition of the impossibility of generating an immutable image of perfection. The image of purity is debased by its exposure to the laws of nature, through the conjunction of the sexes.

Jude and Sue, at different moments, apprehend through these aesthetic images the authenticity of their own conception as peculiarly tainted products of the infinitely random process of selection, which constitutes the evolutionary process. They are painfully conscious of their own value as a debased, alloyed currency. And they virtually become images of the evolutionary process itself, further devaluing
and degenerating their own alloyed inheritance.

Their projection of unalloyed images - untrammelled by and unshackled from moral or scientific determinism - extends to their projection of themselves as images of whole identities. The point at which they most closely achieve these impossible totalities is when they embrace what respectable society forces them into - obscurity and anonymity. So, significantly, their period of greatest happiness is when they move as 'such an obscure pair', as nomads (only one step perhaps away from the vagrant gypsy of the romantic imagination). We recall, too, how Tess's consciousness is least invaded by the repressive meanings which others ascribe to her, when she is solitary, engulfed by landscape:

Whither they had gone nobody knew, chiefly because nobody cared to know. Any one sufficiently curious to trace the steps of such an obscure pair might have discovered, without great trouble, that they had taken advantage of his adaptive craftsmanship to enter on a shifting, almost nomadic life, which was not without its pleasantness for a time (320).

Their existence corresponds to Sue's wish, days before, for an occupation 'in which personal circumstances don't count', (318). This life is the most approximate pact they can make with another, earlier, dream of Sue's when, alone with Jude in a shepherd's cottage, she revels in being 'outside all laws except gravitation and germination' (158).

Their displacement from conventional society forces them to cultivate their own obscurity far outside the dictates of a social order which denies them wholeness. They escape too from the power
of the hereditary myth which has usurped Jude's buried history, but has mystified their relationship, thus fragmenting their attempts to become whole. They never win the freedom to make their own physical and spiritual wholeness the medium of their utterance. They are driven, instead, into utterance of a series of first drafts of that wholeness: a continuous register of their self-conscious ironic displacement.

There are two passages in the novel, amongst others, where Hardy's use of the language of degeneracy is pressed into service to channel 'unutterable' feelings; to provide a displaced utterance of sexual awareness. In both passages we are conscious of two levels of articulation. The degenerate discourse cannot be read off as expressive sexually, it is rather that this form of diagnosis serves as a mask for personal candour. As readers we find ourselves continually anticipating a series of exchanges between Jude and Sue which are never actually achieved. Their exchanges are hampered by Sue's desire for a committed non-sexual association, untramelled by legality, and by Jude's need for that association to be sexual. This serious conflict of desires could constitute the substance of their exchange. Yet although it is continually implied, it is only their preoccupation with their unfitness which eludes censorship. Only a shadow of the unexpressible is cast by the beams of diagnostic light which they throw on their predicament.

The scene in which Arabella calls on Jude, when he and Sue are living together, unsexually, at Aldbrickham, is one example of how recourse to the degeneracy diagnosis both suggests sexual
utterance, and represses it. Jude is about to go out to find Arabella a second time. Sue exclaims that 'she is too low, too coarse for you to talk to long, Jude, and was always'. Jude answers her:

Perhaps I am coarse too, worst luck! I have the germs of every human infirmity in me, I verily believe - that was why I saw it was so preposterous of me to think of being a curate. I have cured myself of drunkenness I think; but I never know in what new form a suppressed vice will break out in me!(280).

The suppressed vice in fact signals his need for sexual fulfillment, for in the next sentence he declares 'I do love you, Sue, though I have danced attendance on you so long for such poor returns' (280). This curious abrupt illogical movement of thought could be accounted for by the strained function that the degeneracy discourse is here asked to perform. Within the terms of the ideology the fact that Jude alludes to his own coarseness as a response to that quality of Arabella's - 'perhaps I am coarse too, worst luck!' - merely situates that comment in his degenerate past, recalling that degenerate moment when he first experiences sexual attraction to Arabella - 'there was a momentary flash of intelligence, a dumb announcement of affinity in posse' (63). Jude appears to accept that he could again be passively carried away by sexual abandonment; and it is this passivity before the inevitable, though uncontrollable, manifestation of the degenerate taint within the personality which of course stigmatises the degenerate as a type. The embedded deviation will always win the struggle with the exercise of consciousness. And here the specific term of Jude's degeneration is significant; further anchoring the diagnosis to the discursive field of the mid-1890s which Hardy has assimilated. Jude's infirmity is implanted in him specifically in the 'germs'. I don't see how
this cannot be interpreted other than as a reference to Weismann's theory of the inheritance of characters through the germ plasm. The anti-Lamarckian character of Weismann's theory stresses the transference of characters activated at the point of sexual conjunction, since it is within the exchange of germ particles that the nascent inherited factor is renewed. The act of sexual exchange becomes far more the focussing moment of the hereditary history, while by this interpretation the acquired characteristics learned through the experience of life play no part at all. Jude's declaration of hereditary infirmity is couched in biological language to express the urgency of sexual passion but it then becomes clear that these are not simply indiscriminate feelings but are aimed specifically at Sue. The strange disjuncture between Jude's admission of this uncontrollable vice and his declaration of love for her is a reflection of the disjuncture between Jude as victim of his sexuality, his passivity before it and his assertive passion for Sue where sexuality is dissolved within elaborate and evasive cadencies - 'I have danced attention on you so long for such poor returns' (280). Then in the rest of the speech, Jude claims that Sue has regenerated him from grossness: 'All that's best and noblest in me loves you, and your freedom from everything that's gross has elevated me' (280).

This declaration of her enbalming influence on him constitutes the mirror image of his degenerate passivity, by subsuming sexual feeling beneath Sue's regenerative influence on him. One effect of this is to annex Sue's desire for a free non-sexual association to the service of an abstract idealism by which Jude can regenerate himself from his own degeneracy. And it again evades sexual utterance.
The focus is on Sue to act, and now it is her very nobility, which Jude has constructed, which appears to crack open. For Sue cries out self-pityingly to him for help, believing, apparently, that Jude will desert her given his predisposition to coarseness. Arabella exists as a threat which is clearly unreal, but Sue mistakes Jude's altruism for desertion - 'I have nobody but you, Jude'. She now assumes the role of the sexless, unnatural, neurasthenic woman, offering the mirror-image of Jude's sexual degeneracy by diagnosing herself in this way:

She ran across and flung her arms round his neck. 'I am not such a cold-natured, sexless creature, am I, for keeping you at such a distance? I am sure you don't think so! Wait and see! I do belong to you, don't I? I give in! (280).

Both her claim on Jude and his on Sue are in one sense dishonourable. In Jude's case he demands, unreasonably, that she should succumb to him because of the intolerable restraint he nobly (in her ennobling of him) is suffering. And Sue, out of an illusory fear of Arabella's influence, forces herself against her wishes into a display of sexual obeisance.

The rhythms of assertion and counter-assertion dominate. Jude oscillates from his declaration of passive potency to assertive and sexual idealising of Sue. Sue veers from controlled autonomy to self-abnegation and dependency. These eddies will not stabilise their feelings of sexual passion and comradely love. They seem rather to constitute elaborate and tantalising evasions of love's utterance: the self is caught up in the whirlpools of their self-consuming degenerate condition.
Earlier, at Melchester, Jude and Sue become increasingly involved with each other. Each has told the other about past relationships - Sue with the undergraduate, Jude with Arabella. Sue, now engaged to Phillotson, faces squarely the idea of marrying Jude, despite the obvious obstacle of Arabella. They now invoke their degeneracy through the family myth at the very moment of defining the terms of their relationship - poised between the possibility of sexual union unlegitimated by marriage on the one hand, and an acutely sensitive awareness of how marriage could destroy them:

They stood possessed by the same thought, ugly enough, even as an assumption: that a union between them, had such been possible, would have meant a terrible intensification of unfitness - two bitters in one dish.

'Oh but there can't be anything in it!' she said with nervous lightness. 'Our family have been unlucky of late years in choosing mates - that's all'.

And then they pretended to persuade themselves that all that had happened was of no consequence, and that they could still be cousins and friends and warm correspondents....(187).

The buried issue here is whether they can deal with a sexual relationship - overlaid with the associations of their cousinship. And this relationship continually signals the bad consequences of their own sexual and procreative potential. Their sexual passion (and the guilt these feelings promote) is expressed through their consciousness of their own unfitness. And the mythic power of the family history helps to shield them from these intolerable feelings. To consider themselves as subjects to other determinants, no matter how absurd, protects them from acting, whilst sustaining their profound attraction and commitment.
This is an evident difficulty for Hardy. The language of the passage strains towards an explicitness about their sexuality, and in terms of the ideology of marriage, points to subversive consequences. The straining is there in the compromising, inexplicit phrases - 'they pretended to persuade themselves that all that had happened was of no consequence' (187). What does 'all' refer to - the family past; the recent intensification of their feelings for each other; the moment a dozen pages earlier in the market square at Shaston where Sue shuns Jude's physical approach; or their recently-narrated past affairs? Hardy here is in collusion with their inability to verbalise these feelings, in substantiating their projection of each other as mere relations 'cousins, friends, warm correspondents' (187). These stolidly invoked terms provide no answer, and seem to call attention to everything that has passed between them as communicating subjects. The text suggests this, but only evasively; it does not embody that experience. If, however, they could absolutely refute to themselves the significance of the determinism, that would be for Jude and Sue to appropriate the sense of themselves as subjects, rather than to continue to see themselves as objects of the deterministic or moral ideology. They could make their sexuality a medium of self-definition. The text would then utter what it continually suppresses but simultaneously suggests.

It is, of course, anachronistic to ask this of a novel of 1895, but at the same time, it would be blinkered not to suggest that Hardy invokes the diagnostic discourse partly to preserve in his characters
the very power of utterance of these questions. And the discourse paradoxically allows Hardy to preserve the novel's existence within the field of intellectual and literary production and reception that nurtured it.

This dialectic may help to account for Hardy's apparent willingness to discuss the novel. In correspondence immediately after its publication in November 1895, he insisted that Jude was not primarily about the marriage debate itself. To Gosse he wrote: 'It is curious that some of the papers should look upon the novel as a manifesto on "the marriage question" (although of course it involves it)' 126

It may also explain his insistence on the importance of the hereditary determinant in the novel. Again to Gosse, he wrote that Jude:

\begin{quote}
 is concerned first with the labours of a poor student to get a University degree, and secondly with the tragic issues of two bad marriages, owing in the main to a doom or curse of hereditary temperament peculiar to the family of the parties. 127
\end{quote}

On the same day, he wrote to Florence Henniker, with whom he had discussed the genesis of the novel at length in 1893, in a similar vein; but with one apparently insignificant yet pregnant difference:

\begin{quote}
 It is curious that some papers consider the story a sort of manifesto on the marriage question, though it is really one about two persons who, by a hereditary curse of temperament, peculiar to their family, are rendered unfit for marriage, or think they are [my emphasis]. 128
\end{quote}

That is surely the point. It is not that Jude and Sue are merely unfit, but that Hardy allows this fact and the discourse of degeneration
which orchestrates it to enter into their own consciousness
and utterance. Their sense of unfitness allows Hardy to negotiate,
as far as he can, their articulation of these questions, because
Jude and Sue anchor themselves to that definition and continue to
invoke their unfitness as they veer towards the unutterable.
'The Hope of Pessimism' was completed by Gissing in October 1882 but never published in his lifetime. In it, Gissing wrote out his intellectual farewell to the values of positivism which he had been actively supporting for the past five years. Not long after his return to England from America in 1877, he had become a self-conscious positivist. In that period his first novel, *Workers in the Dawn* was written (1879) and published (1880). It seems that Gissing became profoundly disenchanted with positivism during the summer of 1881. His next novel, *The Unclassed*, was begun the following February and completed in December 1883, for publication in 1884.\(^1\)

In breaking with Frederic Harrison, Morley and Beesly, Gissing was turning his back on an intellectual grouping which had had considerable influence, but was now distinctly less radical and politically self-conscious than it had been ten years earlier. Yet positivism continued to exercise a methodological hold until the end of the century and beyond, particularly on social scientists like Charles Booth and Fabian socialists such as the Webbs, Sidney Olivier and others, as has been described in chapter One.\(^2\)
Positivism embodied the belief that positive knowledge could only be obtained by methods used by natural science and that what could not be known by these methods was therefore unknowable. As a scientific endeavour it could assimilate evolutionary thinking to its cause, although there was much in such thought which was not compatible with positive philosophy. Gissing is a striking case of a writer who retains a positivistic scientism, as it is embedded in evolutionary discourse, whilst formally renouncing the philosophical stance of the practitioners of the positivist method.

It was of critical importance for Gissing to dismantle the organic relationship which positivists always maintained between the application of scientific thought and the affirmation of the progress of humanity. Evolutionary science applied by the positive method has been made to yield 'a principle of beatitude', with the result that all kinds of contradictions were glossed over in the interests of 'humanity'; which was, as Gissing noted, a ubiquitous term in positivist discourse. There was nothing in positivism which could counter the effects of what he saw to be the quickening struggle for material survival; indeed the materialism of positivism amounted to an endorsement of the existing political order. The optimistic 'religion of humanity' had an obligation to explain such a social order, which contradicted the very altruism so central to the positivists' view of human nature: 'to make this present life of ours an end in itself is equivalent to the discouragement of just those virtues which altruism presupposes'. (87).

Gissing remarks in the essay that before the era of 'Agnostic optimism' is established, we will have to imagine 'the intensifying...
of the social strife which everyday grows more bitter'. Yet significantly, that strife is a function of material privilege and economic hegemony: 'imagine wealth accumulated in the hands of yet fewer capitalists, and the immense majority toiling desperately for mere subsistence' (89).

The social order, which he calls, acerbically, 'this scheme of commercial competition tempered by the police code', is actually endorsed by positivism which can harness evolutionary science to legitimise it and Gissing ironically applauds the 'survival of the fittest' ethic at the heart of it:  

The competitive system...is the grandest outcome of civilisation. It makes us robust and self-reliant...Does not science - the very newest - assure us that only the fittest shall survive? If we tread upon a feeble competitor, and have the misfortune to crush the life out of him, we are merely illustrating the law of natural selection (90).

Gissing appears to be fully aware of the degree of social change necessary to usher in a 'just order', but he refuses to believe that positivism can deliver it:

Did the supporters of the new religion make its universal acceptance dependent upon the prior success of a social revolution, the outcome of which was to be the establishment of a just order, we could...concede the logical strength of their position (90).

The thrust of his argument is that the 'religion of humanity' is a tautological conception. By continuing to endorse it, positivists impale themselves on the horns of an insoluble dilemma. The scientific spirit which they bring to humanity in a spirit of optimism, is capable merely of ratifying the existing order. Moreover, positivism is politically misdirected, since the antagonism between capital and labour, which Gissing already acknowledges, is dissolved and mystified
into a nebulous conception of 'humanity' which indeed requires a strict division between the 'brains' and 'numbers', in John Morley's famous formulation. 5

Gissing was far from being a revolutionary thinker, nevertheless he recognised that the positivist creed was profoundly idealist in conception and that it would take something of an economic and social revolution to effect a change in human nature. Although he is increasingly drawn to a static and pessimistic notion of human 'nature', under the influence of Schopenhauer, yet he is capable of a genuinely radical insight: that 'human nature' is not a fixed datum, but a concept determined by the exercise of ideology, and specifically political ideology; and defined, in its limits and possibilities, by material conditions.

A break with positivism is also important for an understanding of his development of a personal fictional voice during the early 1880s. As all the biographical evidence shows, his fictional route was difficult and precarious. That he turned his back on a radical-journalist career, at a moment when prospects were certainly quite propitious, is some evidence of Gissing's need of a free space, unoccupied by the orthodoxies of liberal humanism, which only the production of fiction could win for him. Yet the paradox of the novelist must have been all too apparent to Gissing himself. He is made free, but he is also bound, as the journalist is not, by the irrationalities of the market. It is the difference between Biffen and Milvain; and Gissing is the least Milvainic of novelists both in temperament and practice.
But to break formally with positivism did not mean that he could withstand the discursive field of evolutionary science. It is one aim of this chapter to show that Gissing was working with what, by the 1880s, had become an elaborate and widely-diffused discourse, available through popularisation of Darwinism to writers of all kinds — including some of his novelist contemporaries against whom he must be measured.

In Gissing's first novel, *Workers in the Dawn* (1880), there is an exchange between Gresham, an artist, and his ward, Helen Norman, who has returned to England after a *wanderjarh* in Germany, during which she has become committed to positivism and social reform. Gresham believes the poor are 'not to be classed with human beings but rather with brutes', attributing to them inherited degeneracy:

> Persistent self-brutalisation through many generations...has brought them to a condition worse, far worse, than that of dogs or horses that do their bidding. It is my firm belief that their degeneration is actually and literally physical; that the fine organs of virtue in which we possess all that we have of the intellectual and refined, have absolutely perished from their frames. 7

Helen counters with an argument which explains persistent poverty through society's indifference: 'This misery is...the result of the criminal indifference and the actual cruelty and oppression of the higher ranks of society'. She admits that 'they often seem mere beasts', but that, 'I cannot, I will not believe that this is more than seeming'. For she retains, to the end, 'a vivid faith in humanity'. 8

Degenerationist argument enables Gresham to distance himself from the poverty question. This is an attitude which readers are
clearly invited to condemn, and yet is one of several distinctive approaches to the social question in *Workers* - including Helen's philanthropic position, and the revolutionary creed of the radicals, Tollady and Pether. By contrast with his next published novel *The Unclassed* (1884), in spite of the opening exhortation to 'Walk with me, reader, into Whitecross Street'; Gissing leaves the location of poverty generalised. Even at its most degraded, the language is both unfocussed and undisturbing. Describing a brutish Christmas in Whitecross Street, he writes:

> out of the very depths of human depravity bubbled up the foulest miasmata which the rottenness of the human heart can breed, usurping the dominion of the pure air of heaven, stifling a whole city with their infernal reek.  

Here the 'miasmata' is a free-floating if striking image; it is a secular version of the traditional rhetoric of religious indignation. The poverty question itself appears to be a subject of the novel; it is certainly on the agenda of authorial discourse. But Gissing's difficulty is to light on a convincing relationship to it. *Workers* reads, at times, like a catalogue of discrete and unconnected attitudes to this abstract poverty question.

Yet in his next published novel *The Unclassed* (1884), by way of contrast, Gissing materialises the 'miasmata' as a disease which is bred within a specifically delineated slum enclave, which kills the slum owner. Urban poverty is particularised and spatialised within the novel. It is now a concrete yet eternal fact of existence in which biological and environmental determinism menacingly renders London as truly 'outcast'. Gissing evolved a new relationship between
the displaced protagonist and the claims on conscience of the social question. The claims of optimistic humanitarianism are found wanting. Through his main protagonist, Waymark, Gissing now nailed his colours to the mast of an aggressive, if ineffectual, aestheticism where the social is not ignored (it is, in fact, considerably more active in the 1884 edition than the revised 1895 edition would suggest), but is deflected and turned into raw material for aesthetic consumption and literary production. In fact, Arthur Golding, near the end of *Workers*, anticipates Waymark in *The Unclassed*; as his 'democratic furor' burns itself out he commits himself to the cause of art.

It is evident that Gissing had become increasingly critical of the possibilities of the positivist route to social reform, in which the personal life was to be sacrificed in the interests of the wider humanity. Having settled with himself the obligation to promote the social question through his fiction, he becomes free to engage imaginatively with the poor on his own aesthetic terms. From *The Unclassed* onwards, Gissing created urban landscapes which, within rigidly defined boundaries, were set apart from the integrating impulses of humanitarianism. It is not an exaggeration to say that Gissing embraced and assimilated contemporary deterministic discourse, to establish his own personal fictional voice which had lain mute in *Workers in the Dawn*. I want to examine how Gissing structures the urban landscapes of three novels of the 1880s, *The Unclassed* (1884), *Demos* (1886) and *The Nether World* (1889). He allows the contemporary discourse of biological degeneracy direct and generous access to his fictions.
More intensively than his major novelistic contemporaries, Gissing employed a considerable armoury of evolutionary concepts and terms. More thoroughly than might have been expected of a major novelist, he welcomed the 'technology' of evolutionary discourse, and offered demonstrations of tainted inheritance, reversion and incomplete recapitulation. He is not alone in this preoccupation, which was common amongst writers who, in the legitimate quest for sensational fictional effects, produced a kind of 'physiognomonic' fiction, using the currency of contemporary discourse. The figures and stereotypes of this fiction articulated contemporary fears and moral panic about the survival capacity of deviant types and groups. The degenerate figure, whether measured by reversion, acquired inheritance or incomplete recapitulation, was unquestionably an exciting, dangerous, even erotic subject, in the hands of writers such as R.L. Stevenson and Lucas Malet. For better or worse, by such means a writer gained a purchase on a readership. This is especially so in the case of Demos (1886). The novel's evident melodramatic effect derives significantly from the propagandist function of the evolutionary emphasis, exploiting anxieties about the biological threat, and the political threat, from the organised working-class.

But it is in The Unclassed (1884) that we first meet the
authentic product of the degenerate urban terrain, in the man-beast Slimy. He is the starkest emblem of the residuum, which as I have suggested in chapter One, focussed a whole cluster of issues arising in the increasingly unstable world of the early 1880s.

Slimy's atavistic physiognomy is not figurative, but quite literally that of a figure calculated to induce terror:

Leaning on the counter, in one of the compartments, was something which a philanthropist might perhaps have had the courage to claim as a human being; a very tall creature, with bent shoulders, and head seeming to grow straight out of its chest; thick, grizzled hair hiding almost every vestige of feature, with the exception of one dreadful red eye, its fellow being dead and sightless. He had laid on the counter, with palms downward as if concealing something, two huge hairy paws. 11

Subsequent references to 'monster' or 'creature' reinforce the bestiality of this grotesque, as does the use of the impersonal pronoun 'it' in the original three-volume edition of 1884 (but deleted in the revised 1895 edition). The general effect of the revisions is to tone down the more sensational depiction of his polluting and disturbing animality. The 1884 edition adds the following to this set-piece description:

Its clothing, if the word can be used, was a huddled mass of vilest rags. Its presence was pollution to all the senses; the air grew foul around it, as it breathed with the heavy snorting of a beast. 12

This anticipates the retributive smallpox which emanates from the effluvial slime in one of Woodstock's own slum tenements, to kill him. Slimy lives in Litany Lane, one of Woodstock's slum tenements, and assaults Waymark who is collecting rents for Woodstock. Slimy embodies all the disruptive potential of disease, as a defining
characteristic of a degenerate and dangerous class. He inhabits a particularised social space which is new to Gissing's fiction; the slum enclave which is part of the total urban picture, but cut off from its 'civilised' face. It is an area populated by the 'unfit' who inhabit that space with a 'degenerate' tenacity. Echoes of this spatialisation of a class-formation beyond official society, and thus apparently not subject to its rules, as I have discussed in chapter Two, can be found in other novels dating from the early - mid 1880s; Hardy's *The Mayor of Casterbridge* (1886) is one example and Lucas Malet's *Colonel Enderby's Wife* (1885) another.

Mrs Sprowl's pub, where we first encounter Slimy, has been sought out by Harriet Smales who takes 'an omnibus eastward' and seeks 'a neighbourhood which most decently dressed people would have been chary of entering after nightfall'. However, a passage subsequently deleted from the 1884 edition shows, in a small detail, Gissing's concern to create an enclave which is defined by deviant abnormality. The barmaid is a girl, 'whose look suggested feeble-mindedness, if not idiocy. She smiled constantly in a vacant manner, and moved her head about fantastically'. In another deleted passage, the pathological components of Harriet's character are displayed when, on a later visit to Mrs Sprowl, she suffers a convulsive fit prior to planning her ruse to discredit Ida Starr.

Many such passages were deleted for reason of economy. They contain some gratuitous elements, in some cases low-life dialect conversations, which show Gissing's commitment to a version of popular realism which surfaced in the occasional short-story of the 1890s, such as *Lou and Fiz* and *Fleet-footed Hester*. This was
outlawed territory for his novels of the 1890s. Yet we come away from the 1884 edition both with a more striking impression of the novelist's attempt to render accurately the contingency of working class life, and also a sense of Gissing striving for melodramatic effects, through a more literal assimilation of popular science.

The spread of the miasmatic disease of Litany Lane, as Adrian Poole notes, does not suggest 'the interconnections of a whole society', as the disease of Tom-all-Alone's strikes the 'innocent' figure of Esther in *Bleak House*: rather it kills the landlord with retributive 'selectiveness'. This enables Gissing to attack Woodstock's ethic of capitalist force, and indict philanthropy. Woodstock's conversion by Ida (who is improbably made to expiate guilt for her own degraded past, by performing charitable acts for children of the East End) is an unconvincing after-thought. The novel suggests that neither conversion of the heart, nor capitalist reform, can alleviate the condition of gross poverty which was being rediscovered as an outrage in the early 1880s.

If society is not worth patching up, its evils can be eradicated only by tearing down and rebuilding. It is no accident that 1883, the year of the composition of *The Unclassed*, seems, as I have suggested in chapter One, to mark a whole refocussing of institutions and formations on class lines. Among a myriad other voices there is a call for social revolution. As John Lucas has suggested, the literature of the 1880s cannot be read without reference to that possibility. The disease of the slums is the mirror image of social revolution, the presence of the atavistic Slimy a threat of
subversion of the social order. The rent collector
is a significant target, for it is 'rent', after all, which forms
the basis of the gradualist, Fabian, non-revolutionary, socialist
programme on housing and ownership in the 1880s. Slimy's world
refuses to compromise; it is beyond civilisation and beyond
reform.

If Woodstock's capitulation to the slum's miasma effectively
indicts his exploitative practice, it equally obliterates the
possibilities of reform. Such was Gissing's sense of its futility.
In the 1884 edition, the effect of Woodstock's death is more
provocatively shocking. In this version he is more sharply
caracterised as an individual, whose liberal capitalist role
(he is very much a Spencerian man of progress, force and laissez-faire)
is programmatically undermined. Much is made of Woodstock's conscious
commitment to public and parliamentary life and his devotion to blue
books. Waymark rather naively envies the 'experience and command
which were the outcome of half a century's keen dealing with the
world's affairs'.

Gissing is explicitly satiric: 'What a worthy citizen was
Abraham Woodstock! What an enlightened, free and independent elector'.
In the 1884 edition, the contradiction between Woodstock's 'official'
allegiance to Westminster and his dereliction of duty as a landlord
is more pronounced, since the site of degradation, Litany Lane,
the district of Mrs Sprowl's pub in Westminster, is set in the
shadow of the site and symbol of the official world, Parliament itself.
But by 1895, Gissing had removed all allusions to Woodstock's
political interests, and transposed the Westminster slum to an unspecified East-end location. Given the publication of In the Year of the Jubilee (1894), the previous year, 'Elm Court', not surprisingly replaces the more ironic 'Jubilee Court' of the earlier edition.

In the 1884 edition, Gissing is keen to undermine Woodstock's establishment-credentials. But the revised edition of 1895, whilst dispensing with the moralising longeurs, and some of the gratuitous detail of the earlier edition, softens the political implications of the diseased slum. Gissing produces an altogether less decisive and more muted version. The revision shows, too, how in revising a triple decker into a single volume, Gissing was excising much 'filling' which that form had necessitated. He had been clearly unhappy about the exigencies of writing the three-volume novel after the appearance of the three-volume The Unclassed in 1884. He wrote to Algernon in 1885, that 'I shall stick to the plan of two volumes, it is speedier work'.¹⁹ But despite this, his new novel, A Life's Morning, was eventually published in 1888 as a triple decker.²⁰

Demos (1886) is the most propagandist of Gissing's novels; hereditary determinism is at the core of its programmatic design. As Adrian Poole suggests, Gissing appears to offer the novel 'as an overt parable about the moral and cultural incapacity of the working class to use power for anything but selfish ends'.²¹ Demos would seem to have as its theme the working man in the mass, but it is through one 'exceptional' figure, Richard Mutimer, that Gissing pursues a more pervasive interest of his: the exploration of what
separates the worlds of the middle and working classes. This question
is, in part, a cultural one, as Poole suggests. However, that gap
is more fundamentally rendered by scientifically-based ratification
which, to the end, governs the curiously ambivalent authorial
relationship into which Gissing enters, with Mutimer. He is
created, it seems, as the living proof of the impossibility of
successful class mobility and integration. Yet this is not
'culturally' explained. Instead, Gissing looks to an elaborate
scientific verification. He frames a biological experiment which
delivers a result; the conclusion confirms the teleological
hypothesis from which he starts.

Initially, Mutimer is presented heroically. His character is
defined by his proletarian radicalism and his unusual idealistic
energy. He is a suitable projector of the Owenite New Wanley
experiment in industrial organisation which is to follow. But the
hero, and the heroic plan, are set up only to be programmatically, and
somewhat ruthlessly, undermined. Mutimer's credibility and the
world of political radicalism of contemporary London are each
destroyed, whilst the privileged world of Adela Waltham emerges
greatly strengthened, if not endorsed, through Gissing's insistent
comparison of her moral integrity with Mutimer's brutality, figured
as a 'natural' function of his proletarian origins.

Through the stock device of inherited money, Gissing allows
Mutimer access to the moneyed world of the Walthams as he pursues
his industrial objective. However, the scheme is increasingly
marginal to the main interest: it becomes little more than a plaything
of Mutimer's. The emphasis is put on the compromising exposure of
Mutimer to upper-middle class landed society, and the alternative
vision of aesthetic retreat offered by Hubert Eldon, Adela's other
suitor. It seems clear that Gissing intends the New Wanley scheme both
to give the London socialists (transmuted into 'Demos') a focus for their
disenchantment and a show of mob-like barbarism. It also provides a
convenient means of access for a working-class figure to a world of
privilege for which he is not 'fitted'.

The deliberately ambivalent construction of the novel, with
its stark dissociations and thematic ruptures, is surprisingly
difficult to pin down. For it is part of the novel's programme to
disguise the very contradictions which sustain it; the discourse of
biological determinism is adeptly mobilised - indicting socialist
idealism by exposing Mutimer to the determinism of his own hereditary
taint. He thus becomes a demonstration and a study of biological
degeneracy, to the extent that his tainted inheritance undermines the
autonomy and integrity of self. Such is the power of this
objectifying discourse in Gissing's hands, that the degenerate
Mutimer cannot really in the end be held morally responsible for his
acts of desertion, bad faith and boorishness. He is placed outside
the conventional terms of reference which would place him as a morally
objectionable figure. Yet, typically in Gissing, the determinism
denies him redemption as well. The unredeemable quality of Gissing's
'degenerate' characters is discussed a little later in this section.

In Mutimer's rise to prominence and his subsequent downfall,
the determinism is played off against his evident capacity for
freedom of choice, mobility and adaptation, which his own hybrid
biological inheritance permits:
Richard represented - too favourably to make him anything but an exception - the best qualities his class could show. He was the English artisan as we find him on rare occasions, the issue of a good strain which has managed to procure a sufficiency of food for two or three generations. His physique was admirable; little short of six feet in stature he had shapely shoulders, an erect well-formed head, clean strong limbs, and a bearing which in natural ease and dignity matched that of the picked men of the upper class.  

Physical qualities apparently represent moral qualities. The physically deficient class, in which he is an exception, is characterised by his friend, Daniel Dabbs,

the proletarian pure and simple. He was thick-set, square shouldered...A man of immense strength, but bull-necked and altogether ungainly - his heavy fist, with its black veins and terrific knuckles, suggested primitive methods of settling dispute (34).

Dabbs, as it turns out, is morally the better man. But it is necessary early on for Gissing to present a favourable view of Mutimer so as to make him worthy of respect in the socialist club.

However, Mutimer's inability to sustain the experiment springs less from technical or economic difficulties than from the specific failures of his character. These defects are then projected on to a broader canvas for ideological consumption through the degeneracy discourse.

Mutimer's defective personality is uncovered layer by layer to reveal the degenerate bedrock which is his class, as signalled by such details as his verbal reversion to his London mechanic's accent, 'with defect and excess of aspirates'. It is through Adela's perception of him that his dissection is carried out. In a scene during a train journey Mutimer's physiognomy is displayed
as a phenomenon which she perhaps ought to have been on the look out for earlier:

His lips were sullenly loose beneath the thick reddish moustache; his eyebrows had drawn themselves together, scowling. She could not avert her gaze; it seemed to her that she was really scrutinising his face for the first time, and it was as that of a stranger. Not one detail had the stamp of familiarity: the whole repelled her. What was the meaning now first revealed to her in that countenance? The features had a massive regularity; there was nothing grotesque, nothing on the surface repulsive; yet...she felt that a whole world of natural antipathies was between it and her. It was the face of a man by birth and breeding altogether beneath her (349-50).

This is Gissing's naturalistic programme at his starkest. Adela and Mutimer are separated by 'natural antipathies'. Moreover, there is a play on 'natural' here. Despite Mutimer's cultural conquest of her he is, to the end, an alien figure by birth and blood, through 'nature'. But the antipathies between them are natural and made to seem normal. Gissing transmutes the . . . . . . of biological and class determinism into an unexamined truth, thus undermining the careful expectations built up in the early part of the novel that a fortunate and gifted member of the working class might gain permanent access to privilege. In an earlier scene in which Adela is the near victim of Mutimer's sexual violence Gissing plunders the physiognomy of reversion for maximum melodramatic effect:

He turned, propped himself against the dressing-table, and gazed at her with terribly lack-lustre eyes. Then she saw the expression of his face change; there came upon it a smile such as she had never seen or imagined, a hideous smile that made her blood cold. Without speaking, he threw himself forward
and came towards her. For an instant she was powerless, paralysed with terror; but happily she found utterance for a cry, and that released her limbs.  

As John Lucas has observed, 'it is as though what Gissing most fears about this unholy alliance is the possibility of miscegenation'.  

Gissing establishes Mutimer's personal distinction at the beginning of the novel as an explicitly exceptional specimen of working-class manhood. All personal deficiencies, it is insinuated, can be traced back to his class (which at one point is described as 'in an elementary stage of civilisation'), and returned not as unusual but actually typical. Mutimer has gained only a provisional reprieve from the inevitable manifestation of his degeneracy. Yet Mutimer's hybrid status allows Gissing to raise him up and then offer him as a degenerate subject for moral dissection. The language of degeneracy is called upon by Adela to describe the disintegration of the temporary privilege which money has conferred upon him; a privilege which entails a moral superiority now turned on its head. As Adela becomes the subject of the novel - the fluctuation of whose consciousness and sensibility we are increasingly invited to register - so Mutimer ceases to be a subject within her mental world, and emerges as a teleologically-constructed subject of the analytical discourse and moral censure, which seeks out and secures Adela's complicity.  

It is not that Mutimer is unfairly treated, nor that Adela is not right to be revolted by him, but that the means by which Gissing makes Adela and Mutimer deal with each other must inevitably fall apart to reveal the essential naturalistic programme at the heart
of the novel.

As has been seen in chapter One, fear of the threat of 'barbarism' was a characteristic of the 1880s. Examples from the past were naturally strongly at work in a culture still attached to the study of the ancient world. But now these anxieties were reproduced in more pressingly immediate shape by evolutionary discourse. From the mid 1880s onwards, writers of fiction were quick to exploit these concerns, finding metaphors of threat from the 'residuum' and types and figures marked by deviant attributes. Gissing's Demos (1886), with its intensive exposure of Mutimer as a specimen of atavism or reversion, shows him as probably better read in the subject of biological contamination than any other novelist of the time, but the power of the idea to shock helped to make it a serviceable topic for many other writers.

The shock lay in the intensified discovery of the contiguity of barbarism and civilisation. Science endorsed a model of literal barbarism. By some quirk of the evolutionary process, the uncalled-for, deviant variety or savage 'sport' could co-exist with the most highly developed species of Victorian civilised man. A famous popularisation of reversion was Jack London's The Call of the Wild (1903) in which the call to Buck, the leader of the dog pack, resounds from the ancestral wolf, bringing on the ecstasy of ancestral recognition. It is a popularisation of an idea going back at least thirty years or more; the pathetic moment which only perhaps in the form of a fable can achieve that degree of intense memorability. Wells, as we shall see in his 'scientific' fables or
romances, could likewise exploit the sensational possibilities of reversion, so pointing up the narrow dividing line between man and beast.

But there is little doubt, too, that the literary reversion expressed conventions derived from popular melodrama. The uncovering of the villain of the piece and the unmasking of vice beneath the smooth civilised surface, in charged recognition scenes, had their evolutionary analogues. By the 1870s, reversion was well established in evolutionary discourse.

Darwin had drawn attention to reversion as a principle of inheritance in The Variation of Animals and Plants Under Domestication (1868). He remarked that, whilst there was nothing unfamiliar in children resembling their grandparents more than their immediate parents, it was 'astonishing' when a more distant resemblance was observed.26 Drawing on evidence from breeding of animals and plants, he noted that reversion occurred either when an uncrossed race or variety had lost, through variation, some characters it had formerly possessed, or more dramatically, when a species had 'at a former time been crossed with a distinct form, and a character derived from this cross...often having disappeared during one or several generations, suddenly reappears.'27

This phenomenon was transformed into a rationale for the emergence of unexpected characteristics in man, exemplified by the 'sport' or freak of nature. Such behaviour and characters were interpreted as manifesting regressive steps down the rungs of the evolutionary ladder, to less civilised and more 'savage' states. However, what was designated 'savage' was also an index of violence
and brutality as well as untutored primitivism. Walter Bagehot, in the early 1870s, talked of the 'inherited passions' which were held in check by civilisation but released on barbaric occasions such as the French Revolution: 'we see frequently in states what physiologists call atavism, or rebirth...to the unstable nature of their barbarous ancestors'.

Clinical interest in reversion, in the 1880s, is illustrated by the work of D. Hack Tuke, an alienist professionally concerned with the insane and the criminal. In 1885 he argued that a person who possessed no conventional moral sense, and showed no remorse for wrong-doing, suffered from 'moral insanity', and should be designated a 'moral imbecile' and an atavism:

Such a man is a reversion to an old savage type, and is born by accident in the wrong century. He would have had sufficient scope for his blood-thirsty propensities and been in harmony with his environment in a barbaric age, or at the present day in certain parts of Africa.

Although there is no use made of evolutionary discourse in R.L. Stevenson's Dr Jekyll and Mr Hyde, published in December 1885, three months before Demos, there is a scene from the story comparable with one in Demos. The narrator, Dr Lanyon, describes the crude and melodramatic transmutation of Hyde into Jekyll. Lanyon's account claims the authority of the trustworthy medical expert:

He put the glass to his lips and drank one gulp. A cry followed, he reeled staggered, clutched at the table and held on, staring with injected eyes, gasping with open mouth; and as I looked there came I thought a change. He seemed to swell - his face became suddenly black and the features seemed to melt and alter - and at the next moment I had sprung to my feet and leaped against the wall.
The comparison with Gissing is worth making, less perhaps for the explicit similarity of technical vocabulary, than for the framing of an observable process of palpable transformation. Stevenson's design on the reader is clearly less ideologically loaded than Gissing's presentation of Mutimer, whose residual brutishness is commended as typical of his unnatural and unworthy class aspirations. And whilst in Stevenson the agency of transformation is chemical and not hereditary, both writers dramatise an important contemporary concern, the terrifying contiguity with civilised behaviour of ungovernable, often violent, feelings. How these drives could be described, investigated and accounted for is very much a concern of the literature of the 1880s. This was a period in which the irrational was asserting itself in the language of character analysis, and the psychological landscape was being re-drawn.

Stevenson was not unaware of the phenomenon of reversion. In an essay of 1883, 'The Character of Dogs', the dog is treated as 'an exception, a marked reversion to the ancestral type, like the human being in fact'. In his short story Olalla, first published in December 1885, (it appeared in volume form in 1887), he describes a degenerate Spanish family, originally high-born, now living in slothful, if gracious, poverty. The faithful and childlike son is hirsute and of 'a dusky hue':

The treasure of ancestral memory ran low; and it had required a potent, plebian crossing of a muleteer or mountain contrabandista to raise, what approached hebetude in the mother into the active oddity of the son.
And Olalla herself is the beautiful, secretive but destructive daughter who proceeds to attack the narrator like a wild cat and then soothes his wounds, pledging never to perpetuate her family, but to allow it to die out for good. The story has little additional interest other than as a possible source for H.G. Wells's *The Island of Dr Moreau* (1896), in which the off-stage shrieks of vivisected animals could well have been suggested by the nocturnal cries of bestial pain in *Olalla*: 'it was no illusion; some living thing, some lunatic, or some wild animal, was being foully tortured'.

Another novel of the mid 1880s, Lucas Malet's *Colonel Enderby's Wife* (1885) declares itself to be the 'history of a deviation'. The narrator states that:

> Occasionally...even in the most physically and mentally conservative of races there occurs a sudden deflection from the accustomed type. It is probably only a case of reversion, of a return to an older strain of blood.

In similar vein to the Olalla figure, Jessie Enderby, the principal subject in the 'moral dissecting room', as Malet calls her novel, is portrayed as egoistical, and self-absorbed, destructive but beguiling. Her husband suffers from a chronic heart condition. By cajoling him into dancing with her, she precipitates his physical collapse and premature death. Yet she has a 'dash of original genius', not shared by the mediocrities of the declining Enderby household. The centre of reassuring authority is, again, a medical practitioner for whom Jessie's ecstatic and hedonistic dancing recalls 'a race of beings supplying the link between ourselves and the dumb animals about us'.
Jessie's destructive qualities in some respects anticipate the neurasthenic and hysterical attributes of female psychology constructed in the 1890s. Typically nervous and highly wrought, her self-possession is significantly 'over-vitalized'. She is also 'unnatural' by refusing the positivistic remedy for her egoism: the self-sacrifice and salve of motherhood. Yet Jessie's amorality is absolutely of its time, in Malet's description:

Her feeling was purely selfish. She had not the smallest sense of obligation to her husband, hardly of commiseration for his suffering - only that dreadful furious feeling, that her playthings were all broken and that nobody was there to mend them; that the world was spoilt to her.

Malet undoubtedly brings to mind Gissing's studies of female egoism - particularly in the horribly mis-matched marriages of Carrie and Arthur Golding in *Workers in the Dawn* and later Ada and Arthur Peachey in *In the Year of Jubilee* (1894). But while Carrie suffers considerable degradation, at no time is she objectified by evolutionary discourse. The most interesting case of female egoism is Harriet Smales, the wife of the hapless Julian Casti. And in Harriet we observe Gissing allowing to accrue around her stock associations of a lower evolutionary existence. But he does not dispatch her specifically to a lower evolutionary status, (her egoism recalls rather the Comtist phase of egoism in George Eliot's work).

And this is important because it is only after Gissing had completed *Workers* that he began, as I have described, to unshackle himself from positivism and to assimilate the psychology of Schopenhauer for whom the irrational and amoral act of egoism was a
guiding force of the inevitable assertion of 'will'. Untrammeled by
the easy meliorism of positivism, Gissing finds in Schopenhauer a
transitional ideology of female psychology which will both serve the
positivistic notion of egoism as an evolutionary phase and a more
teleological, biological and reversionary interpretation of egoism,
which will find full expression in the character of Clem Peckover
in *The Nether World*.

Harriet is unaware of the qualities of fine feeling and
'nice complexities of conscience' in her husband Julian Casti:

> She neither admired nor despised him for possessing them; they were of unknown value, indifferent to her...until she became aware of the practical use that might be made of them (105).

And in a passage deleted from the 1895 edition, but present in the 1884 edition, Gissing comments:

> Herein Harriet was typical of the people whose lack of principle arises from their lack of imagination; they do not disbelieve the existence of noble motive, but recognising its presence in this or that person, are simply unable to comprehend the nature of such a characteristic.

Here the sentiment is not dissimilar from the voice of George Eliot (with, say, Rosamond Vincy in *Middlemarch*). But Harriet is not redeemable. The possibility of moral growth through a belated recognition of wrong-doing and the operation of conscience is not available to Gissing's Harriet. The crime she commits against her childhood enemy Ida Starr (she plants a spoon on Ida who is subsequently arrested and jailed) is no vehicle for the purging of guilt. Though Harriet can almost be counted among the moral imbeciles, she has an independent force which refuses to be labelled. Despite
being of the degenerate and atavistic world of the slums,  
of Mrs Sprowl's pub and of Slimy, the reversionary man-monster,  
Harriet is not specifically a reversionary figure. But she is  
played off from the first page against Ida who in conventional  
terms (she becomes a prostitute) falls below Harriet morally.  
If there is a redemption in the novel, it lies in Ida's adoption of  
the philanthropic role which Helen Norman had played in Workers in  
the Dawn.

Ada Peachey, sister to Beatrice and Fanny French in  
In the Year of Jubilee, is another figure devoid of respect for  
moral authority: 'For such minds no moral authority - merely as a  
moral authority - is or can be valid. Such natures are ruled only  
by superstition'.

One part of this novel is firmly grounded in lower-middle  
class suburbia, Gissing's aim with Ada being to expose pretentions  
to gentility by making her symptomatic of her class. She is lazy  
and neglectful, jealous and gratuitously violent. When she learns  
that her husband Arthur has left home taking the son, she starts to  
smash up what no longer contains her energies, the suburban home and  
its intrusive furniture. But her sisters, one of whom, Beatrice,  
is revolted by 'wanton destruction of property', also reveal animal-  
like propensities; Beatrice 'sprang upon the wild animal, and  
flung her down'. And the mining of the surface finally yields the  
class image of fraudulent aspiration:

Now indeed the last trace of veneer was gone,  
the last rag of pseudo-civilisation was rent  
off these young women; in physical conflict,  
vilifying each other like the female spawn
of Whitechapel, they revealed themselves as born-raw material which the mill of education is supposed to convert into middle-class ladyhood (253).

But because Gissing is dealing with a 'sham education', an agency which can interpose between the classes and permit an assertion of 'culture', the reversion is not to a hereditary deviation but back to the working class origins of the parents from a recently acquired gentility. The reversion convention here services a version of cultural degeneration which by the early 1890s had begun to preoccupy Gissing and which, by definition, was not biologically determined. It is, of course, part of a wider movement from biological to cultural determinism which we can trace in the work of Wells and others.

Perhaps the most memorable and certainly most thorough-going depiction of reversion in Gissing is the figure of Clementina Peckover in *The Nether World* (1889). The name is obviously emblematic, suggesting a hierarchical 'pecking' order in which she has to peck to survive, or be pecked. Both her physical appearance and her early presentation within the hierarchy of the Clerkenwell power structure, bear that significance out. Gissing establishes her presence, very early on, as a figure thoroughly grounded in appetite. Her remarkable physiognomy is described after we have witnessed her fondness for food and drink, and her bullying of Jane Snowdon.

That physical, moral and behavioural characteristics are interchangeable is a tactic of 1880s naturalistic discourse which we have examined in *Demos*. So often the literary presentation depends
on some exposition of the synthesis of evolutionary naturalism on which the intellectual appeal of the discourse rests. Clem is thus presented explicitly as a magnificent study in deviation: 'her forehead was low and of great width; her nose was well shapen, and had large sensual apertures'. Later, she is described as 'in the very prime of her ferocious beauty':

her shoulders spread like those of a caryatid; the arm with which she props her head is strong as a carter's and magnificently moulded. The head itself looks immense with its pile of glossy hair (120).

Clem appears to be the very opposite of idealised womanhood. She is 'cruel', 'fierce' and 'crafty'. In this blend of feminine and masculine qualities, she emerges as something of a sexual hybrid, recalling what Darwin says in *Variations*: animality is not purely a masculine or a feminine trait, but seems to be accompanied by the emergence of secondary sexual characters: 'In every female all the secondary male characters...apparently exist in a latent state ready to be evolved under certain conditions', instancing (among other species) the hen:

which had ceased laying, and had assumed the plumage, voice, spurs and warlike disposition of the cock; when opposed to an enemy she would erect her hackles and show fight. 44

Gissing seems to have found a model for Clem in the commonplaces of breeders' manuals. The 'warlike disposition' is fully on display in the ironic Bank Holiday scene which degenerates into violence. Pennyloaf, her rival, is the first to display her 'erected nails'. Clem responds: 'in an instant she had rent half Pennyloaf's garments off her back, and was tearing her face till the blood streamed' (112).
Other familiar atavistic tags apply to Clem. She is beyond civilisation, 'Civilisation could bring no charge against this young woman; it and she had no common criterion' (6). And, 'in laughing, she became a model for an artist, an embodiment of fierce life independent of morality' (8). But Gissing's objectification of her atavism is somewhat contradictory. As though thinking out loud he insinuates that she is a phenomenon who defeats the observer, and that he can offer only a plausible evolutionary rationale. She is both contained within authorial discourse and beyond it too: 'Who knows but this lust of hers for sanguinary domination was the natural enough issue of the brutalising serfdom of her predecessors in the family line of the Peckovers?' (6).

But this suggestion of an inherited degeneracy can be put against the suggestion that she is a 'degenerate' of the urban environment - the 'nether world' of the novel. Gissing now adopts the tone of the studious and considered, rather than mystified, observer, searching for the most telling image to square the contradictions of the degeneracy thesis:

Her health was probably less sound than it seemed to be; one would have compared her, not to some piece of exuberant normal vegetation, but rather to a rank, evilly-fostered growth. The putrid soil of that nether world yields other forms besides the obviously blighted and sapless (8).

Here the environmental rather than hereditary influence is paramount. Clem is a recognisably vigorous if discarded product; she is both fit and vigorous as well as diseased and degraded.

But Clem is actually less representative of the world of the
novel than her degenerate typicality would suggest. For the degeneracy of the 'nether world' does not bear on the powerful metonymic representation of the contingent life of the people on its streets, alleys and tenements. The degeneracy has its source in a specific rhetoric which Gissing seems to adopt at moments in the novel when he wishes to distance what he has so vividly and intimately brought to life.

Gissing places the world of the novel beyond the reaches of civilisation, which means that it is pitched beyond the reaches of the degeneration diagnosis as well. The novel's total social space finds Clem, marginalised. Increasingly she becomes little more than a series of reflex responses to J.J. Snowdon's manoeuvrings; and a creature of static desire and of the conventional and functional plot centering on the quest for the Snowdon inheritance. To read the novel as if Clem's lust for money was symbolic of a pervasive appetite would be to ascribe to the plot a centrality which it clearly does not have.

To get beyond civilisation in this novel is not to be exposed to a horror gallery of atavistic degradation. It is to be placed beyond the tactical command of the social space of London occupied by writers who have hitherto determined how the urban poor should be depicted in novels. The 'innocent' degenerationist thesis can only be sustained by a mode of writing which can preserve a rigid and unironic distance between the analyst and the degenerate subject in a symptomatic reading by the informed and privileged observer. Although Gissing at times claims this 'privilege', as I have shown, he entirely resists the lure of the polemical crudity of Arnold White,
whose *Problems of a Great City* (1886) Gissing read the day before he started the novel. 45

Gissing deflects the lure of the ideology by the solidity of the novel's form and the strength of its metonymic pact with the social space of Clerkenwell. From within the 'impenetrable', inexorable quality of the world declared rhetorically 'beyond civilisation', Gissing can represent the limited autonomy of the lives of Kirkwood, Jane, Pennyloaf and the Hewitts, Clara and Bob. They engage with the specific determining constraints - housing, employment and the law, that define the possibilities and boundaries of this world.

The markedly degraded characters who would be netted by Charles Booth's classification A and B - (Bob in his more desperate phase, Pennyloaf and Mrs Candy) - have an autonomy of existence which Clem is never really granted; she may be brilliantly stamped but she is quite inert. Our first glimpse of Pennyloaf Candy is through Bob Hewitt's eyes on the way home from work:

'Hello! that you?', he exclaimed, catching her by the arm. 'Where are you going?'
'I can't stop now. I've got some things to put away, an' it's nearly eight'.
'Come round to the Passage to-night. Be there at ten'...
...Pennyloaf hastened on. (72).

The social space of the novel, as John Goode has suggested, is physically precise. 46 Beyond the reaches of the philanthropic ideology, Bob and Pennyloaf move in and out of specific houses on named and connected streets and alleyways and the rhythms of much of the narrative capture and enact this closed world of material dependence.
It is only when Gissing stands back from this created 'reality' that it threatens to become inexorable once more. Jane Snowdon, on her way home from work, calls on Pennyloaf, who now bears Bob's child, (work and mobility are necessary components of the best of Gissing's working class fiction, as in novels like Margaret Harkness's *City Girl* (1887) and *Out of Work* (1888)). Gissing pulls back to observe with Malthusian disgust:

> On all the doorsteps sat little girls, themselves only just out of infancy, nursing or neglecting bald, red-eyed, doughy-limbed abortions in every stage of babyhood, hapless spawn of diseased humanity, born to embitter and brutalise yet further the lot of those who unwillingly gave them life (129-30).

Here rhetoric takes over from subject. We move from the concrete 'girls on the doorsteps', through to the biological image of 'spawn of diseased humanity' via the transitional reductionist 'abortions in every stage of babyhood'. The analytical voice is present at many points during the novel - in the Bank Holiday sequence for example - and in the philanthropic episode, where the inhabitants of Shooters Gardens including Pennyloaf and her drunken mother are turned into subjects of an objectified social strata. But Gissing can persuasively affirm the integrity of the world beyond official sanction, as when the poor show themselves to be unresponsive to Miss Lant's philanthropy, yet loyal to the informal support system of the native Batterbys.
I have examined in chapter One, how the struggle for existence lent ideological ratification to a Spencerian version of laissez-faire individualism. A Malthusian battle for scarce resources by a growing pressure of population was presented as a 'natural' if not eternal fact of existence. Attempts were made to counter that appropriation, by deploying the language of struggle in the cause of the economically-deprived working class. But the more successful challenge to the Spencerian notion of survival of the fittest emerged by the late 1880s among the scientific popularisers of evolution, and turned on the question whether an ethic of evolution was possible, let alone desirable. Novelists of the period such as Gissing, Hardy and Meredith instinctively distanced themselves from naturalistic ethics of the Spencerian sort, and found a more congenial spokesman in T.H. Huxley who, as has been already discussed, attacked the equation in Spencer of 'fittest' with 'best'. Yet as the works of these writers show, the conception of struggle was at the very heart of the experience of the central protagonists: indeed in evolutionary terms many of Hardy's and Gissing's 'heroes' are failures in that struggle. Our response to them depends on our bringing to the often elaborate metaphorical presentation of the idea of the universe as a struggle, a counterpoising criterion of 'fitness'.

The vocabulary of Darwinian evolution, as I have suggested earlier, is perpetually on display in Gissing's fiction. More explicitly than
in Hardy, Gissing voices through his characters the urgency and pressure exerted by the analogical implications of terms like 'survival', 'struggle' and 'fitness'. Indeed, one of Gissing's limitations as a novelist is that whilst he is able to make the reader susceptible to the searing vulnerability of his characters' states of isolation, alienation and exile, he perhaps insufficiently interposes an alternative or distancing vision to the determinism by which they define themselves. So often the characters' terms become the terms of the novelist. Yet, by the same token, Gissing is able, in that deadlock, always to keep the class and social and economic determinants in the forefront of our evaluation of his protagonists' 'fitness'. And in *Born in Exile* he does so, conclusively, by actually heightening the presence of evolutionary or Darwinian language, and making it the function of an explicitly ironic and anti-heroic programme to expose the springs of class privilege.

In 'The Hope of Pessimism' Gissing announced his opposition to Spencerian ethics. That he was aware of the dominant ideological allegiance claimed by that cast of evolutionary thought is clear from this remarkable piece of angry mockery:

> Let this constitute a man's creed, and consciously or unconsciously, he will inevitably make it his first object to secure possession of his birthright. The social results which directly issue from such a conviction in the individual are only too plain before our eyes. Hence this scheme of commercial competition tempered by the police code, to which we are pleased to give the name of a social order. The motto of our time is: Every man for himself, and the Devil take the hindmost... The competitive system, depend on it, is the grandest outcome of civilisation. It makes us robust and self-reliant: we expect no mercy in the battle, and accordingly give no quarter: the strong man will make his
way; for the weak are there not workhouses and prisons? We are a growing population; our great problem is how to make the food of two keep three alive...Does not science - the very newest - assure us that only the fittest shall survive? (90).

He substantiates the materiality of the competitive social order, to which science lends ideological support, in a deleted passage from the 1884 edition of The Unclassed, composed a year after the essay was written. It introduces the advertisement for companionship that Waymark places and which Julian Casti answers. In the configuration of the advertisement, Gissing locates an objectification of the competitive ethic:

The advertisement columns of the newspaper press present us with a ready-made index to the social history of the time. Glance over these sheets of closely-printed matter, and be initiated into the secrets of the most pitiless age the sun ever calendered. See here disclosed, working without disguise, the central motor of our common life. Science, formulating the machine's operation, teaches us to speak politely of the survival of the fittest. The lecture platform resounds to its praises in extreme eloquence, landing the principle of universal competition. Every-day experience, and its concentrated index the advertisement column, put the matter in plainer language, do not care to hide the fact of a brutal fight for livelihood, and sum up in intelligible terms all the meanness, ruthlessness, anguish and degradation which such a system implies. 47

This is an insight which Gissing elaborated in In the Year of Jubilee (1894); indeed the appearance of a similar description of a London Underground advertisement hoarding may have led him to delete this impressive passage when he came to revise The Unclassed the following year, 1895. In this deleted passage may also lie the germ of the posturing, Spencerian suburban 'deity', Samuel Barmby, in whose platitudes the note of the 'lecture platform' is sounded.
Clearly Gissing is exposing here the dominant discourse within which positivism works. What is particularly significant is that Gissing projects on to us Waymark's act of communication, an affirmation of an alternative structure of values. The profit motive does not mediate his act of advertising; the medium contains and holds opposed ideologies in an ironic tension:

Once and again, in glancing over these columns, you come across an announcement which strikes you with a sense of incongruity, some appeal to the world at large for something not stateable in terms of cash or credit, the utterance of one whose needs do not in any way connect themselves with salary. 48

Waymark, Casti and Ida Starr, the unclassed protagonists of the novel, do not appeal to the world in 'terms of cash and credit'. That theirs is a negative affirmation against competitive ideology is a limitation in so far as only by reference to the competitive ideology can Waymark begin to establish an alternative mode of personal fitness - though by accepting Woodstock's employment he is compromising himself. But he nevertheless defends his novel-writing against Woodstock's materialistic force. Waymark counsels Casti, reflecting Gissing's reorientation to Schopenhauerian detachment: 'if you had a fault, it was this very lack of independent force; you know I have often felt it in your poetry. Your life has been too easy'. 49 He advised Casti to be:

passive as regards your wife's irrationality, but strong and independent in your own course... put your suffering into song...What are we here for, but to make perfect pictures out of the horrors about us? 50

Waymark cultivates, rather half-heartedly, this aesthetic utopianism in response to suffering. The predicament imposes a relativistic detachment, and a passivity before suffering - no other course seems
what...did it mean, this hustling and bustling of people on all sides, these grave-set, often fierce-set faces, this desperate seriousness in pursuit of a thousand conflicting ends? 51

The sense of helplessness before struggle is a characteristic of all Gissing's protagonists, who inhabit a world for which they are not happily 'fitted'. They sense that the struggle is inexorable and with varying degrees of success realise themselves through a cultivated passivity before it. The self-conscious assertion of passivity is taken even further in the figure of Kingcote in *Isabel Clarendon* (1886). Kingcote defines himself, negatively, against the exigencies of struggle, but without achieving even Waymark's limited satisfaction. Kingcote believes that he is 'unfit' to carry out that to which he is attracted:

Journalism I am utterly unfit for, as you must recognise. Equally unfit to write for magazines; I have neither knowledge nor versatility. There remains fiction, and for that I am vastly too subjective. 52

He cultivates 'the work of resigning myself to doing nothing'. In his inertia, he projects himself, negatively, against a society which exacts the price of adaptability to its material drives, as a test of the fitness for the struggle:

The world has no place for a man who is possessed merely of general intelligence and a fair amount of reading...There must be specific capacity, estimable in terms of the ledger. Lacking this, and lacking the aid of influential friends, a man may starve - or there is the workhouse. What would you have? 53

Even compared with Waymark, Kingcote is a particularly ineffectual figure who further enslaves himself in a drawn-out and destructive love affair with Isabel Clarendon. However, Waymark's philosophy of aesthetic 'force' is developed in Kingcote's artist friend, Gabriel, who is able to achieve a measure of fulfillment in painting. His
'East End Market at Night' (an emblem of Gissing's own artistic commitment - we recall that he keeps faith with similar scenes in *Thyrza* (1887)), and the satisfactions derived from art are echoed in Ada Warren's literary awakening. She, too, engages with London - not at night, but at twilight by the Thames. Yet Ada turns down the wealth offered her by an accident of inheritance. Her rejection of the 'arbitrary law' is a radical rejection - not simply of money - but of a conception of power which that money confers. It is another version of appalling 'force':

This wealth was not mine; a mere will could give me no right in it. I have often, in thinking over it, been brought to a kind of amazement at the unquestioning homage paid to arbitrary law... My whole self revolted against such laws. It seemed a kind of conjuring with human lives - something basely ludicrous. And the surrender cost me nothing.54

Ada's refusal to be made 'forceful' by the will is one step in Gissing's dismantling of that disabling Victorian convention in which women in fiction are rescued from the contradictions of their position by inherited money.

In *New Grub Street* (1891), Darwinian themes are at the novel's centre. In *The Unclassed* and *Isabel Clarendon*, forms of literary and artistic enterprise have allowed a refuge, and the possibility of detachment from the struggle; now the struggle for existence is the struggle of literary survival itself. The effect is to identify the business of literary production with the terms of real life, conceived persistently by Gissing as a battle for survival. Because literary figures dominate the novel, and because the market is immanent - the market being the ultimate arbiter of success or failure - the whole world of the novel seems penetrated by Darwinism. Yet while *New Grub*
Street offers important insight into the literary and cultural life of the 1880s, we have to ask whether the novel's particular concern is not at the same time, 'a specific form of the nature of survival within a Darwinian social world'.

The life of New Grub Street is disconcertingly raw-edged and brutal. All, with the exception of Marion and the realist, Biffen, who eventually commits suicide, find the dividing line between the personal and the literary life a fragile and meaningless separation. For a consequence of the tactical life - which is lived out according to the ethic of the market - is that it demands of its producers, and those who are financially dependent on them, extremes of self-preserving guile. So that it is particularly ironic that the apparently 'civilised' practice of letters turns its less successful exponents into opportunistic creatures of greed - preeminently, Alfred Yule.

One of the more surprising features of this novel is that Gissing successfully undermines the reader's natural tendency to regard the art of literature and even the 'trade' with a special nostalgic sympathy. Yule, and Reardon (as John Goode suggests, hardly an oppressed cultural hero), are presented sufficiently unsympathetically to seal off obvious routes of reader-identification. Gissing's portrayal of the severity of the struggle for existence is the more subtle and moving in that Yule and Reardon blindly internalise the very ideology of struggle against which they ineffectually fulminate.

Yule's complex relationship with Marion, his daughter and
amanuensis, is soured by the retribution he inflicts after learning about a piece of literary gossip, which later turns out to be false. Marion's view of him is crucial, for an understanding of Gissing's careful balancing of sympathy:

it was the hateful spirit of literary rancour that ruled him; the spirit that made people eager to believe all evil, that blinded and maddened. Never had she felt so strongly the unworthiness of the existence to which she was condemned. That contemptible review, and now her father's ignoble passion - such things were enough to make all literature appear a morbid excrescence upon human life. 56

Literature like a foreign body, seems to suck parasitically from life. Life surrenders itself to letters. This image echoes other disease motifs. When Yule learns from the man at the Camden Town coffee stall that his eyes have become fatally diseased, he perceives the existence of the struggle ethic but is unable to detach himself from it. By accepting its terms as a 'judgement' he presents himself as unfit for the battle for life, although it is not life which is denied him:

Among all the strugglers for existence who rushed this way and that, Alfred Yule felt himself a man chosen for fate's heaviest infliction. He never questioned the accuracy of the stranger's judgement, and he hoped for no mitigation of the doom it threatened (446).

Reardon as we see, is even more passive before the terms of struggle. Reardon is explicitly contrasted with the 'fit' literary species, Jasper Milvain, who embodies the rejuvenated Spencerian 'survival of the fittest' ethic of the 1890s. Fitness, as Huxley recognised, is always a problematic term and now Gissing exploits its connotations of force and strength, in Milvain. Although he is a carefully conceived and not unsympathetic protagonist, he is a
specifically Darwinian 'type'. He is not simply the obverse image of Reardon, a successful literary careerist, but a figure of Spencerian 'fitness'; he is fit not merely in the sense of 'appropriate' or 'suitable' but in his assertion of force which he conceives as both 'necessary' and 'natural'. This conflation is the basis of the 'Social Darwinist' position and Milvain is an early exponent of it. Meredith's Victor Radnor in One of Our Conquerors, published in the same year as New Grub Street (1891), is another; and for a generation to come there were to be other striking protagonists of amoral Darwinian 'force' most notably Kurtz in Conrad's Heart of Darkness (1902), Wilcox in Forster's Howards End (1910) and Gerald Crich in Lawrence's Women in Love (1916).

The hack journalist for whom value lies in what pays, Milvain is the perfect example of successful adaptation to the irrationalities of the market; indeed the market is the making of him, whereas it helps to destroy Reardon and Biffen. Unlike Reardon who, in the struggle to retain his self-respect turns his dependency on literary success into a cult of failure, Milvain characteristically uses literature as a means to gain non-literary ends. In a process of neat sexual selection he pairs off with the ambitious but level-headed Amy after Reardon's death; it is a recognition of mutual force, Milvain having composed laudatory reviews of Reardon's life and work designed to bring him to her attention. Indeed, part of Gissing's sustained ironic achievement is to show how the events of the novel lend Milvain's opening mots justes on Reardon's prospects, 'He isn't the kind of man to keep up literary production as a paying business' (36), a retrospective insight proving the validity of his value system, by no
other criteria than that the facts prove him right. This is indeed the basis of the 'Social Darwinist' position. His speech in the chapter immediately after Reardon's death expresses an almost exemplary wisdom, ironic in context: 'the struggle for existence among books is nowadays as severe as among men'. It is as if Gissing knows that anything Milvain utters will be right, if only because he offers an almost 'innocent' endorsement of the world of the novel in which the fittest do survive.

He is the one figure in the novel who can see clearly how the market works. His Darwinian power lies in his realistic assessment of the world as it is and his ability to adapt. And here he is at the opposite pole from Biffen who, more convincingly than Reardon, lives out a resistant aesthetic commitment. The market will not allow the luxury of integrity for Milvain as when, ironically, to assist the sales of Biffen's novel, 'Mr Bailey, Grocer', he writes, anonymously, contrasting notices for different periodicals. His admiring sister Dora (who makes a Milvainic match with Welpdale, another 'man of the day') judges him to be 'clever' and opines that Biffen 'ought be grateful to you if he knew'. Under the ethic of the survival of the fittest, an apparently altruistic act always exacts its particular price.

Such is the determining and engulfing power of Darwinian discourse, that Reardon actually views his own career according to the criteria of success and failure:

Society is as blind and brutal as fate. I have no right to complain of my own ill fortune...For all that, it's hard that I must be kicked aside as worthless just because I don't know a trade (230-1).
Reardon is made painfully conscious through experience of the harshness of the market, but he cannot redefine his criteria for 'success'. He is emotionally wedded to the idea of specifically literary success in the face of continuing failure, and so the market becomes the very focus of his life, exerting a proportionately greater influence the more he fails in it. Reardon's passivity is continually insisted on:

He knew very well that a man of strong character would never have entertained this project. He had got into the way of thinking of himself as too weak to struggle against the obstacles on which Amy insisted (257).

Yet Reardon is presented as more than a passive and discarded literary outcast. In fact, his passivity and acquiescence make him the archetype of the degenerate organism according to the metalinguage of the novel. In the description of Reardon's obsessive state of mind, Gissing draws on the language of pathological degeneracy to bring out the psychological reality of his unfitness. Reardon becomes the prisoner not only of his own obsession but also of the deterministic diagnosis of Gissing as narrator and of those around him. It is a significant development in Gissing - highlighting an increasingly sensitive interest in the psychology of deviation from the early 1890s onwards. There is a line of continuity here between Reardon, Godwin Peak in Gissing's next novel Born in Exile (1892) and the neurasthenic Alma Rolfe in The Whirlpool (1897).

As if realising that passivity alone exerts no redeeming oppositional force, Gissing makes a specific plea for Reardon and Biffen, commending their lack of resistance as admirable recalcitrance given the competitive order of society:
From the familiar point of view these men were worthless; view them in possible relation to a humane order of society, and they are admirable citizens...you scorn their passivity; but it was their nature and merit to be passive (462).

'Nature' and 'merit' are not of course the same thing. Gissing simply leaves two very different springs of passivity loosely associated - the determinism of character or temperament and the determinism of the inexorable forces of society. He develops no real traffic between the two. No transforming dynamic energy is generated. Yet Gissing is clearly more concerned in *New Grub Street* than he has been in his work to date with the psychological springs of passivity and 'unfitness'. The actualising in this fiction of his protagonists' propensity to fail is one of the real advances of the novel.

It is significant that Reardon is explicitly conscious of his own degeneracy in the shape of a deadlocked sense of inadequacy, and this awareness is bound up with his tendency to reify the value of money. For Reardon is not simply poor; his poverty is a state which helps to define the kind of person he is. He is continually situating himself in a spectrum of wealth and poverty. Contrasting his lot with that of a couple of wealthy girls, out riding in Hyde Park, he argues that, 'the power of money is so hard to realise; one who has never had it marvels at the completeness with which it transforms every detail of life' (232).

This, if Gissing means us to take Reardon seriously, is an absurd over-statement. His acquiescence before financial values is then objectified in the language of biological degeneracy, of organic atrophy:
Between wealth and poverty is just the difference between the whole man and the maimed. If my lower limbs are paralysed I may still be able to think, but then there is such a thing in life as walking. As a poor devil I may live nobly; but one happens to be made with faculties of enjoyment, and those have to fall into atrophy (232).

To figure the experience of deprivation in this way is to seal the self from change - it is indulgently deterministic, and Gissing indulges Reardon here. But at the same time, the degeneration image, in which the body atrophies, but not the mental capacity for articulating that sense of decay, denotes a qualitatively new kind of mental predicament. The life of the mind under duress, rather than withering and dying does actually 'de-generate'; it generates its own obsessive awareness of unfitness.

A little later, Amy and Reardon speak the language of contemporary materialist psychology (as exemplified by Maudsley or Bain) as they consider whether this mental degeneration can be empirically detected and isolated:

'There must be some special cerebral development representing the mental anguish kept up by poverty'. 'I should say', put in Amy 'that it affects every function of the brain. It isn't a special point of suffering, but a misery that colours every thought' (232).

In terms of contemporary materialist psychology, the brain diffuses the pathological condition throughout the faculties; the influence is deterministically cumulative since the very means by which to combat it, the creative imagination of the writer, is damagingly infected. Reardon thus presents himself as a patient suffering from mental disease - his faculties invaded by poverty for which financial security is the only cure. The analytical terms which Gissing has Reardon speak merely accentuate a generalised sense of impending mental breakdown.
Yet there is a momentary glimpse of a significant development in Gissing's work; a moment when the self-consuming and de-generating tautologies of Reardon's rationalisations seem to lead to a state beyond which the discursive cannot articulate. Gissing hints that it is more important to register how Reardon perceives the truth of what he is saying, than it is to accept at face value his mechanical determinism. But in the end Gissing shies away from the implications, for the pathological discourse, of Reardon's fleeting sense of ontological uncertainty, as expressed by the qualifications he aims at his own conceptualising:

...Can I think of a single subject in all the sphere of my experience without the consciousness that I see it through the medium of poverty? I have no enjoyment which isn't tainted by that thought, and I can suffer no pain which it doesn't increase. The curse of poverty is to the modern world just what that of slavery was to the ancient (232-3).

'Consciousness' and 'medium' offer the possibility of a more self-awareness. Here poverty can be seen as not simply a cause of the pain of thinking, but as a convenient frame through which Reardon's consciousness of deadlock is expressed. Yet after Reardon's sceptical if rhetorical question, Gissing draws back from turning Reardon into the diagnostician of his own capitulation to the competitive materialism of the prevailing Darwinist ideology. To remain outside his character in this way Gissing would need to put impossible questions to the determinism which in its synthesis of the individual and the 'natural' struggle, keeps the characters both outside themselves, yet inside that synthetic equilibrium.

Waymark, Casti, Yule and Reardon are locked into a predicament,
ever-conscious of the price the struggle for existence exerts, but unable to pursue convincing aesthetic courses to mitigate or transcend their sense of unfitness for life. This deadlocked predicament is given special prominence in the figure of Godwin Peak in *Born in Exile* (1892). In fact Peak can be seen as Gissing's most sustained objectification of deadlock, sustained as it is through Peak's backward-looking adventure in intellectual subterfuge, which structures the whole novel. Whilst this passage can be seen as a turning away from the exigencies of contemporary competitive society, sustained by his journalist friend Earwaker, and is clearly marking a refusal to participate in the struggle, there is no character in Gissing more obsessively conscious of struggle, and the impact of deterministic Darwinism, than Peak. It is as if Reardon, in *New Grub Street*, had taken upon himself the role of Fadge: that is the measure of the perverse inauthenticity which now structures the Gissing protagonist.

In *Born in Exile* Gissing turns hypocrisy to his advantage. Freed from the obligations of internal consistency and outer integrity, Gissing's route for Peak becomes epistemological, rather than moral or positivistic in the manner of George Eliot's realism. Peak's identity is presented relativistically. He is shaped primarily by conflicting rather than consistent motivations - the most important of which is the tension between the condition of 'exile' and the need for 'integration' which prompts his adventure.

It is in this unresolved ambivalent condition that Peak can be said to figure, most prominently, those degenerate characteristics which his fictional forebears have, with less emphasis, shared.
And as with all labelled 'degenerates', Peak has an exemplary function. Moving beyond authorial identification, Peak's compromised, ambivalent identity flourishes on the very stubbornness and strength of the traditional Warricombe family. Their hegemony and Peak's special scientific modernity are actually directly in conflict. The discourse of biological determinism is employed more insistently in this novel than in any other. From 'The Hope of Pessimism' onwards, Gissing had been using this discourse, as a medium for the exploration of human motivation and psychological abnormality, and increasingly as a meta-language for the 'placing' of the whole social order. In *Born in Exile* he writes it out once and for all. Even more explicitly than with Reardon, Peak is made to embrace, in self-preservation, the very determinism to which he subjects himself and by which, within the larger social process, he can claim our sympathy. The same is true of Hardy's Jude and Sue and, with a different emphasis, Tess (*Tess* was published only a few months before in November 1891).

In the Exe Valley, looking down at the home of the Reverend Martin Warricombe, Peak embraces fervently the civilised enclave, 'a spot of exquisite retirement: happy who lived here in security from the struggle of life'. The echo of Horace's formulation of retirement from struggle, 'beatus ille', is unmistakable. Rather than project himself as a successful graduate in science from Whitelaw College into a promising career, Peak attempts to manufacture an alliance between his own heightened desire for domestic and personal harmony, and the orthodoxy of the Warricombe household which embodies for him that integration of personal happiness and social esteem. He exchanges a scientific for a religious vocation and in so doing
puts the commodity which makes him exceptional, his intellect, at the service of that which he is ideologically opposed to. His intellectual capacity, which equips him to confront the struggle for existence (as to an extent his contemporary, Earwaker, does) is harnessed instead to perpetuate the struggle for existence he has so far experienced, in the struggle for education and social mobility from his family and class:

All he had to fight the world with was his brain; and only by incessant strenuousness in its exercise had he achieved the moderate prominence declared in yesterday's ceremony. By birth, by station, he was of no account; if he chose to sink, no influential voice would deplore his falling off or remind him of what he owed to himself. Chilvers, now—what a wide-spreading outcry...would be excited by any defection of that brilliant youth (61).

Repeatedly in the novel the question of the struggle for existence is set before the reader in terms of the challenge which intellect must face from social privilege. There is a characteristic movement of thought in the discourse available to Peak; the recognition of capacity and uniqueness is a weapon for survival in a world in which the claim of intellect alone is no guarantee of a place. The radical recognition of the basis of social and intellectual acquiescence, the privilege on which success in life depends, is tellingly apparent in the subsequent success of the mediocre Chilvers, whose efforts Gissing announces elsewhere, 'would always be aided, applauded, by a kindly circle' (51). Warricombe's daughter, the principal object of Peak's desire, voices this theme, after Peak's unmasking:

Was there not every reason to believe that thousands of people keep up an ignoble formalism, because they feared the social
results of declaring their severance from
the religion of the churches? (392).

One of the important paradoxes which Peak's Darwinian adventure helps
to expose is that Warricome's religious orthodoxy cannot address
itself to the very materialism which Whitelaw College can be seen
to legitimise. Yet Warricome has his son educated at this academy
without perceiving anything of the ideological conflict with his own
anti-materialist theology. Whitelaw College, as John Goode suggests,
is 'the product of raw capitalism but the bestower of science and
culture',59 good enough at least for Martin Warricome's son.

Peak's Darwinism, in its hereditarian emphasis, is very
Galtonian in its elitist and conservative notion of 'natural' decency
as a function of 'breeding'. Peak pontificates to his brother
Oliver:

Do you know what is meant by inherited
tendencies? Scientific men are giving a
great deal of attention to such things
nowadays. Children don't always take after
their parents; very often they show a much
stronger likeness to a grandfather, or an
uncle, or even more distant relatives (65).

And in himself and his family he impugns 'the ancestral vice in his
blood...the long line of base-born predecessors, the grovelling hinds
and mechanics of his genealogy' (179). But unlike Hardy in Tess or
Jude, Gissing does not have Peak affirm a wish to transcend the
hereditarian discourse, he instead wants to appropriate its more
dignifying attributes: 'Oh for a name wherewith honour was hereditary'
(179). And his overriding ambition is to win a woman of breeding:
'I have in mind a woman of the highest type our civilisation can pro-
duce'(140) in the belief that 'the daughter of a county family is a
finer being than any girl who can spring from the nomad orders'
The class basis of this determinism emerges strongly in this extract, in which Gissing clearly objectifies Peak as a perverse élitist:

The woman throned in his imagination was no individual, but the type of an order. So strongly had circumstances moulded him, that he could not brood on a desire of spiritual affinities...he was preoccupied with the contemplation of qualities which characterise a class (217-8).

Warricomebe points out to Peak the country seat of a local aristocrat, and Peak proceeds to exult in 'the prerogatives of birth and opulence' and feels 'proud of hereditary pride'. And the status which the Warricombes can confer on him is phrased in terms of the recognition of his 'natural' biological makeup:

Admitted to equal converse with men and women who represented the best in English society, he could...be what nature had proposed in endowing him with large brain, generous blood, delicate tissues. What room for malignancy? (160-1).

Gissing has Peak overlay his exceptional intellectual character by reifying breeding as a vehicle for a perverse form of natural rights.

Peak has moved upwards in society, measured by his College achievement, yet he attributes this mobility to the 'right of nature' to which he lays claim. Peak insistently denies his origins throughout the novel in the interests of natural or biological integration. This helps to make the fiction explicitly anti-realist; the gap between origins and aspiration is one to be annihilated. Yet it is part of the remorselessly double view of Peak which Gissing offers us that the more he tries to close this gap the more the reader is urged into acknowledging the hegemony which remains unassailable in its cultural power and intellectual complacency.
The paradox of Peak's perverse choice of career and his utterly élitist claiming of rights of 'nature' is that we are forced to the objective truth of the separation not by 'blood', but by class. In a scene at Hyde Park, which echoes a scene in *New Grub Street*, already discussed, it is Peak himself who recognises the paradox of class separation in the very physical contiguity of members of higher and lower orders. It is a scene which Gissing alone could write:

> Here he stood, one of the multitude, of the herd; shoulder to shoulder with boors and pickpockets; and within reach of his hand reposed those two ladies, in Olympian calm, seeming unaware even of the existence of the throng... They were his equals, those ladies; merely his equals. With such as they he should by right of nature associate (129).

Peak is the one figure in Gissing who acts on this desire, to try for the possibility of access through its release, (though the sentiment is widely diffused among his protagonists). His degenerate denial of intellectual integrity becomes the curious means by which the truth of this separation is brought home. Gissing had the opportunity of exploiting evolutionary discourse to explicitly address the subject of the class structure but chooses not to. Instead he invites the reader to inspect that subject by way of provoking a necessary riposte to the exasperating insistence of Peak's teleological utterance.

Yet Peak's unique and perverse journey is, I think, strikingly analogous to the process of zoological and biological degeneration of the invertebrate organism such as the ascidian, highlighted by E. Ray Lankester and others, described in the second section of chapter One. Gissing never made an explicit connection
between his concerns as a novelist and this particular scientific phenomenon (which had certainly become assimilated into evolutionary discourse by the early 1890s). It is nevertheless illuminating to see the process as a metaphorical structure for Peak's epistemological falling off - particularly as Gissing gives such elaborate expression to biological determinism generally in this novel.

Many of Gissing's protagonists share common attributes, analogues for which can be sought in the degenerate organism. Displaced and unintegrated within the social order they are more than usually passive - even 'feminine', as male figures, before the consciousness of the enormity of an impenetrable social reality. Desirous of, but unable to achieve autonomy, they tend to drift, gravitating to firm points of security and support, a dependency on which, in turn, threatens their autonomy and saps their originality. The possibility of break-through is foreclosed by this predicament. We recall that in *Workers* Carrie seeks out Golding who in turn seeks Helen Norman. In *The Unclassed*, Casti seeks Waymark who is, in turn, compromised by looking to Woodstock. In *The Nether World* this pattern is reproduced endlessly as an index of sheer survival.

But Peak's career is more highly determined than theirs. By positivistic standards alone, his passage constitutes a regression from science back to theology. This suggests a specifically zoological degeneration. The struggle for existence in the 'open sea' of the market is refused, and the cessation of struggle chosen, in Peak's desire to move to the less demanding intellectual backwater of the Warricombes, without having to meet the demands of integrity - the usual authorial control on the realist protagonist. Peak's actions
can be charted, as can the life of the degenerate organism, by dialectically opposed perspectives on his predicament. He is both exiled, but gains access; he becomes integrated whilst remaining to the end unintegrated; he is parasitic but gains the possibility, for a time, of autonomy; he both capitulates passively to desire, and asserts himself against that part of the social structure which, for him, embodies it.

Gissing surely means us to take Peak from both sides: for his exposing role extends to the reader of this text, so that how we choose to interpret Peak's provocatively ambivalent identity must reveal the partiality of the basis of our own judgements on him. Unique among Gissing's protagonists, Peak's adventure exposes the reader to the contradictions of a social order which very nearly allows Peak to pull off his intellectual vanishing trick; and in the light of that order we may legitimately, if with some discomfort, wish that he had done so.
Like Meredith's *One of Our Conquerors* (1890) and Wells's *Tono-Bungay* (1909), *In the Year of Jubilee* (1894) has as one of its themes the claims of the energies of materialism to speak for the aspirations of a whole national way of life. Gissing understood the symptomatic quality of the 1887 Jubilee, writing at the time that, 'tis much to have beheld the most gigantic organized exhibition of fatuity, vulgarity and blatant blackguardism whereof our time has record'. His disdain was directed both at the national obsession with commerce, and at the aspiring classes - the lower-middle class in particular - who typified this obsession. In fact what Lionel Johnson wrote, when reviewing *One of Our Conquerors*, could be applied to Gissing's *Jubilee* and his next novel, *The Whirlpool* (1897): 'it is not too much to say that "the world", or "society", or "the Public" seems to rank among the *dramatis personae*'. The penetration of this 'world' by commercial energy is a theme in Henry James's *The Tragic Muse*, as well as in *One of Our Conquerors*. Gissing read both novels in 1892. Within this shared consciousness of 'the world' it is perhaps Gissing's distinction to have found, yet again, in the city of London a commanding subject, but now London as the fount of imperialism and commerce, and of their celebration by the nation. *In the Year of Jubilee* records a condition of cultural confusion in which a group of characters are engulfed and, for the most part,
overwhelmed by the excitements and temptations of forces beyond their control. Gissing's narrative bends to accommodate the intrusion of these energies; his characters become, in a sense, captives of his technique. Yet the dispersion of authorial interest among a loose grouping of figures, rather than around an overweening career of a Victor Radnor or a Ponderevo, lends the novel much of its distinctive resonance, and enforces Gissing's major theme: it is as if the pervasiveness and accessibility of the energies of the moment can indeed exclude no one.

Thus the dominant female figure, Nancy Lord, is placed within an unsatisfying romantic relationship with her suitor, Tarrant, yet is far more significantly present as a woman caught up by the forces of modernity. Her very qualities of restlessness and superficiality enable Gissing to objectify her as a peculiarly symptomatic figure of the age.

Nancy leaves her father's house in Camberwell for the Jubilee celebrations in town - chaperoned by her father's pedantic friend Samuel Barmby. She manages to evade him and meets Luckworth Crewe the advertising agent who, at a later meeting, takes Nancy up the Monument to display to her an enticing vision of commercial prosperity. It is a neat inversion of the \textit{de haut en bas} attitude of Arnoldian disdain which Gissing's commentary has encouraged the reader to adopt, with regard to the vulgarity and obtuseness of Nancy as well as of Stephen Lord and Barmby:

They stood side by side, mute before the vision of London's immensity...this spectacle of a world's wonder served only to exhilarate her; she was not awed by what she looked upon. In her conceit of self-importance, she stood there,
above the battling millions of men, proof against mystery and dread, untouched by the voices of the past, and in the present seeing only common things, though from an odd point of view. Here her senses seemed to make literal the assumption by which her mind had always been directed: that she - Nancy Lord - was the mid point of the universe (104).

Crewe's vision images the accessibility of a range of choice of styles, made possible through material acquisition, which the forces of publicity can generate. And it confers on Nancy a temporary power to which another relatively independent woman, Beatrice French, later succumbs. Yet the illusory quality of this power is exposed for her when, in a later scene, after Tarrant's disappearance to the West Indies has forced Nancy to face up to being alone, she subsequently feels alienated by its lure, and 'a mere outcast' from it. Ironically, on Tarrant's return and her reconciliation to him, the couple retreat to the north London suburb of Harrow - only a more modish version of the stifling Camberwell, from which modernity had drawn her.

Crewe's speculative energy is one thematic centre of the novel. His 'vision of golden prosperity' can be put beside the commercial enthusiasm of Victor Radnor and of Edward Ponderevo. But it is worth comparing, too, Gabriel Nash's cultivatedly ironic vision of prosperity for the actress Miriam Rooth in James's *The Tragic Muse*:

Miriam's drawing forth the moderness of the age...
Its vulgarity would rise to the grand style, like that of a London railway station, and Miriam's publicity would be as big as the globe itself. All the machinery was ready, the platform laid; the facilities, the wires and bells and trumpets, the colossal, deafening newspaperism of the period - its most distinctive sign - were waiting for her, their predestined mistress, to press her foot on the spring and set them all in motion. Gabriel brushed in a large bright picture of her progress
through the time and around the world, round it and round it again, from continent to continent and chime to chime, with populations and deputations, reporters and photographers, placards and interviews and banquets, steamers, railways, dollars, diamonds, speeches and artistic ruin all jumbled into her train.63

Something of the same tenor can be found at different points in In the Year of Jubilee, yet it is Gissing's own authorial voice which adopts a detachment like Gabriel Nash's before the monstrous energies of the age. Gissing's fascinated engagement with the contemporary cultural process can be no more clearly registered than in passages where he tries to identify images of the age and, unusually, renders their complexity in prose which enacts a metonymic relationship with the fictional world of suburban London. At the same time he offers fairly conventional metaphors for values which he believes are being undermined - the basis of an orthodox belief in the general degeneration in standards. Gissing's description of an advertisement hoarding on the Underground expresses the energies of the age in a characteristic idiom:

High and low, on every available yard of wall, advertisements clamoured to the eye; theatres, journals, soaps, medicines, concerts...all the produce and refuse of civilisation announced in staring letters, in daubed effigies, base, paltry, grotesque. A battle-ground of advertisements, fitly chosen amid subterranean din and reek; a symbol to the gaze of that relentless warfare that ceases not...in the world above (309).

This image of advertising, as a consummate metaphor of a materialistic practice, recalls the passage in The Unclassed which Gissing deleted in 1895, one year after Jubilee was published, and to which I have referred.

In a city-bound omnibus, Nancy avoids Barmby's glances by
reading the rows of advertisement placards above his head:

somebody's 'Blue': somebody's 'Soap':
somebody's 'High class Jams'; and behold,
inserted between the Soap and the Jam -
'God so loved the world, that He gave His
only begotten Son'...Nancy perused the
passage without perception of incongruity,
without emotion of any kind (61).

It is interesting to put beside this, Jessica Morgan's programme of
extra-mural education:

Her brain was becoming a mere receptacle for
dates and definitions, vocabularies and
rules syntactic, for thrice-boiled essence
of history, ragged scraps of science,
quotations at fifth hand, and all the
heterogeneous rubbish of a 'crammers'
shop (17).

Or there is Barnaby's 'grasp' of culture:

His mind was packed with the oddest jumble
of incongruities; Herbert Spencer jostled
with Charles Bradlaugh, Matthew Arnold with
Samuel Smiles; in one breath he lauded
George Eliot in the next was enthusiastic
over a novel by Mrs Henry Wood (214).

Gissing also casts his eye on the encroachment of the speculative
builder, in one of the most impressive passages in the novel:

Great elms, the pride of generations passed
away, fell before the speculative axe, or were
left standing in mournful isolation to please
a speculative architect; bits of wayside hedge
still shivered in fog and wind, amid hoardings
variegated with placards and scaffolding black
against the sky. The very earth had lost its
wholesome odour; trampled into mire, fouled with
builders' refuse... it sent forth, under the sooty
rain, a smell of corruption, of all the town's
uncleanliness (218).

There is little doubt that each descriptive panorama echoes the
other, to encourage the reader to register what is common in the way
of the material determinants of the cultural process which each image
signifies. Nancy's failure to discriminate is framed in a way homologous
to Jessica Morgan's and Barmby's dealings with knowledge; and consumerism is juxtaposed with religious discourse, the energy of speculative vandalism with rural innocence.

These set-piece descriptions help to register other motifs which thread in and out of the novel's rather oppressive social texture. In the opening chapters, Gissing introduces the suburban levée of the Arthur Peachey household. One by one, his wife and sisters emerge to face another routine and desultory day. The effect is of sham, complacency and pretension, characteristic enough of Gissing's well-documented jaundiced attitude to the lower-middle class. Yet in specific details, Gissing diffuses his satiric venom onto the curious construction of the life-style itself. Like other styles and rituals in the novel, the description is bathed in imitation and parody. The detached Peachey home, with its stucco pillars, borrows a style from the country house - the estates of which are being turned over to the speculative building of increasing numbers of just such houses, and the Peachey household is a kind of parody of the style of domestic comfort which this suburban development promises. The house is crammed with objects which derive their identity from their very proliferation - precipitating a picture of a miscellany of odd juxtapositions and incongruities. These sisters live by raiding life-styles handed down from elsewhere. We notice the 'strange medley' of 'pictures', the 'autotypes of some artistic value hanging side by side with hideous oleographs framed in ponderous gilding' (2).

Ada's leisure-reading takes on the same character; included
in it are literal 'miscellanies': 'on tables and chairs lay scattered a multitude of papers: illustrated weeklies, journals of society, cheap miscellanies, penny novelettes, and the like' (5). Her participation in the process of cultural assimilation is framed to give a specific image of how the cultural product (here the work of popular journalism) offers itself for consumption. The newspaper brings together discrete categories into a jumble: a 'dozen serial stories, paragraphs relating to fashion, sport, the theatre, answers to correspondents' (5), (the last subject is a further elaboration of the miscellany). And the literal miscellany is the publishers' recognition, in miniature, of the literary portmanteau - a framing of separate and unrelated items which convey a particular image of printed discourse. The inevitable second-hand and imitative mode is reciprocated and reinforced by the imitative quality of its consumption by readers like Ada and her sisters. Yet it is again this process of reciprocity and mutual dependence which emerges uniquely from passages such as these, to produce the confident if controversial affirmation of cultural degeneration in which Gissing's characters are implicated, but for which they are not individually responsible. The Peachey household may be a sham, but that is what the consumer culture trades in.

In writing *In the Year of Jubilee* Gissing may well have evolved insights which required a more satisfying 'theoretical' framework than his materialist analysis of the culture could give him. In this major shift of emphasis to an examination of the springs of the modern, Gissing was susceptible to the kind of tendentious psychopathology which Max Nordau offered in 1895, the year after the publication of
Jubilee. *Degeneration* proclaimed a societal condition in which degenerate artists and their public reciprocated the profligate energies associated with urban life. Gissing has already discovered these energies in the condition of consumption, which he asserted in the texture and movement of the novel. Metonymies penetrate a narrative whose very title suggests a specifically symptomatic text. Yet his next major novel, *The Whirlpool* (1897), bears the marks of a more thorough-going assimilation of a teleological framework in which the city is to become a menacing repository of a disease of civilisation - vicarious energy now turns to consuming neurosis.

*The Whirlpool* (1897) certainly needs to be read with Max Nordau's *Degeneration* (1895) in mind. Gissing read Nordau within a few weeks of its publication in England in the spring of 1895 and began *The Whirlpool* a year later in April 1896. As I have argued in chapter One, there is much in *Degeneration* which was attractive to those writers of the 1890s who sought a register for the apparent fatally diseased condition of contemporary civilisation. Nordau's special symptomatic relevance was that he located the pathology in the city and in those social groups and types who had inherited and were transmitting the diseases of civilisation amid the metropolitan agglomerations of Western Europe.

Nordau's formulation - dealt with at greater length in chapter One - provides a context for an understanding of how Gissing assimilates and uses a distinctive pathology, which effectively describes and circumscribes the possibilities of female consciousness in *The Whirlpool*. I want to explore the buried determinism which
governs Gissing's treatment of the central female figure, Alma Rolfe. Gissing's narrative describes the growth and development of Alma as an object of analysis but we are in a position, perhaps, to interpret this narrative quite differently. Although Alma's husband, Rolfe, is conventionally seen to be Gissing's philosophic spokesman in the novel, the terms of the buried determinism, if made more explicit, help to highlight the peculiarly selective way that Gissing commends the male centre of consciousness, to the detriment of Alma's claims to authenticity.

I shall argue that The Whirlpool is a novel of great psychological potential; for it is continually suggesting the possibilities of inward change. But for this potential to be realised, we have to imagine another novel, in which the characters are not separated from each other by a discourse of evaluating determinism. We need to free Alma from the deterministic bind that defines and contains her as the subject of Gissing's critical project projected through Rolfe.

Rolfe is in many ways clearly more irrational and foolhardy than Gissing intends him to be. Gissing's authorial insistence urges us to view him as a free subject; honourable, honest, sceptical, romantic, inspecting - everything bar committed. But he is clearly limited to a particular set of assumptions which express a distinct ideological position. To register the full weight of this way of seeing, we have, in effect, to free Rolfe from Gissing's authorial illusion that he is really free, and to rescue Alma from all that traps and limits her; and to do this we have to move outside the novel into the ideological world in which Gissing conceives it. Then,
perhaps, we can more easily understand how the narrative dispatches Alma and Rolfe to separate discursive worlds.

The pathological discourse which is pervasive in *The Whirlpool* binds Alma to it so that she becomes, in effect, the neurasthenic carrier of the prevailing 'condition'. The degenerate purveyor of that which is wrecking their marriage and most other marriages and relationships in the novel, she is objectified by Gissing as an agent of destructive, unknowing and inconsistent confusion.

The full force of how the prevailing ideology works becomes clearer when we compare Gissing's project for Rolfe. He sheds his independence in bachelorhood for a consciously experimental marriage, in which he and Alma evolve a degree of trust allowing them a measure of independence, yet the relationship becomes undermined precisely because that trust collapses. And Gissing means to lay the blame for this failure on Alma's delusions.

Each phase of the marriage is signalled by a change of environment: the rural retreat of Wales, which induces eventual boredom and restlessness, is followed by the comfortable compromise of Pinner - a rural suburb of North-West London. This phase proves even more disastrous. Alma and Rolfe are increasingly threatened by a shared sense of suspicion, jealousy and guilt, generated by the whirlpool world of metropolitan intrigue, with its self-absorbed rentier class, superficial salon culture and empty aestheticism. It is the world to which Alma with her rather ordinary musical talent is drawn and it engulfs her in its strategies of display, promotion and sexual appetite.
Yet Alma engages with this world not out of free choice but from a neurotic compulsion which she already appears to carry within her - unconsciously and degenerately; she is passively compelled. Yet whereas Alma is seen as the flaw in Rolfe's marriage, he is rarely ever seen by Gissing as the flaw in hers.

There is probably a critical norm for The Whirlpool which places Rolfe at the centre and assumes an unproblematic function for his wife Alma. My reading of the novel is an attempt if not to mis-read it at least to subject it to a focus which points up Gissing's profound and complex engagement with the concept of degeneration. The evidence for this in this text is implicit in the presentation of a relationship in the dialogue and characterisation, and these must be allowed exposure in an analysis, at the risk of over-concentration at this point on plot-summary, not demanded by other novels of Gissing.

Gissing presents Rolfe as a man who keeps his distance from difficulties but is not entirely free from ordinary worries. After a short time in Pinner he finds he is short of money. He invests in a photography business and begins to pore over the financial press. At this juncture, Gissing stresses his financial generosity to Alma who is spending more money than is prudent. Rolfe, though, is well aware of the financial and personal pitfalls that people can fall into through force of circumstance and bad judgement and maintains a decent distance from it all. Characteristic of this displaced enthusiasm is his rather ineffectual retreat to Wales, early in the marriage. It satisfies his urge to distance himself from the centre, but bores Alma to distraction. And he preserves a distance in his
personal relationships with a detachment which becomes destructive.

These perspectives are brought together in Wales when Alma and Rolfe receive a visit from Mary Abbot. Earlier, in London, near the opening of the novel, Rolfe has met Abbot, a journalist, who reports that a mutual friend - Wager - has run off and deserted his children. The following day the insurance company owned by Alma's father collapses and Wager's investments in it crash. He is later found to have committed suicide. When Rolfe goes to see Mary Abbot Gissing is distinctly patronising: 'she had undertaken as a penitence the care of little children and persevered in it with obstinacy rather than with inspired purpose'. But Rolfe does the decent thing and puts up half the necessary money for the children's upkeep and future welfare. Yet while Mary Abbot is keen to educate the children herself, Rolfe, on marrying Alma, does not tell her of this arrangement and Alma's intimations of some hidden understanding between them grow when Mary Abbot visits them in Wales. Rolfe and Mrs Abbot go out walking; Alma intercepts them, having worked herself up to a state of feverish jealousy which she not once gives utterance to. Instead she collapses into a hysterical fit and is confined to bed, her suspicion lingering on. However, the irrationality of this phase cannot be located only in Alma's peculiar behaviour. Rolfe's silence about his own selfless project is, in many ways, just as irrational but the author points the finger at Alma.

Another significant crisis erupts in the third book. Alma's suspicion of Mary Abbot is not allayed by Rolfe's silence over the
financing of the deserted children. Suspicion grows through the second book during their first months in Pinner. Alma opens a letter addressed to Rolfe from Mary Abbot acknowledging her receipt of his cheque and she now concludes that the children are Rolfe's by a previous liaison and that Mary Abbot is fully compliant in the cover-up. But partly out of feelings of resentment and partly because she is becoming increasingly caught up in the social world of Dymes, Redgrave and Mrs Strangeways, she suppresses her sense of grievance.

Months later, after her London concert and her unintentional witnessing of the murder of Redgrave, her suspicion grows when Rolfe suggests to her that they move to Gunnersbury so that Mary Abbot might educate their son. Alma, now in a more advanced state of nervous weakness, begins to break down. Rolfe assumes that Alma doesn't want to move because she wants to avoid seeing Mary Abbot, but instead of confronting her worries directly, he begins to question her right to decide what to do with the boy.

Alma who has never felt warmly towards her son is labouring already under an explicit and very unfavourable comparison with a blooming mother of four, Mrs Morton, whom she and Rolfe have just visited in the country. Rolfe with his paternal idealism well intact has already appropriated the moral authority for deciding on their son's future, which adds to Alma's sense of failure. The climax of the scene is strangely convincing:

'Why do you behave as if I were guilty of something - as if I had put myself at your mercy? You never found fault with me - you even encouraged me to go on-'.

Her choking voice made Harvey look at her in apprehension, and the look stopped her just as she was growing hysterical.

'You are right about my letter', he said, very gravely, and quietly. 'It ought to have been in a kinder tone. It would have been, but for those words you won't explain'.

'You think it needs any explanation that I dislike the thought of Hughie going to Mrs Abbot's?'

'Indeed I do. I can't imagine a valid ground for your objection'.

There was a word on Alma's tongue [presumably, liar] but her lips would not utter it. She turned very pale under the mental conflict. Physical weakness, instead of overcoming her spirit, excited it to a fresh effort of resistance.

'Then', she said, rising from the chair, 'you are not only unkind to me but dishonest'.

Harvey flushed.

'You are making yourself ill again. We had far better not talk at all'.

'I....

Rolfe hesitated. Believing that her illness was the real cause of this commotion, he felt it his duty to use all possible forebearance; yet he knew too well the danger of once more yielding, and at such a crisis. The contest had declared itself - it was will against will; to decide it by the exertion of his sane strength against Alma's hysteria might be best even for the moment.' (355-6).

We notice how Alma's feelings are interpreted through Rolfe's diagnostic vision of her. Her own sense of her self is denied and annexed. Rolfe reads her surface behaviour as explicable of her state of mind. The actuality of the breakdown is grasped both as a critical gulf between them and as a particular crisis, in which unarticulated speech is converted into visible behaviour which draws attention to the subject, yet only in its objectified form. She is now the patient for Rolfe - the bearer of the over-determining condition: 'he felt it his duty to use all possible forebearance' (356).
Alma, as so often happens in *The Whirlpool*, is centre stage, but as an object of Rolfe's observation rather than of his understanding. Eventually Rolfe explains with 'burlesque gravity' why he had never bothered telling Alma. When she calms down he rather ponderously 'meditates on Woman'. But his reasons for not explaining to Alma his arrangement are never given. Gissing, in passing, concedes that Rolfe ought to have had a conversation with 'a frank exchange of views' but the overwhelming feeling is that Rolfe's behaviour, far from being irrational, constitutes little more than an understandable oversight - a slight male lapse. Gissing cannot properly ironise Rolfe as we wish he would.

But whereas Rolfe is seen to act out of rational and moral deliberation, Alma appears to be in control of comparatively little. She is presented as charged by uncontrollable, irresistible forces of energy; magnetically drawn to the civilised irrationality of the rentier's metropolis.

Towards the end of the second book, the preparations in London for Alma's concert are described. The day before Alma is due to perform, Rolfe's impetuous friend, Carnaby, having believed a rumour that the millionaire aesthete Redgrave is having an affair with his wife, dashes over to Redgrave's exotic Wimbledon bungalow and seeing him with a woman in the shadows strikes him down, killing him. Out of the shadows emerges not Carnaby's wife but Alma who immediately begs him to conceal the fact of her presence. Alma is now caught between her infatuation with the murdered Redgrave and the need to keep up appearances to Rolfe, with this knowledge locked inside her.
And what keeps her awake at night and drives her nearer the fatal overdose of morphine is the continuing memory of that moment of unfulfilled desire which she now converts into jealousy of Sybil Carnaby, whom she accuses of stealing Redgrave's affections.

Significantly, Gissing does not present her strong feelings for Redgrave as something she can admit to herself. There is no interiorisation of consciousness nor mode of utterance which can take the reader closer to her, other than the signs of her physical and mental disturbance. Her perception of her behaviour and the reader's perception of her, are continually overwhelmed by the pressure of the pathological discourse. Gissing does not only indict a way of life, he is also interested in the neo-psychological life of this woman under acute stress resulting from the conflicting roles she is expected to perform.

It is not difficult for the reader of Gissing to see how differently Alma's career might have been structured. Yet more importantly, we can imagine the reader of 1897 to be as far from entering Alma's consciousness as Rolfe himself - given Gissing's authorial insistence that one joins Rolfe on his side of the abyss. The reader is invited to feel comfortable in Rolfe's company as he makes his dives for solitude, while paradoxically, Alma, alone amid the salon jackals, is removed from the companionable narrator's encouragement. As a neurotic she bears her neurosis alone. And that is part of the ideological power of the discourse which stigmatises degenerates or deviants: the belief that they are unconscious of the very forces by which they are stigmatised. Alma has a head full of people but she herself cannot be reached. Like a
'condition', she can only be understood once it has passed away.

It is notable in the novel that Rolfe continually misses the significance of his wife's reactions; he registers the neurosis, but not the latent conflicts which it obscures. Gissing cannot seem to allow him to expose his own consciousness to Alma's inspection in any serious way. He rarely articulates his anxieties to her. His concerns are philosophical, cultured - yet always distanced. Appropriately, he becomes an armchair spokesman for intelligent concern (which expresses Gissing's own views), about the ethical difficulties of educating children in an increasingly imperialist and barbaric world.

Four months before beginning to write *The Whirlpool*, Gissing read Herbert Spencer's *Education* (1861). It is worth recalling a quotation cited in chapter One, section six:

> Nature is a strict accountant; and if you demand of her in one direction more than she is prepared to lay out, she balances the account by making a deduction elsewhere.\(^66\)

By 'nature' Spencer had in mind the process of reproduction in which women are not only central but find their 'natural' role. For Spencer, women are defined and limited by their function as bearers and nurturers of human kind, so that activity at any high level of intensity unconnected with this function is bound to have a deleterious effect, and will be an unwanted source of pressure - it will 'tax' women. The term, as used by Spencer, is revealingly ambiguous:

> because of the physical tax which reproduction necessitates...because of the tax, physical and mental, necessitated by rearing children... assuming the preservation of the race to be a
As described in chapter One, this conception of woman's 'natural' state with its penalty clauses and sacrifices on the one hand, and its motherhood-joys and its racial benefits on the other, is one which easily intersected with a mechanical model of woman's nervous system, which attributed neurasthenia and hysteria to inappropriate and wasteful expenditure of energy outside the calm of the home, hearth and nursery. The most important business of the woman, then, was to procreate and not to overtax herself with intellectual activity. This became a commonplace of orthodox Darwinian thinking well into the twentieth century. The male, however, is biologically the more variable sex. Variability can guarantee the development of the species since without it no degree of greatness or sophistication can be achieved. Man is the active, aggressive, intellectual sex, pushing back the frontiers of human development. Imperialism, and English imperialism in particular, provided a visible opportunity for this determinism in action. By the 1890s, however, woman as home-maker began to take on a more overt political significance and this gathered momentum after the Boer War. The regenerative role that women (in particular) were asked to play in the redefinition of values around imperialist needs will be discussed later in this section and in the next chapter.

Many accounts of the late 1880s and early 1890s followed Spencer in viewing women as underdeveloped men, whose development had been arrested by their sexual system; they were even to be categorised as savages or, indeed, children. In Differences in
the Nervous Organisation of Man and Woman (1891), Harry Campbell argued that the neurotic disposition of women had a biological foundation. Their child-like craving for sympathy, their imitativeness and their lack of will-power and initiative were immature qualities beyond which they could not advance; and yet the woman was also a conventional being:

more a creature of social routine, than the man...she is more disposed to bigotry, her excess of feeling making her very tenacious of her beliefs which nevertheless are uncorrected by any severe intellectual discipline, or by a wide view of life. In imitativeness and lack of originality, again, she stands conspicuously first.

Some indication of the degree to which neurasthenia had by the 1890s evolved into the prevalent condition of the aspiring woman, described in chapter One, can be gauged from a rather more open-minded work of this period, Cyril Bennett's The Modern Malady; or Sufferers from 'Nerves' (1890).

Bennett drew a picture of the pressures and tensions of modern life from an analysis of groups of aspiring female medical students, discussing how the male-dominated profession responded to them. He believed many such women were neurasthenics; in some cases the women, themselves, diagnose their own neurasthenia. Bennett identified this condition to be an index of the passage of such women into the 'public world', but he could not decide whether this condition should be traced to their hereditary disposition or to professional and social antagonism. Women who achieve eminence, he believed:

seem to have shot out a long angle on one side of their natures at the expense of drawing to a corresponding extent on the other side. The emotional part of them appears to be defective,
and the defect manifests itself chiefly in an annoying, though often amusing, deficiency of humour. It may be that the sieves of these professions are of a particularly distorting order, and that the sensitive organisations of women are more easily injured by them than the tougher organisations of men.71

Bennett was clearly sympathetic to the difficulties confronting middle-class professional women and criticised the way male doctors stigmatised them. But he retained throughout a biological model of women's innate 'sensitive organisation'.

Another model of female behaviour which was in evidence in the 1890s, could be detected in a generally intelligent review of The Whirlpool by Greenough White. He identified a hint of degenerate criminality in Alma's makeup:

Its plot inheres in the degeneracy of a woman's character...The degeneracy of the central character is exhibited by a few infallible signs: the self-pity of the wrong-doer...her opening a letter addressed to her husband and the unfounded and degrading suspicions excited by something she had read in it - and finally, the depth of degeneracy in a wife and mother, a regret that she had not, in her salad days, profited by Redgrave's dishonourable proposal.72

The passage in question certainly suggests such an interpretation. When Alma opens the letter addressed to Rolfe from Mary Abbot, Gissing comments:

At this point in her life, Alma had become habitually suspicious of any relation between man and woman which might suggest, however remotely, dubious possibilities. Innocence appeared to her the exception, lawlessness the rule, where men and women were restrained by no obvious barriers. It was the natural result of her experience of her companionship, of thoughts she deliberately fostered (252).
This description of lawlessness affords a glimpse of the imperialist ethic; Carnaby's New Zealand offers precisely the absence of 'barriers' that here denote an atavistic criminal impulse. But Alma is cast as the passive carrier of the evils of the metropolitan world and is loaded with its moral disease.

Significantly, Gissing does not distinguish between her attitude to that world and her feelings towards Rolfe and Mrs Abbot. That she has now become subjugated to the irrational forces of desire can be measured by comparing her first appearance as Bennett Frothingham's daughter early in the novel. As the daughter of a wealthy banker she can be expected to identify a predator when she sees one. She consciously exploits her sexuality, although as Patrick Parrinder suggests: 'a more determined gold-digger than Alma would have responded to Dymes' or Redgrave's advances during her Wanderjahr at Munich, rather than seeking respectability with Harvey Rolfe'.

But Parrinder's account of her 'tragic' role doesn't quite point up those movements which gather momentum, driving Alma forward and downward; less a character with, whether for good or ill, motives of her own, than a carrier of the energies of others. The opposing terms in which metropolitan London is viewed - the barbarism within the civilised portals and the death of innocence at the hands of Darwinian lawlessness (the terms of the novel's theme) - come to rest in Alma, who is crushed between them.

If there is a specific source for the sexual and criminal innuendo within the novel, as detected by Greenough White, it is Lombroso's and Ferrero's *The Female Offender* (1895) which Gissing read in August 1895 some eight months before beginning *The Whirlpool*. 
It is a study typical of the Lombrosian method as described in chapter One. Every kind of undesirable stigma is attributed to the female criminal in order to demonstrate the inherent degeneracy of this type. There are chapters on 'Facial Anomalies', 'Brains', 'Skulls', 'Acuteness of Sense' and 'Tattooing'. The picture of the female criminal which emerges is of a biologically degenerate woman lacking traditional maternal impulses and with strongly 'masculine obsessions':

the female criminal...is excessively erotic, weak in maternal feeling, inclined to dissipation, astute and audacious, and dominates weaker beings sometimes by suggestion at others by muscular force; while her love of violent exercise, her vices and even her dress increase her resemblance to the sterner sex. Added to these virile characteristics are often the worst qualities of woman: namely, an excessive desire for revenge, cunning, cruelty, love of dress, and untruthfulness, forming a combination of evil tendencies which often results in a type of extraordinary wickedness. 75

As with Nordau's catalogue of degenerate characteristics amongst artists, these qualities do not bear particularly detailed inspection, isolated from any verifiable context. Gissing, however, need not have accepted every stigma in order to have his idea of a female criminal 'type' confirmed. This emphasis surfaces in the presentation of the feuding between Sybil Carnaby and Mrs Strangeways in the wake of Redgrave's death. A rather gratuitous sense of evil surrounds Mrs Strangeways. When Alma calls on her, the suffocating atmosphere turns 'her thoughts to evil' (264), and Dymes later tells Alma that 'I draw a line for women. Mrs Strangeways goes a good bit beyond it' (408). Mrs Strangeways generates an atavistic hatred in Alma when she importunes her for money:
Looking at her elaborately plaited yellow hair, her thin neck, her delicate fingers just touching the long throat, Alma felt an instinct of savagery; in a flash of the primitive mind, she saw herself spring upon her enemy, tear, bite, destroy (428).

But the most interesting, and possibly the most decisive, way in which Alma is stigmatised and judged, is through her role as a mother. There is an important regenerative ideology of motherhood embedded in the novel which helps to organise our response both to the whirlpool world and to what could lie outside it. Yet in the regeneration, we find that Alma merely confirms the power of the 'degenerate' condition which Gissing has ascribed to her.

Alma is self-evidently not a talented mother. But this evidence accumulates, not as a series of relatively marginal perceptions about her personality, but as yet another medical judgement by which she is outlawed. The ability to be a good mother is a highly-charged social issue and there is clear evidence that patriarchal assumptions about the role of woman as mother were being reconstructed as a distinct political ideology, from the late 1890s onwards.

Within the text, motherhood emerges, alongside certain distinctive attitudes to children and their education, as some sort of measure of degeneration or regeneration, and this discourse enables Gissing to underwrite the separate narrative worlds which Alma and Rolfe inhabit. Rolfe is subtly regenerated through a caring attitude towards his son, whereas Alma's lack of marital fitness is a function of her degeneracy - so persistently characterised by her own nerve weakness and hysteria. And the degenerate condition is played out in
the family. Whilst Rolfe finds in his son a source of solace, sympathy and self-development, Alma draws

a broad line of demarcation between nursery and drawing-room; it was seldom she felt in a mood for playing with the child, and she had no taste for 'going walks'. But Harvey could not see too much of the little boy (383).

The son, Hughie, bears the heredity of his parents in his nervousness: 'He had no colour on his cheeks, and showed the nervous tendencies which were to be expected in a child of such parentage' (383). Gissing's clear inference is, that it is Alma's defective genetic influence which is decisive.

Shortly afterwards, three incidents occur in quick succession which underline Alma's maternal and domestic inefficiency, in a lurch toward the abyss which is so characteristic of Gissing's tacky, insistent, apprehension of breakdown. Rolfe discovers her addiction to a 'narcotic'. Now he has:

a most uncomfortable sense of strangeness in his wife's behaviour; it seemed to him that the longer he lived with Alma, the less able he was to read her mind or comprehend her motives (387).

Because of Alma's growing indifference to domestic affairs, she is unable to undertake finding a replacement for the cook who has just resigned. Shortly after, Alma gives birth to 'a lamentable little mortal with a voice scarce louder than a kitten's' (387). Yet her tenderness towards the baby does not prevent its early death, the result of which is to harden her even more against her son:

Harvey had thought she would ask for her little son, and expend on him the love called forth by her dead baby; she seemed, however, to care even less for Hughie than before (394).
What reduces motherhood to an ideological question, is that Gissing invests the feelings and attitudes of adults to children with an intense partiality. At the beginning of book Three, Gissing draws on wholly new areas of sensibility, in Rolfe's awakening to the obligations of parenthood. He reproduces a comfortable and comforting version of family life in the Morton household suffused by an organic ideal of a stable, unchanging backwater. It is the country-house impulse to integration we have witnessed in Isabel Clarendon and with a different emphasis in Born in Exile. Inscribed within it, however, is the reconstituted ideal of motherhood by which Alma's maternal inefficiency is registered. Significantly, Mrs Morton is introduced as a paragon of good health first and a woman second:

Mrs Morton had the beauty of perfect health, of health mental and physical. To describe her face as homely was to pay it the highest compliment, for its smile was the true light of home, that never failed (324).

Good health, in the terms of the prevailing medical discourse within the novel, signals a desirable condition of life and invests the children of such a mother with the sound qualities of racial health. Mrs Morton is indeed eugenically desirable in her fertility:

Four children she had borne - the eldest a boy now in his twelfth year, the youngest a baby girl; and it seemed to her no merit that in these little ones she saw the end and reason of her being. Into her pure and healthy mind had never entered a thought at conflict with motherhood. Her breasts were the fountain of life; her babies clung to them, and grew large of limb (324).
Alma, we recall, would like to give milk but is prevented from doing so and her child dies. And again, by contrast with Alma, Mrs Morton: 'would have found it an impossible thing to abandon her children to the care of servants' (324).

That Mrs Morton does bypass her servants as she 'conceives her duty as wife and mother after the old fashion', makes her, paradoxically, very much a woman of the future. Consciously or not Gissing, within the idealised portrait, captures that enlightened, leisured, self-sufficient woman who, by the mid 1890s, was forming a ready readership for the burgeoning encyclopaedias of child-care, medicine, domestic arrangements, and health and beauty. It was a response, in part, to the accelerating demise of the servant and, more important, was signalling a redefinition of the role of motherhood in a national movement for the regeneration of racial health.

As I have suggested in chapter One, attitudes towards motherhood were changing in the late 1890s. Among the middle and upper middle class, children were increasingly seen as the bearers of a new and stouter future. The rhetoric of eugenics appealed to women of all classes in specific ways. While working-class women tended to bear the brunt of the increasingly interventionist machinery of child welfare, hygiene lessons and the paraphernalia of domestic science, amongst the middle-class, money and time could allow the development of a new self-conscious attitude towards children and childhood, and the expression of a progressive liberal-individualism unshackled by Victorian repression. I discuss H.G. Wells's use of the ideology in the next chapter.
The Children's Encyclopaedia edited by Arthur Mee, which appeared from 1908, expresses vividly, in a typical discussion of the period, this distinctively idealistic, if sanctimonious, Edwardian vision of childhood. In the opening preface, addressed to 'All Who Love Children All Over the World', Mee wrote that the encyclopaedia is:

The first attempt that has ever been made to tell the whole sum of human knowledge so that a child may understand. Nothing could be more false to its purpose than to imagine that it seeks to cram the mind of a child with things that children need not know...[It is] based upon the finest ideas of education that have ever been expressed in English, set forth in a book which Herbert Spencer gave to the world nearly fifty years ago. It conceives the bringing up of a child as the supreme task in which we can engage, but it has no sympathy with those who would set a child down at a desk almost before it can run. It believes that in its early years a child is its own teacher, and that in a right environment it will teach itself more than all the teachers in all the schools can teach it. 77

Mee's high-flown tone in which the child is elevated alongside its parents is quite characteristic of the period. The editor of two of the continuous fourteen sections of the encyclopaedia was Dr C.W. Saleeby who, by this time, had established himself as one of the key eugenist polemicists in the country. On the liberal wing of the movement, (he deplored negative eugenicist measures such as sterilisation), Saleeby, in 1909, elevated 'maternalism' into a creed which incorporated child-centred education into a Darwinian vision of future struggle: 'The history of nations is determined not on the battlefield, but in the nursery, and the battalions which give lasting victory are the battalions of babies'. 78 In a lecture the previous year he opposed motherhood to the state in this graphic conceit: 'There
is no state womb, there are no State breasts, there is no real substitute for the beauty of the individual motherhood’. 79

As Anna Davin has suggested, there was an increasing exhortation to women not to shirk motherhood, ‘related to the belief that the middle-class and upper-class women were pursuing new opportunities in education and employment’. 80 The robust mother devoted to her children’s welfare was championed by feminist campaigners such as Frances Power Cobbe, who urged female self-help through their tending to their own health, alongside the movement for dress reform which dated from the early 1870s. 81, 82 But the mother was now cast as the new womanly ideal within the family. W.E.H. Lecky wrote in 1899: 'The beauty of perfect health and of high spirits has been steadily replacing as the ideal type, the beauty of sickly delicacy and of weak and tremulous nerves.' 83

Secularists and Malthusians had debated the role of motherhood in relation to the birth-rate and the quality of the population well before 1903-4, when the influence of the eugenic movement began to be felt. Through propagandists such as Bradlaugh, G.J. Holyoake and particularly Annie Besant, who wanted 'expertise in food preparation and baby care encouraged through professionalising house-keeping', the connection between motherhood and the future of national racial health was being cemented. 84 In March 1894, Grant Allen, a writer much influenced by secularist thought, urged:

\[
\text{duties of a moral abstinence from fatherhood or motherhood on the part of the unfit, and a moral obligation to fatherhood and motherhood on the part of the noblest, the purest, the sanest, the healthiest, the most able among us.} \quad 85
\]

Allen's article is also a likely source for Tarrant's advice to
Nancy in *In the Year of Jubilee* (composed January - April 1894), that it is her 'duty to keep out of the beastly scrimmage' and that she should as a mother be exceptional since 'not one woman in a thousand can bear a sound-bodied child; and not one in fifty thousand can bring up rightly the child she has borne' (429).

Such rhetoric in praise of the families of the élite class drew on Spencer's *Education* (1861) which I have suggested is an influential text for Gissing. Within the family the highest stage of development could be witnessed, as Spencer exhorted the parent:

> Not only will you have constantly to analyse your own motives - to discriminate between those internal suggestions springing from a true parental solicitude and those which spring from your own selfishness, your love of ease, your lust of dominion...You will have to carry on your own higher education at the same time that you are educating your children...Morally you must keep in constant exercise your higher feelings, and restrain your lower...It is a truth yet remaining to be recognised that the last stage in the mental development of each man and woman is to be reached only through a proper discharge of the parental duties...That it cannot be realised by the impulsive, the unsympathetic and the short-sighted, but demands the higher attributes of human nature, they will see to be evidence of its fitness for the more advanced states of humanity. Though it calls for much labour and self-sacrifice, they will see that it promises an abundant return of happiness, immediate and remote. 86

While Gissing does not explicitly connect an idealistic view of middle-class motherhood with a specific regeneration ideology, he does draw on a prevailing rhetoric which, like the voice of male reaction at the end of the novel, is growing in influence and would continue to do so, well into the 1900s. It is the idea of the mother as the lynch-pin of the family - the key social unit in the national struggle for efficiency after the trauma of the Boer War. It is
particularly apposite that it was H.G. Wells (as I describe in the next chapter), who in the years from 1901 beat the drum of national efficiency, particularly with regard to the production of healthy children by mothers endowed with the responsibility of raising the standard of the race. He alone amongst the reviewers of *The Whirlpool*, drew attention to the persistence of an ideological restructuring of the present by a vision of evolutionary futurity, in his very partial interpretation of Gissing's novel.

Wells's review registers that *The Whirlpool* is about 'some social influence, some far-reaching movement of humanity';\(^\text{87}\) it successfully opens up the contemporary to the future. The eleven-year gap between the publication of *The Whirlpool* and the date (1886) of the opening scenes, is, indeed, unimportant since Gissing is careful to implant crucial facts as developments. As in *New Grub Street* and *In the Year of Jubilee*, he retrospectively identifies the sources of developments in the world of 1897. John Goode points out that 'modernity is the novel's dominant motif'.\(^\text{88}\) It is reflected in the commercial development of photography and bicycles and, more importantly, in what Goode calls: 'the pervasive representation of an ideological formation responsive to this newness', - imperialism and perhaps, less insistently, its 'counter' ideology - decadence.\(^\text{89}\)

Wells perceives Rolfe's description of the significance of Kipling's *Barrack-Room Ballads*, in the final scene of the novel, as symbolic of a change which is strictly contemporary. The voice of reaction is 'a change that is sweeping over the minds of thousands of educated men'.\(^\text{90}\)
Wells was, however, wrong, as several critics have pointed out, to identify Rolfe merely as an exponent of imperialism. Gissing, himself, tried to correct this impression in a letter to Wells directly after the article appeared in the *Contemporary Review*. But Wells nevertheless succeeds in extrapolating this vigorous future, throughout the review. He alerts the reader to the reconstituted ideology of the family, by examining the attitudes to children in the novel: 'In *The Whirlpool*, he writes, 'the implication is always of the children, children being neglected, children dying, untimely, children that are new born'. Wells believes that by exploring the question of dependents, Gissing has dispatched for good his arcane longing for the 'noble' way of life - 'the hopeless ideal of scholarly refinement' and now faces full-square the modern dilemmas that confront 'civilised' people, for whom the role of children is central. He clearly believes that attitudes towards children are fundamental if the evolutionary challenges posed by the dawning century are to be met:

It is the discovery of the insufficiency of the cultivated life and its necessary insincerities; it is a return to the essential, to honourable struggle as the epic factor in life, to children as the matter of morality and the sanction of the securities of civilisation.

What these sentiments usher is Wells's emergent eugenic reformism, which was to become such an important feature of his future writings and will be examined further in chapter Four. Wells implies that in Gissing, he has found an exponent of the eugenic necessity for strong, healthy parents to provide the fittest offspring to compete in the 'honourable' struggle for existence, which is
intensifying on a national and international plain. He points out Gissing's newly acquired moral credentials for judging characters in his fiction:

In the early novels it would seem that the worst evil Mr Gissing could conceive was crudity, passion, sordidness and pain. But The Whirlpool is a novel of the civilised, and a countervailing evil is discovered - sterility. This brilliant refinement spins down to extinction, it is the way of death. London is a great dying-place and the old stupidities of the family are, after all, the right way.  

Wells instances here Mary Abbot's neglect of her child and her self-imposed reform through bringing up the orphan children; and more important, Alma's maternal inefficiency - leaving 'for the future one little lad', as evidence of Gissing's theme of redemption through struggle. What exercises Wells is the idea that if the struggle for civilisation in England means anything at all then that civilisation ought to provide for its people the 'sanction' of securities by which civilisation can further evolve; and the cradle of its security is to be found within the 'homely family'. We are back at the Mortons - but via a very different route. And it is important that we perceive how Wells has read Gissing's path with his own partial map.

Wells does not, however, address the central theme of the novel, which is the breakdown of a marriage through conflicting personal and social pressures; for him not to understand Gissing's commitment to Rolfe's search for a significant modus vivendi, is in effect, to ignore Gissing's profound failure with Rolfe and to minimise Alma's responsibility for that breakdown - however deterministically it may be presented. In his keenness to champion Rolfe's 'conception of struggle and survival' against Morton's 'conception of spacious culture',...
Wells obliterates the uncertain space between Rolfe and Gissing, which, as I have argued, is a continuing difficulty. The fact is that Wells articulates a social reformulation which is latent in *The Whirlpool* but is not acknowledged by Gissing at a conscious level. And Wells's formulation is a truly pragmatic one, whereas Gissing is idealist and utopian. Wells problematically elevates the family into the most highly developed cradle of racial health, justifying the effectiveness of the struggle in the large world beyond the front door. This ideological formulation was to gather considerable force during the next decade.

It was particularly important for Gissing therefore, that he should refute Wells's interpretation of Rolfe as a man of the future. In a letter to Wells he stresses Rolfe's conservatism and slow emergence out of egoism:

> As a bachelor, he was largely an egoist and took the egoistic tone of a certain world. Later he is ripe in that experience which kills the cruder egoism. That he does nothing is natural in the man. 97

It is Rolfe's personal development that counts; he 'would probably never had developed at all, after a certain stage, but for the change wrought in his views and sentiments by the fact of his becoming a father'. 98

By concentrating on Rolfe's apparent expositional role, Wells totally missed what for Gissing was a moving discovery; that of the debt that a father owes to the son he has brought into the world. The cure for Rolfe's egoism is the experience of fatherhood, an experience which, indeed, changed Gissing's own life: his diary entries and letters of this period testify to his solicitude as a father. The
literary expression of this in *The Whirlpool* owes more to the early conventional idealism of Gissing's positivist days than to the beckoning materialism offered by Wells.

What Wells does not express, of course, is the reader's sense that in spite of his intense voicing of conflicting moral positions, Rolfe is, to the end, the flawed armchair philosopher. Rolfe does not enter the deterministic deterioration of Alma's world in any significant way. The more seriously he takes his own re-educative mission the more this lack of integration is felt. However interesting Rolfe's differing postures may be, they are all finally undercut by the drift of this narrative from the major concern of the novel. So that discovering the meaning of paternity becomes a separate serious project. His son Hughie is hardly the same boy that Alma is apathetic about. Father and son inhabit a different world from Alma's; their ideology which excludes her. As John Goode suggests, Rolfe's development from a crude Darwinism to his awareness of parental obligation ought to rest at Alma's door.

For Rolfe, the Mortons come to represent 'the true ideal of achieved autonomy' — a desire for integration which Wells misses in his zeal to capture Rolfe for the fighting future. The world is projected through the growing child but the debate in fact goes nowhere; it is a self-enclosed educational exercise. The self-awareness that emerges from Rolfe's relationship with his son has never extended to the novel's central educational project — the learning of living within marriage; and that has been sunk by the teleology of degeneration that Gissing has built into his characterisation from the very beginning.
I have tried to describe how Gissing's pre-determined structure of failure dictates the terms of the marriage experiment. It is true to suggest that the pathological expression of degeneration ensures that this experiment comes to look like a foreclosing proof, or demonstration. We are left with the curious paradox that the 'open' experiment in The Whirlpool is marginal to the novel's centre - and is, in fact, a closed one.

It follows that against such closure any assertive self-consciousness must construct its own distinct and separate world. The logic of this is a bildungsroman such as Thomas Mann's Buddenbrooks, or The Rainbow, in which a new generation is the expression of a whole social and historical evolution. That, indeed, would have been a decisive break with the foreclosed character of his narratives, which the determinism underwrites. Yet in The Whirlpool he perhaps comes closest to that breakthrough.
H.G. Wells's prolific output of scientific journalism and science fiction of the 1890s and especially after 1895, whilst deeply indebted to evolutionary theory, is distinguished by its sceptical treatment of prevailing assumptions about man's place in nature and contemporary ideological inferences derived from them. He was a 'Social Darwinist' with a difference. Unlike his contemporaries, Benjamin Kidd and Karl Pearson, Wells found little in evolution to justify a complacent view either of man's superiority or his secure foothold on the biological ascent.

Wells employs a range of biologically-derived propositions in his 1890s writing which query man's evolutionary stability. A proliferation of speculations suggests that man could be humbled and even displaced; his history of dominance offered no necessary grounds for belief in his dominance to come.

This imaginative scepticism about the self-definition of educated, English-speaking, ruling-class man at the zenith of his development is at the core of the most original phase of Wells's long career as a writer. Beginning in the early 1890s in his mid-twenties,
he was to establish himself within five years as perhaps the most influential writer of the decade. The spectre of degeneration which haunted readers of the 1890s is indeed a crucial factor in his popular success; for, far from dispelling the idea, Wells, as will be seen, exploited it time and time again to telling effect. It was with The Time Machine, which I shall argue is the pre-eminent degeneration parable of the period, that Wells secured his reputation.

In an essay of 1891, 'Zoological Retrogression', Wells considers that the history of evolution, with its inherent idea of continuous human progress, is complicated by degeneration:

> it is only recently, however, that the enormous importance of degeneration as a plastic process in nature has been suspected and its entire parity with evolution recognised...In fact, the path of life, so frequently compared to some steadily-rising mountain-slope, is far more like a footway worn by leisurely wanderers in an undulating country... Upward and downward these threads of pedigree interweave, slowly working out a pattern of accomplished things that is difficult to interpret, but in which scientific observers certainly fail to discover that inevitable tendency to higher and better things with which the word 'evolution' is popularly associated.1

Wells goes on to instance the degenerate vertebrate, the Tunicata, which actually performs like an invertebrate crab or mussel. In a bold passage-suggestive of the imaginative scope of his science fiction - Wells implicates man in the uneven process of evolution by claiming that he descends from the mudfish Dipnoi, which from the open-sea has adapted to the more hospitable environment of river mud: 'they preferred dirt, discomfort, and survival to a gallant fight and death'.

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1 Adapted from H. G. Wells, 'Zoological Retrogression'.
Developing air-bladders rather than gills, 'emigrants from the rivers swarmed over the yet uncrowded land'. From the reptiles of the 'coal-measure epoch' sprang,

divergently the birds and mammals, and finally man, the heir of the ages. He it is who goes down to the sea in ships, and, with wide sweeping nets and hooks cunningly baited, beguiles the children of those who drove his ancestors out of the water. 2

As is evident in The Time Machine and several of Wells's short stories, there is more than an element of sheer unprovable popular speculation in the essay. The ironic curve of the argument offered in a knowing tone of confidence, if not arrogance, is intended to instruct, entertain and perhaps above all to shock. This is no more clearly seen, than in this youthful tour de force where he conjures up a biological apocalypse, his tone of studious understatement offsetting the essential naivety of the speculation:

there....is no guarantee in scientific knowledge of man's permanence or permanent ascendancy. He has a remarkably variable organisation, and his own activities and increase cause the conditions of his existence to fluctuate far more widely than those of any animal have ever done. The presumption is that before him lies a long future of profound modification...it may be that, instead of this, Nature is, in unsuspected obscurity, equipping some now humble creature with wider possibilities of appetite, endurance, or destruction, to rise in the fulness of time and sweep homo away into the darkness from which his universe arose. The Coming Beast must certainly be reckoned in any anticipatory calculations regarding the Coming Man. 3

In illuminating man's descent from a degenerate species, Wells questions the assumption that it is man who gives evolution its direction and purpose. For Wells, this was all too close to the substitution of another teleological belief for the displaced
Christian belief in man's special status. If evolution could admit retrogression, how certain could he be of his ever-upward progress? In 'On Extinction' (1893), Wells speculates rhapsodically on the tragedy inherent in Nature's rejection of the 'plans of life'. Successive phases of evolution have been built on the extinction of certain species and Wells reminds the reader that the nineteenth century has, in fact, witnessed the virtual elimination of one species - the bison:

Surely a chill of solitude must strike to heart of the last...survivors of the defeated and vanishing species. The last shaggy bison, looking with dull eyes from some western bluff across the broad prairies, must feel some dim sense that those wide rolling seas of grass were once the home of myriads of his race, and are now his no longer. The sunniest day must shine with a cold and desert light on the eyes of the condemned. For them the future is blotted out, and hope is vanity.

Having thus humanised the remaining bison, he counterposes the situation of man - his evolutionary affiliation is neatly insinuated:

These days are the days of man's triumph. The awful solitude of such a position is beyond the imagination. The earth is warm with men. We think always with reference to men. The future is full of men to our preconceptions, whatever it may be in scientific truth.

The biologising of man suggests that his assured status in this phase of evolutionary triumph is the result purely of the random process of natural selection, and man, as the most highly evolved animal, owes his existence as a species to his success in that struggle. No first cause or supra-evolutionary idea, Wells implies, can be formulated to justify man's current accession to the evolutionary crown.
One aim of this, in other respects, rather slight essay is to bring out the stark contrast between barrenness and plenitude, extinction and vigorous life. The reader is enjoined to speculate about the future implications for humanity of evolutionary reverse. Wells is also concerned to knock man off the pedestal of his evolutionary conceit by questioning the teleology at the heart of evolutionary thought: that man can find confirmation in his continued successful progress. The idea threads in and out of his speculative journalism and his short fiction. Through his narratives recurs the idea that man's hegemony over lower species and other planetary life could not be taken for granted; and that he needed to look to his own fitness if he was not to be overtaken by other 'fitter' competitors. These narratives open up the more unthinkable possibilities in which man was made vulnerable, both to invasion and replacement.

Part of Wells's success derives from his exploiting the mythic component within biological determinism, and the contemporary rhetoric directed at perceived actual competitors - degenerate or racially tainted groups, foreign competition, or the immigrants (significantly termed 'aliens') of the period; the subject of a section of chapter One of this thesis. As Wells's evolutionary speculations veered between empirically-observed truth and outright myth, so the empirical and the mythic interacted. Yet by taking the existing apocalyptic element in determinism to its conclusion, Wells took up a somewhat ambivalent stance, with regard to the truth of such determinisms. Did The Time Machine, for example, merely confirm the pessimistic and apocalyptic tendency in determinism, or
on the other hand, by out-flanking the doom-laden prognoses of the degenerationists, might Wells not have been enjoying a series of extended jokes at their expense?

In Wells's best-known story of invasion, *The War of the Worlds* (1898), man is all but annihilated by invading Martians. One effect of the narrative is to undermine the absolute authority of man as a species. With dogged relativism, Wells explores man's fate from an unfamiliar and unusual point of view. The human world is objectified as only one of several planets on which evolution has taken place; the Martians are given the same evolutionary privilege as man: 'the intellectual side of man already admits that life is an incessant struggle for existence, and it would seem that this, too, is the belief of the mind upon Mars'.

Wells suggests that the races of man are in any case locked into a hierarchical and exploitative relationship. Before the Martians are judged 'too harshly',

we must remember what ruthless and utter destruction our own species has wrought, not only upon animals, such as the vanquished bison and dodo, but upon its own inferior races. The Tasmanians...

Wells insists on man's vulnerability to replacement by the Martians, by emphasising both man's destructive capacity and the Martians's human characteristics - significantly their over-developed faculty of intelligence. The narrator observes:

To me it is quite credible that the Martians may be descended from beings not unlike ourselves, by a gradual development of brain and hands... at the expense of the rest of the body...they have become practically mere brains, wearing different bodies according to their needs.
The conflated existence of a highly-evolved foreign intelligence interested Wells. In his short story *The Crystal Egg*, this faculty is expressed through sensory receptiveness. Yet he was not alone. Such speculation was the stuff of numerous popular accounts. Francis Galton wrote in the *Fortnightly*, in 1896, on 'Intelligible Signals Between Neighbouring Stars', and there had been much newspaper speculation over 'the possibility of exchanging visible signals' with Mars in 1891. Galton speculated about the behaviour and appearance of Martians - notably, their 'antennae which during conversation between social equals and friends are in constant movement and touch'. His article also gave an account of a possible signalling code that might exist to detect Martian life.

Wells's interest in the evolution of intelligence, and particularly of the organ of the brain, is a crucial factor in his subsequent application of evolutionary humanism, to be described in a later section. As Bernard Bergonzi has suggested, 'the obsession with brain-capacity as a physical sign of intellectual ability was to remain with Wells throughout his life'. For the human brain, naturally enough, could be seen as both the site of intelligence and the peak of evolutionary development. Wells's suggestion that a superior species of brain had evolved, raised for him the question of the utility of the human brain, as well as its limitations and untapped potential.

In *The War of the Worlds* (1898) he succeeds brilliantly in sustaining the intellectual demands of the evolutionary process, while charting the victory (by default) of human over Martian intelligence
despite the near-annihilation of man. The Martians are disposed of precisely because their advanced brains render them powerless to deal with the spread of bacteria - leaving a small handful of less intelligent human survivors to formulate a crude assertion of contemporary 'Social Darwinism'. The Artilleryman voices the brutal and defensive response, 'Life is real again, and the useless and cumbersome and mischievous have to die'. While Wells is undoubtedly sympathetic to this no-nonsense assertion of force, when viewed against the almost total havoc wrought by the invading Martians the assertion looks feeble and futile indeed, as if the Artilleryman has gloriously missed the point. The fiction has enacted, after all, the terror of the evolutionary collapse of mankind centred pointedly on London and the South East of England. Clearly a rather more expert and all-seeing kind of human intelligence is called for, to emerge from the vision of apocalypse which the invasion has invited.

In The Sea Raiders (1896), man is superseded by giant squids with 'large intelligent eyes' and 'a grotesque suggestion of a face', and is replaced in The Empire of the Ants (1905). The Selenites with their powerfully developed heads in The First Men in the Moon (1901) have almost human characteristics: in the figure of the Grand Lunar, intellectuality is objectified as an abstract quality in its own right. Wells's interest in threatening alien intelligence is bound up with his regenerative vision of the dawning of the age in which the expert, the 'coming man', will both embody man's evolutionary achievement through the application of mind, and ensure the continuation and prosperity of the human race now faced by sterner and greater odds from without.
The prevailing idea in Wells's 1890s work is that late-Victorian man cannot necessarily have it his own way. When he writes in 'On Extinction' (1893) that 'these days are the days of man's triumph', he exercises a deft scientific sleight of hand by ironically fusing a piece of imperialist rhetoric with an evolutionary commonplace. It is his intention to cast a deep shadow over this habitual conflation of science and political hegemony. And he does so by interposing forces which the play of evolutionary discourse itself has made credible and potent. His work is fired by the imaginative possibilities of driving a wedge between the consciousness of English imperial man and his territory of control, by calling on those social, political and economic feelings of insecurity which are gathering pace at this time. And this is a shared tactic of the growing literature of invasion and destruction of the period. Writers such as G.C. Griffith thrived on such a readiness to imagine the worst in the way of disaster, destruction, and war. But whereas this literature tended to whip up moral panic by singling out relatively obvious targets from without, (successively France, America and Germany), Wells's usurpers are more usually the fantastic yet not wholly incredible products of the evolutionary process of which man is the most successful offshoot; the product not of the entire process but of a particular phase of it.

In 'The Rate of Change of Species' (1894), Wells argued that while contemporary man is 'indisputably lord of the world as it is' a sudden change of climate or an 'addition of some new constituent to the atmosphere' or the 'advance of a fresh glacial epoch' would leave man powerless to adapt to new conditions:
He would very probably go before the majority of such slight and flexible creatures..(such as the greenfly). No doubt man is lord of the whole earth of to-day, but the lordship of the future is another matter. To give him that argues a confidence in the permanence of terrestrial conditions which has no justification either in geological or astronomical science. No doubt he is the heir of all the ages but the herring, the frog, the Aphis, or the rabbit, it may be, is the residuary legatee. 18

Paradoxically, it is the very slowness of man's evolutionary development that renders him the more helpless before ecological catastrophe. Man is unable to undergo rapid modification, whereas smaller, less developed organisms breed more abundantly and therefore become modified more rapidly:

The true heirs of the future are the small, fecund, and precocious creatures; those obscure, innumerable plastic species that die in myriads and yet do not diminish...the large predominant species flourish so long as the fight suits them, but when the battle turns against them they do not retreat, they perish. 19

And as if to answer critics for whom catastrophe could not possibly usher in a new biological order, Wells writes in 'The Extinction of Man':

it is part of the excessive egotism of the human animal that the bare idea of its extinction seems incredible to it. 'A world without us' it says, as a heady young Cephalapsis[[a now extinct species of fish]] might have said it in the old Silurian sea. 20
The Time Machine is the single fiction of the 1890s which is organised thematically and structurally by the idea of degeneration. It is probably the finest of all Wells's works because in no other does the structure of the fiction meet so comprehensively the demands of the central theme. That its theme is evolutionary degeneration invites an inspection of how it is structured and suggests that Wells's choice of the science fiction form is well suited to express the psychic, philosophical and social substance of this highly topical neurosis.

There may be, as Darko Suvin suggests, a quality inherent in the form of science fiction which lends itself particularly well to such a theme. Tono-Bungay, composed some thirteen years later, is, by contrast, a striking case of a 'cognitive' theme failing to find its appropriate form. It isn't only a formalist question, because the failure of Tono-Bungay, as I want to show, derives also from Wells's failure to understand the dynamics of the society he wants to anatomise. But the formal success of The Time Machine does enable us to raise questions about the relationship in Wells between fictional form, social vision and an evolutionary-derived construction of thought. That he succeeds in 1895, and he fails in 1909, can be attributed to the evident obsolescence, in the Edwardian period, of the very teleological formulae which had been
strikingly successful in administering to the apocalyptic predelictions of the readership of the mid-1890s.

At the outset we can examine the seven-chapter phase, 4-10, of the story of the Time Traveller's experiences in the world of 80271, then the subsequent journey into the future in chapter 11. This is the major phase of the story which charts the growth, to horrific awareness, of the Time Traveller's understanding of the full evolutionary significance of the Eloi-Morlocks relationship. It is a demonstration (to be found in other stories) of Wells's heuristic technique: the narrative embodies a process of discovery, through distinct stages, so that the 'innocent' interpretation at the opening of the sequence is far removed from the realisation of the true status of the Eloi at the end of it.

However, this phase of the story is framed in an important way by discursive expression of evolutionary biology - an ideological medium through which these alarming shifts of perception are registered. We can compare two quotations from The Time Machine. The first occurs towards the end of chapter four, in which the Traveller has encountered the Eloi and has witnessed something of their innocent behaviour, their harmless, playful but mentally indolent culture, and their childlike androgyny; he does not yet know at this point of the existence of the Morlocks. The second occurs just before he re-launches himself into the future, having set fire to the wood to repel the Morlocks; he is now fully aware of their dominance over the Eloi. Witnessing the
Eloi's paradisal world - a world untouched by struggle and labour -
he muses that

with this change in condition comes inevitably adaptations to the change. What, unless biological science is a mass of errors, is the cause of human intelligence and vigour? Hardship and freedom: conditions under which the active, strong, and subtle survive and the weaker go to the wall; conditions that put a premium upon the loyal alliance of capable men, upon self restraint, patience, and decision. And the institution of the family, and the emotions that arise therein, the fierce jealousy, the tenderness for offspring, parental self devotion, all found their justification and support in the imminent dangers of the young...I thought of the physical slightness of the people, their lack of intelligence and those big abundant ruins, and it strengthened my belief in a perfect conquest of Nature. For after the battle comes Quiet. Humanity had been strong, energetic and intelligent, and had used all its abundant vitality to alter the conditions under which it lived. And now came the reaction of the altered conditions.

Under the new conditions of perfect comfort and security, that restless energy, that with us is strength, would become weakness. Even in our own time certain tendencies and desires, once necessary to survival, are a constant source of failure. Physical courage and the love of battle, for instance, are no great help - may even be hindrances - to a civilised man. And in a state of physical balance and security, power, intellectual as well as physical, would be out of place.

About to depart for cosmic space, he mourns the death of the intellect:

I grieved to think how brief the dream of the human intellect had been. It had committed suicide. It had set itself steadfastly towards comfort and ease, a balanced society with security and permanency as its watchword, it had attained its hopes - to come to this at last...it is a law of nature we overlook, that
intellectual versatility is the compensation for change, danger, and trouble. An animal perfectly in harmony with its environment is a perfect mechanism. Nature never appeals to intelligence until habit and instinct are useless. There is no intelligence where there is no change and no need of change. Only those animals partake of intelligence that have to meet a huge variety of needs and dangers (78-9).

Whilst in the first passage the speculation is far more tentative and carefully qualified than the shocked affirmation in the second passage, the Traveller's analysis is predicated on essentially the same assumption in both cases - a consistent application of the evolutionary process to the development of civilisation. This statement and re-statement of evolutionary ethics is the frame which contains the Traveller's subjection to the process of ironic revelation.

Initially, the ineffectual Eloi exist in a state of harmony in which the struggle for existence apparently no longer obtains. Then, with the entry of the subterranean Morlocks, he realises that 'man had not remained one species, but had differentiated into two distinct animals' (50). This leads to the political perception that the Eloi maintain their hegemony over the repressed and inferior, proletarian Morlocks; 'above ground you must have the Haves, pursuing pleasure and comfort, and beauty, and below ground the Have-nots, the Workers getting continually adapted to the conditions of their labour' (52). Eventually, through his friendship with Weena, he realises that the Eloi live in terror of the Morlocks; the full bestiality of the Morlocks is registered
shockingly when, despite their obvious physical degeneration, they are clearly the ascendant carnivorous species who nurture the decadent Eloi, 'decayed to a mere beautiful futility' (60) as 'fatted cattle' (64) for their consumption.

Despite the series of ironically and obliquely presented mutations in this sequence, the Traveller couches his second analysis in precisely the same terms as his first. The surface assurance of his tone of voice maintains the illusion that the mere capacity to draw analytic conclusions offers at least some guarantee of rationality, but the shock to the system has been substantial. A pessimistic Wells is clearly setting evolutionary biology against itself and against those who, like the Time Traveller, espouse it in ignorance of any other frame of intellectual reference. One can only speculate on the considerable effect on Wells's readership, soaked as they were in Darwinism.

What the Traveller's evolutionary analysis demonstrates is the impossibility of stepping outside evolutionary discourse, even though the logic of an evolutionary reading promises only a blank and hopeless outcome. The Traveller is remorselessly wedded to evolutionary necessity by which all phenomena can be grouped, categorised and, indeed, rationalised in language. From the start his view of necessity is, almost pitifully, man-centred. It hardly matters exactly how and in what degree the differentiated species of Morlocks and Eloi embody aspects of humanity, for any general hypothesis is clearly as applicable to man as to any other species. Conversely, by the Traveller's terms, man may be of no more
evolutionary consequence than the liverwort still millions of years off, or the Wellsian ascidian with whom the Eloi as vegetarians invite comparison. We recall how the degenerate ascidian in 'Zoological Retrogression' (retitled 'Degeneration as Evolution' in *Scientific American*), 'settles down for life; a merely vegetative existence on a rock'.

The Traveller's assumptions in the end are Wells's own. Any species - including man - is in constant struggle with his environment even though, as the Eloi show, that struggle is no longer consciously waged. The relationship between a species and its environment is in continuous flux; in order to secure future survival man must consciously struggle with the environment to offset the inevitable pressure of population, exacerbated by decadent, unproductive sexuality.

Now the intellect is a decisive factor for man in winning the struggle, and thus becomes a factor in natural selection itself. For Wells, to conquer an environment which is characterised by pain, hardship and change, is to win freedom; yet freedom cannot be won outside the struggle, it only derives its value from within it. Anthropologically, the most effective institution for the expression of struggle is the monogamous family which can draw on the human attributes of solicitude and altruism which are directed at the exposed and vulnerable young. Such qualities are themselves derived from the exigencies of struggle in the adult world (altruism directed at the young to guarantee future evolution is a traditional evolutionary common-place).
But now all these propositions demonstrably favour not the higher but the degraded species. The scales have tipped the other way; through these conditions the intellect has secured a 'state of physical balance and security' where 'power, intellectual as well as physical' (37) has become redundant. The 'reaction of the altered conditions' (37) is unstoppable, and the hitherto favoured species degenerates. Wells, through the Traveller's continued engagement with evolutionary discourse, even as it describes the process of degeneration, effectively calls into question its intellectual credibility. But at another level he plays on the insecurities of those for whom evolution alone explains all phenomena, and once the evolutionary logic plunges into devolutionary reverse, the evolutionist is revealed as completely exposed; he has nowhere else to turn for refuge.

Now the devolutionary phase takes off with the Traveller's renewed leap into the cosmos of futurity. The mutations of dominance and subordination of the Eloi and Morlocks phase have shockingly finalised the wrong way up. The sequence is reduced to strange insignificance as the journey of remorseless biological devolution begins. The film of evolution now plays backwards at speed.

Wells wrote in later years that this particular sequence was by far the weakest in the story. By implication he attributed the leap into cosmic devolution to the influence of the astrophysicist William Thomson, later Lord Kelvin, whose influence I have discussed in the first chapter. By the 1930s Kelvin had become discredited, thus making Wells's disclaimer necessary:
The geologists and astrologists of that time told us dreadful lies about the 'inevitable' freezing up of the world and of life and of mankind with it. There was no escape it seemed. The whole of life would be over in a million years or less... while now Sir James Jeans in his smiling *Universe Around Us* waves us on to millions of years. 24

Wells's repudiation of Kelvin testifies, in fact, to the importance of his influence during the period that *The Time Machine* was composed. Wells was never again to reach such a pitch of devolutionary drama in his narratives.

The Traveller's remorseless devolutionary journey is compressed into a single chapter (11). He encounters in succession a selective series of ever-developing forms, 'a thing like a huge white butterfly' (83), the monster-crabs, and the 'liverworts and lichens' (84). These phenomena are apprehended amidst a state of ever-accelerating entropy, as the light from the sun, which for a time remains a source of oppressive 'sullen red heat', diminishes as it becomes first partially and then totally eclipsed. Then a dreadful 'bitter cold' assails him (84).

Against this rush to extinction, the relatively leisurely Eloi-Morlocks episode assumes a new perspective. 25 Whilst the Eloi and Morlocks are locked into a post hominem vision of degeneration, the cosmic adventure has the effect of annihilating the carefully arranged human suggestiveness of the sequence, framed by the oblique commentary on the laws governing the attainment and dissolution of human civilisation. The Time Traveller's devolutionary journey signals a departure from the dialectical operation of civilisation and decay,
which was so effectively to furnish Wells's later work in the 1890s. The Morlocks' ascendancy, with its pessimistic complications, is seen to be merely a staging post on the road to oblivion.

In the *New Review* serialisation, Wells constructed a more systematic devolutionary chain of being. The Traveller's first meeting after leaving the Eloi and Morlocks is with a species of marsupial, like kangaroos, and then a centipede-like creature. These intermediary vertebrates are omitted from the Heinemann edition, so dispensing with a species mediating between the Morlocks in the degenerate sequence and the lower-order creatures of the devolving sequence.

The effect is to qualify that unfolding series of discoveries in which the human implications are ironically laid before us. But whilst chapter 11 is a superbly deft imaginative recreation of Kelvin's astro-physical prognoses, Wells was surely right to point to its weakness in the context of his whole narrative. For it is within the central seven chapters that the full weight of Wells's subversive evolutionism can be measured. The cultural analyst is always too strong for the pessimism of the astro-physicist to exercise a decisive sway. He never again directly took up Kelvin's ideas in fiction.
I want to continue the discussion of Wells's evolutionary view of human society by looking at three essays, two scientific and one literary, written 1896-7. Together they form an important bridge between the deeply pessimistic vision of human devolution contained in *The Time Machine* and Wells's quasi-sociological writings which dominated the first five years of the new century. In 'Human Evolution, An Artificial Process', which in some ways can be taken as Wells's own restatement of T.H. Huxley's *Evolution and Ethics* (1893), Wells uses Benjamin Kidd's recently published popular work of 'Social Darwinism' *Social Evolution* (1894), to attack the view that civilised man is 'improving by virtue of the same impetus that raised him above the apes'.\(^26\) For Wells distinguishes between the inherited factor in man's development and the acquired factor, 'the highly plastic creature of tradition, suggestion and reasoned thought'.\(^27\) His distinction concedes that man is not subject solely to the workings of natural selection, as Kidd would argue, but that man is determined too by artificial or 'cultural' factors.

But Wells also states that man is only 'mentally, morally, and physically, what he was like during the later Palaeolithic period'\(^28\) and that he evolves incredibly slowly by comparison with lower
animals (an idea first worked out in 'The Rate of Change in Species'). Civilised man, still displays his own animality manifested in typical, everyday behaviour:

Regard his psychology, and particularly his disposition to rages and controversy, his love of hunting and violent exercise, and his powerful sexual desires. At present normally a man's worldly interests, his welfare, and that of his family, necessitate a constant conflict to keep these dispositions under. A decent citizen is always controlling and disciplining the impulses of anger, forcing himself to monotonous work and resisting the seductions of the sporting instinct and wayward imagination. 29

Not to recognise the animal in man is to mistake his nature and to underestimate, paradoxically, the crucial importance of the 'artificial' factor, which keeps the savage at bay and 'makes the comfort and securities of civilisation a possibility'. 30

Wells appears to be moving towards an evolutionary programme which he can then apply to contemporary society. He gravitates beyond the vision of nihilistic, evolutionary folly in his sombre story of 1896, The Island of Dr Moreau, to a view of man's potential for civilising development. The acquired control positively counters the lawlessness of the inherited animalism in man, and constitutes a check essential to the future of civilisation. 31

He is thus more candid about man's animality than Kidd, yet nevertheless more hopeful that man can derive continuing benefit from the acquisition of moral and educational controls.

Wells claims to reconcile 'a scientific faith in evolution with optimism' through education which can secure
a social organisation so cunningly balanced against exterior necessities on the one hand, and the artificial factor in the individual on the other that...every sentient creature on earth, may be generally happy. 32

As Philmus and Hughes point out, Wells's aim here, is to reconcile the operation of natural selection (which after Weismann's refutation of the inheritance of acquired characteristics, left it to progress through chance variations) with the 'human aesthetic sensibility'. 33 It was with reluctance that Wells accepted the validity of Weismann. Wells wished to play down the biological factor and to stress the predominance of the 'acquired' or cultural factor in man's development - the basis of a more humanistic assertion of mind over the power of inheritance.

As Philmus and Hughes put it, 'freed from the "grotesque" theology of Moreau the study of the man-making operation might become a hopeful affair'. 34 The application of mind to society on a sound ethical basis - the 'acquired factor' - becomes one cornerstone on which Wells's subsequent writing is founded.

But Wells now has a further problem. While he has not entirely rejected evolutionary struggle he has, in effect, elaborated its field of operation by injecting into the process of natural selection the chance variations of thought and ideas generated by the evolution of mind. He has moved to a position in which 'man-making' is more under man's conscious control and not merely an accumulated capacity of Lamarckian inheritance. But in another important essay, 'Morals and Civilisation' (February 1897),
Wells suggests that the ethical basis of human purposefulness is locked irrevocably into evolutionary struggle and cannot actually transcend it.

'Morals and Civilisation' is the occasion for the most elaborate discussion to date of his new-found evolutionary humanism. Drawing on contemporary anthropological thought, Wells now identifies human society as a phase in a whole teleological evolution. Present society comprises the 'militant civilised state' which has evolved in succession from gregarious animalism, tribal savagery and militant barbarism.35

Wells anticipates, more tentatively, a non-militant cosmopolitan civilisation in the future, a condition which such things as the rules of war and the perfect security of non-combatants away from the immediate seat of war foreshadow (263-4).

He illustrates the place of morality in the present 'militant' state by marriage and sexuality, topics which frequently recur in his subsequent work. But at this point he re-introduces reasons for the rise and fall of civilisation already elaborated in The Time Machine.

The norms of sexual morality are laid down by the exigencies of the struggle for existence among tribes of animals. Wells suggests that among animals where violent death is a frequent occurrence, sexual continence is necessary to conserve the strength to carry on the struggle for existence. 'Sober polygamy' ensures the maximum number of vigorous descendants. But man, who doesn't face imminent death, yet needs to perpetuate the race, chooses the
monogamous family as the unit best equipped to do so, 'the
monogamic family, with an entire prohibition of wasted energy,
is no doubt the moral ideal, so far as sex is concerned, of the
modern militant, civilised state'(264). Now Wells introduces a recurring
commonplace of degeneration, that unproductive indulgence leads
inexorably to stagnation and then decline: the cliché of French
decadence shows up the hack-journalist in him, always a component
in his work:

States and nations that fall away from that
ideal will inevitably go down before States
that maintain it in its integrity. France,
for instance, wanes, for the simple reason
that the circle of ideas of the common
French household severs marriage and
offspring (265).

He then argues that had it not been for the Tudor explorations which
facilitated the necessary capital for war and foreign expansion,
Western civilisation would have remained static and inevitably would
have regressed. The 'final phase' of civilisation bears witness
to

the establishment of a broad area of physical
security, then a moral dry-rot spreading
outward from the cities, the loss of energy
through sexual vice, and then... pressure
from without and collapse.

In the 'militant' state sexual energy is harnessed to promote
civilisation, and on this basis gains its moral sanction.

So Wells argues round to a position in which sexual morality
is gauged by a version of utilitarianism; a conception of a working
social order which ultimately depends on its means of
perpetuation:
Upon the consistent presentation of sexual morality as existing entirely for the sake of offspring and of the general stock of energy, the continuation of the present progress of our civilisation most assuredly depends (267).

Now children became a target of Wells's regenerative enthusiasm. The bearers of expectations of their late-Victorian parents, who projected onto them their hopes for racial and social success, they were used to channel and legitimise sexual energy. For the middle class, in particular, children had become one subject of a whole regenerative discourse. Wells believed that children should perform a role within the evolutionary struggle - perhaps more elaborate than others saw it. He was among the first to expound an ideological version of imperialism, 'civilised militancy', in which children were assigned an objective place. Within a few years, the re-definition of the child as a target of imperial and racial regeneration had coalesced with a complementary reconstruction of the role of the mother.

One writer who had articulated, although with diffidence, the spirit of the fighting future, was Gissing, in The Whirlpool of 1897. As I have discussed in chapter Three, Wells wrote a long and generally sympathetic review of the novel in the context of Gissing's earlier work, which perceptively interpreted the novel for the times, but, in fact, reveals quite as much about Wells's own current preoccupations.

The essay, 'The Novels of Mr George Gissing', appeared in the Contemporary Review in August 1897, six months after 'Morals and Civilisation'. Wells declares that children have hitherto played little part in Gissing's earlier novels, but in The Whirlpool
'the implication is always of the children'; characters are judged according to the attitude they take towards them. In Gissing's early novels 'the worst evil Mr Gissing could conceive was crudity, passion, sordidness and pain'. Now 'a countervening evil is discovered - sterility'. With its synthesis of the moral and the biological components, sterility becomes a crucial prescriptive term for Wells.

Yet he recognises two features of the novel which modify the prevailing sterility. He welcomes the novel's implication that 'the old stupidities of the homely family are, after all, the right way' and, more controversially, he adduces from Rolfe and Morton's discussion of the new imperialism, 'a new and growing sense of the eternity and universality of the conflict'. Rolfe's attitude bears witness to a change that is sweeping over the minds of thousands of educated men. It is the discovery of the insufficiency of the cultivated life and its necessary insincerities; it is a return to the essential, to honourable struggle as the epic factor in life, to children as the matter of morality and the sanction of the securities of civilisation.

Here we recognise the prescriptive evolutionism of the Traveller's analyses in *The Time Machine*, but now recast into what always threatened to become an explicit social programme. What stands out is Wells's re-incorporation of the terms of the struggle for existence as a *sine qua non* of an evolving civilisation, but in which it is specifically the monogamous family that will play a decisive evolutionary and regulatory role. There is a strong line
of continuity here to the militant imperialism and collectivism of certain social imperialists and Fabians, such as Shaw and the Webbs, which drew Wells towards 'national efficiency' at the turn of the century. From that point on, the role of motherhood and the position of children as the 'sanction' of the securities of civilisation that Wells pressed for, were to play an important part in his social engineering manifestos, to be examined later.

Underlying this movement of thought is Wells's resolute commitment to a reinvigorated notion of 'force' which had first been made popular in Spencer, now couched in imperialist rhetoric. The combative terms 'struggle', 'conflict', crucial to the contemporary racial determinism of Kidd and Pearson, and the small change of idiomatic jingoism, are now mobilised through oscillating movements of thought which resolve into continuous patterns of teleological contraries: evolution and dissolution, strength and weakness, productivity and wasteful expenditure of energy. These movements crystallise at the turn of the century into the terms of social prescription, 'efficiency', 'muddle' and 'waste', which Wells uses as the catch-phrases of the displaced spectator, before the mysterious, uncontrollable momentum of Edwardian society.
Perhaps the most fruitful approach to Wells's work after 1900 is to view it as an imaginative response to certain key social and political questions of the day which excited and sustained the attention of doctors, welfare specialists, academics, journalists and politicians. If there was any one obsession which magnetised Liberals, Conservatives, Fabians and even some Socialists, it was the question of national efficiency and the regeneration of the British nation.

The idea of efficiency was projected from the sphere of biological discourse into that of national and international affairs. And once established as the rallying cry of a national and imperialist objective, the imperatives of war provided the occasion and stimulus for a scrutiny of various national institutions and the degree to which they were assisting the health of the nation.

The Boer War, 1899 - 1902, became the charged focus of national and social anxieties which had, of course, existed well before 1899. The event, itself, has an almost predictable justness, in that it represented the contradictions of imperialism at a moment of its crisis. The war revealed the fabric of misunderstanding, frailty, ignorance, brutality and cunning which its ideological expression - imperialism - was founded on and yet concealed.
Military reverses and losses, incompetence and fraud, in a campaign which lasted at least eighteen months longer than anyone expected, traumatised public opinion (assuming that we may take the accounts of statesmen and journalists to be accurate) and had important consequences.\textsuperscript{40}

Despite considerable pro-Boer sentiment and opposition, what was learned from the war was not so much that it was a mistake as that Britain was insufficiently organised to play an imperial role in the world, if it could not without difficulty quell a South African population numbering a mere fifth of the total deployment of British soldiers.\textsuperscript{41} Thus the actual experience of war merely confirmed the long-standing anxiety that England's race had been sapped of the necessary vigour and determination for such a fight, should it arise. Now it had come, and England's decadence was exposed.

For some years, particularly since the mid-1880s, the concept of the English Race had been developed as an organic growth, drawing strength from all sections of the community. But at the same time the urban working-class in particular were increasingly subjected to the repertoire of jingoistic and imperialist exhortation. One effect was to damp down working-class aspirations - a tactic which some socialists, like Morris and Belfort Bax, could see through. By the turn of the century social imperialism was almost certainly marshalled to head off organised labour and turn it down the road of compliant conservatism.\textsuperscript{42} Behind the public face of the nationalistic slogans was the realisation that national and
racial fitness was inevitably dependent on the fitness of all the people, (as I have suggested in chapter One). Social speculation on the fate of the poor and the working class continued to be impregnated with biological assumptions. Two highly influential articles offered evidence to show that recruits to the army were below the required level of physical efficiency or fitness and were thus unfit for army service. 43 In January 1902, General Maurice announced that 28% of men who had volunteered for service in 1900 were rejected, a claim which he reiterated the following January. 44 In May 1903, George F. Shee reported that in Manchester 8,000 out of 11,000 would-be volunteers were turned away. 45

These revelations had wide reverberations in official circles. Within the frame of reference of biological discourse they confirmed that the law of natural selection within the towns had not operated in the best interests of the nation. But there was now a stark contradiction to be faced by men like James Cantlie (whom Shee cited extensively) for whom the intensification of urban struggle would have led to the 'unfit' being eliminated. Yet now the 'unfit' were in danger of becoming the new norm. Imperialist-minded commentators, whose belief in the synchrony of biological and social development was less than total, faced a rather bizarre problem: the law of natural selection appeared to work against the national interest, by preserving men at a low level of fitness when England's imperial struggle should have decisively confirmed the superiority of the fittest race. 46 If there had been any lingering belief that it was possible to judge human affairs as a direct expression of this abstraction, then the experience of the
Boer War ought to have erased it for good. But now fitness for the international struggle was to involve not only the demonstration of this proposition on the playing fields of Eton and the veldt of South Africa, but intervention in the evolutionary process, as an investment in the future of the English race. 47

Among the more influential statements of social imperialism to emerge during the war was a lecture by Lord Rosebery in November 1900, which he gave to Glasgow University students (many of them clearly medical students) in his capacity as Rector. He declared that:

An Empire such as ours requires as its first condition an imperial race - a race vigorous and industrious and intrepid. Are we rearing such a race? In the rural districts I trust that we are...but in the great cities, in the rookeries and slums which still survive, an imperial race cannot be reared. You can scarcely produce anything in these foul nests of crime and disease but a progeny doomed from its birth to misery and ignominy. That is a rift in the cornerstone of your commonwealth, but it brings some of you directly into its service. For many here are reared to the service of medicine. They will be physicians, surgeons, medical officers, medical inspectors. Remember, then, that where you promote health and arrest disease, where you convert an unhealthy citizen into a healthy one, where you exercise your authority to promote sanitary conditions and suppress those which are the reverse, you in doing your duty are also working for the Empire...Health of mind and body exalt a nation in the competition of the universe. The survival of the fittest is an absolute truth in the conditions of the modern world. 48

Here Rosebery invites future doctors and medical staff to use their expertise not simply to cure the sick, but to improve the quality of English race. Belief in imperial destiny becomes a pre-condition of ethical judgement on which social intervention is ostensibly based.
This Liberal imperialism suppressed, of course, in the interests of incorporation, formidable issues of class and power; and it becomes an ideological formation more pervasive and difficult to encounter than that espoused by commentators of the 1880s.

As I have suggested in chapter One, fear of the 'residuum', the unemployed and unemployable labour of the 1880s, was now recast into a fear of the economic competitor - the classic imperialist anxiety about foreign trade. The idea of the survival of the fittest extended to national fitness. The working class were now deemed to have a stake in the solution of the national problem, for which they now carried a serious responsibility.

Making use of the 'heart of Empire' conceit, as Charles Masterman was to do the following year, Rosebery incorporates the doomed poor into the imperialist vision, but also serves them up for his predominantly medical-student audience as objects of attention and inspection by medical expertise; and this, as we are to see, opens up a space in which the expert as cult figure, the 'coming man', can intervene. The harnessing of a rejuvenated scientism to social questions is being increasingly recognised as a characteristic and critical development in Edwardian ideological practice.

As if confirming evidence were needed to support Rosebery's contention that the poor were still a major presence at the heart of the large cities, B.S. Rowntree's pioneering study of York, Poverty: A Study of Town Life, appeared in 1901 to reveal conditions which continued to bear out Booth's analysis of the London population,
over a decade before. Thirty per cent of the population of York lived in a state of poverty. In a development from Booth, Rowntree innovated a mean income-level at which a basic physical efficiency could be sustained. Over 15% of the sample fell below this severely pitched level. W.T. Stead, discussing the study in his widely read *Review of Reviews* in December 1901, made the increasingly common connection between poverty at home and imperial strength abroad:

If we are to hold our own among the nations in the severe commercial struggle that lies before us the mass of the people must be physically and mentally efficient. It is the best fed and the best taught nation which will survive in the long run. It is sometimes even more important to know what the great mass of the people eat than what they think. The destinies of nation’s are affected to a much greater extent than we imagine by their stomachs. 53

Rosebery had deliberately set himself apart from the old Liberals, represented by Gladstone and Harcourt; and the Liberal Party, out of power since 1895, could not look back to him as leader. So now unaligned, and above the party game, Rosebery, in harness with the recently formed 'Administrative Reform Association', was moving influential opinion behind this new policy of social imperialism, in drawing attention to governmental and administrative weaknesses exposed by the Boer War. Early in 1900, Rosebery severed links with two Liberal organisations. And that spring Haldane arranged a meeting between him and the Fabians, Sidney and Beatrice Webb.

The previous month, February 1900, the Webbs had secured a majority within the Fabian society for Shaw's pro-imperialist
(effectively anti-Boer) position, but their current and abiding objective was to establish the idea in administrative circles of target levels of minimum efficiency, in a whole variety of social agencies. And in Rosebery they saw a potential confederate.58 In a widely-quoted article of 1901, Sidney Webb praised Rosebery's disavowal of the old Liberalism, and stated, rather disingenuously, that the working class wanted to know 'what steps' his followers were likely to take 'to ensure the rearing of an imperial race'.59 Proclaiming his own Fabian expertise, Webb proposed that the campaign for national efficiency should be put in the hands of a group of men of diverse temperaments and varied talents, imbued with a common purpose and eager to work out...how each department of national life can be raised to its highest possible efficiency.60

This programme, which, in effect, called for an alternative Civil Service, was echoed in Rosebery's next major speech in March 1902, two months before the peace was due to be signed. Returning to Glasgow he put the idea of efficiency at the centre of political and social policy. Efficiency was defined as:

a condition of national fitness equal to the demands of our Empire - administrative, parliamentary, commercial, educational, physical, moral, naval and military fitness - so that we should make the best of our admirable raw material. 61

The speech also launched the Liberal League, an extra-parliamentary organisation to promote national efficiency with Rosebery himself as President; its main spokesmen were three major Liberal politicians of the future, Haldane, Grey and Asquith.62 Asquith himself had already recently defined liberty, in terms appropriate to the new utilitarianism, as making, 'the best use of faculty, opportunity,
energy, life...everything, in short, that tends to national, communal and personal efficiency'.

Eight months later Haldane and Grey were invited by Webb to join his own Civil Service as legal spokesmen in the shape of the 'co-efficients' (who were 'efficient' up to the point where tariff reform split them). Ranging from the Conservative editor of the National Review, L.J. Maxse, to Bertrand Russell (the least imperialist-minded member, who resigned the following May) it was a politically diverse coterie which was, in effect, no more than an irregular dining club. Webb's high ambitions for the pooling of expert opinion were never realised. But what is remarkable is the degree to which, even in Fabian terms, Webb was prepared to embrace Germanophiles like Maxse and stout Imperialists like Milner in the name of the doctrine of efficiency. As he wrote to Wells in September 1902, the subject of all discussions was to be 'the aims, policy and methods of Imperial Efficiency at home and abroad'. Wells's own portfolio was literature.
I now want to examine the issue of physical deterioration, the arrest of which was one of the principal objectives of the campaign for national efficiency. The standard accounts by Semmel and Searle don't mention the activity generated by Sir Lauder Brunton, which seems to have had a considerable influence on the setting up of the Inter-Departmental Committee on Physical Deterioration, in 1903.

We can regard Brunton as an example both of the patriotic and concerned social imperialist of his day, and as a typical representative of the medical establishment: a man whose training and practice had run roughly parallel with those of several figures who have made earlier appearances in this study, and who by the 1890s had become notable specialists in their field, T.C. Allbutt, T.S. Clouston, H.D. Rolleston and James Crichton-Browne amongst them. 67

Between the appearance of Maurice's article 'Where to Get Men' and Shee's 'The Deterioration in the National Physique', Brunton was particularly active, and his overall campaign waged from 1899 to 1905 throws some light on how influential opinion could be mobilised, and helps to show how the press and politicians in harness could create a climate in which a problem could be investigated at the highest level.
Brunton's domestic campaign was waged on three fronts. Firstly, he wanted to encourage the current sporting fad, and channel it into military games of war. Secondly, he shared the concern for the apparently intractable sub-standard physical fitness of the urban poor, and thirdly, he wanted to institute means by which the population as a whole could improve its physical fitness.

Early in 1902, as the momentum of opinion to seek out the causes of physical unfitness in the population grew, Brunton gathered together, in the manner of the day, a group of influential figures to discuss the question of military training in schools; amongst them were Buckle, editor of The Times and the ubiquitous Haldane (who, as already mentioned, was about to join the Liberal League and, later that year, the co-efficients). The rhetoric of Brunton's letter to the press at this time reflects the spirit of Kipling's poem The Islanders, in which he had criticised the complacency of the English upper class, symbolised by their obsession with sport, 'the flannelled fools at the wicket'. Brunton wanted this love of sport translated into a love of military combat: 'let all children be taught at school, partly in play and partly as work, how to handle a gun, how to shoot, and how to manoeuvre'. But the practical problems of inaugurating a programme of military education soon became overwhelming, and the scheme lost momentum.

Yet a year later the climate had perceptibly changed. In January 1903, Brunton widened his call. He now advocated ways of awakening the country to the need to consolidate the Empire and defend the nation. Following a Lancet editorial urging a programme of national efficiency, Brunton noted the interest generated by
Maurice's revelations of unfit recruits, and reiterated the by now general alarm that the hereditary predisposition of the stunted poor caused them to reproduce their physical inadequacy. He suggested a commission to investigate national deterioration. By April he was warning that 'the deterioration in our population' had 'attained such an extent as to constitute a national danger', and repeated his call for an inquiry.

National defence had become intertwined with the idea of national efficiency - a two-pronged offensive to deal not solely with the Boers, but with the most serious economic and military rival - Germany. The notion of fitness incorporated economic, military and physical efficiency in a generalised bout of paranoia - boosted by sensational press coverage and numerous literary fantasies on the themes of invasion and foreign domination.

By May, Shee's article had appeared and, in Brunton's words, Sir William Taylor and Sir Frederick Maurice were dining with my friend and colleague, the late Howard Marsh...They discussed the question of physical efficiency, which had been first raised by Maurice...In consequence of this, Sir William Taylor addressed a memorandum to the War Office and an Inter-Departmental Committee was appointed to investigate into the causes of physical degeneration.

The Physical Deterioration Committee was in fact appointed in September 1903, its work was completed by the following July and it reported in August 1904.

The Manchester Guardian was taking an active interest in the issue in 1903. It carried an open debate on the subject of
National Physical Training, and in July 1903 its London editor, J.B. Atkins, enthusiastically reported another gathering of luminaries (the Bishop of Ripon, Grey, Maurice, Maxse and T.C. Albutt, amongst others) brought together by Brunton to plan a National League for Physical Education, to be called upon to implement the recommendations of the Physical Deterioration Committee once it had reported. The League was eventually inaugurated in June 1905 after Brunton had campaigned vigorously that year at numerous meetings of hospital advisers and head teachers' associations. The meeting was billed as 'The Great Question of the Day, "The Health of the People"'. It was addressed by Haldane and many other authorities, particularly medical ones. On the executive council sat Brunton himself, an expert on inebriety T.S. Clouston, Sir James Crichton-Browne (by now King's Surgeon), Manchester Guardian journalist J.B. Atkins, Maurice, and cricketers C.B. Fry and Pelham Warner.

Also on the council was E.H. Pooley who had just completed his work as secretary to the Committee on Physical Deterioration. The Committee's unusual report, published in August 1904, had set out in its original terms of reference, to enquire 'into the allegations concerning the deterioration of certain classes of the population as shown by the large percentage of rejections for physical causes of recruits for the Army' but whose enlarged terms of reference became:

(1) To determine, with the aid of such counsel as the medical profession are able to give, the steps that should be taken to furnish the Government and the Nation at large with periodic data for an accurate comparative estimate of the health and physique of the people; (2) to indicate generally the causes of such physical deterioration as does exist in certain classes; and (3) to point out
the means by which it can be most
effectually diminished. 78

Broadly speaking, the report rejected the hereditary factor as a
cause of 'degeneracy': 'the influence of heredity in the form
of the transmission of any direct taint is not a considerable factor
in the production of degenerates'. 79 It endorsed the post-Weismann
arguments of several doctors, one of whom stated that 'inferior bodily
characteristics, the result of poverty and not of vice are not
transmissable'. 80 Instead the report endorsed a view of
environmental determinism. Unfavourable 'noxious' conditions
rendered the offspring of the mother more vulnerable to disease
and thus sowed the seeds of progressive degeneration. The report
appeared to reject claims by Karl Pearson that intelligence was not
reproducing itself and was actually being bred out by the less able
and more fertile stock. 81

The health of the environment was seen as crucial; the causes
of deterioration were to be sought in specific ill-effects of city
existence-polluted atmosphere, 82 adulterated food and milk 83 and
unhealthy factory conditions. 84 The report gave special attention
to the effects of alcoholism, although its tone was no longer in
keeping with that of temperance propaganda:

More may be done to check the degeneration
resulting from 'drink' by bringing home to men
and women the fatal effects of alcohol on physical
efficiency than by expatiating on the moral
wickedness of drinking. 85

The doctrine of 'efficiency', as we have seen, was the new century's
version of a belief in spiritual regeneration. The Committee's
report reflected the intellectual frame of reference of its medical
specialists. Formed over three decades of positivistic science,
efficiency was clearly a logical outcome of that methodology, in keeping with the new utilitarianism which now dominated social policy in the early years of the century. This is strikingly reflected in the change in direction of Wells's writings at this time, to be discussed in the subsequent two sections of this chapter.

As we have seen, in the hands of powerful politicians like Rosebery and Haldane, thinkers like Webb, and eminent lobbyists like Brunton, Allbutt and others, 'efficiency' could be given a cutting edge fit for the growing realisation of England's economic vulnerability to its competitors. Moreover, as the campaign of Brunton and the deliberations of the Committee on Physical Deterioration demonstrated, the doctrine of efficiency signalled the buoyant prestige that biological and medical science had won for itself. Efficiency could now administer to the plight of the corpus imperium, in the confidence that it had outflanked and replaced the salve of religion for good. Had there ever been another moment in the nation's history when the scientist and doctor had won such freedom and authority to confidently deliberate on the destiny of Britain and its population? And could that moment have found a more generously endowed representative than H.G. Wells?
A story which takes as its theme Wells's involvement with the question of physical efficiency is *The Land Ironclads*, published in the *Strand Magazine* in December 1903. Set on an unspecified battlefield, a military campaign is witnessed through the eyes of a war correspondent. As the battle is being waged, the correspondent gradually becomes aware that one side is employing not ordinary weapons but large moving guns which turn out to be the guns of an ironclad, a prototype tank. Wells's uncanny ability to anticipate a machine, not invented until 1914, nor in active use until 1916, is usually taken to be the most distinctive feature of this story. But *The Land Ironclads* is also significant for the manner in which it draws on topical concerns and transmutes them into a larger vision.

The story contrasts two kinds of fighting men. At the beginning, the war correspondent talks to a jocular, complacent lieutenant who is waiting for an attack by the enemy. Wells insists on the physical difference between the two sides. The lieutenant and his men are confident roughnecks, old campaigners - 'nice healthy hunters and stock men...rowdy-dowdy cowpunchers and nigger-wackers'(117-8). Their masculine characteristics are stressed: 'hard brown skin...sinewy frame, an open, tireless stride, and a master's grip on the rifle'. (119).

By contrast their opponents are effete and apparently ineffectual:
They're a crowd of devitalised townsmen, and that's the truth of the matter. They're clerks, they're factory hands, they're students, they're civilised men. They can write, they can talk, they can make and do all sorts of things, but they're poor amateurs at war (117).

Underpinning this contrast is the contemporary problematic anxiety about two related questions: what kind of man is necessary for victory in contemporary warfare and what is the nature of that warfare?

The Boer War had shaken the belief in the unrivalled supremacy of English troops. A consequence was the wholesale re-appraisal of all aspects of England's military performance. 1903 saw the report of the Elgin Commission of Enquiry into The South African War, and the Butler Committee on the Disposal of War Stores was to report in 1905. Behind these investigations lies a prevailing sense that the nation's military incompetence is both determined by and curiously symbolic of a pervasive degeneracy at the heart of Empire at the century's turn.

In the immediate aftermath of the war, as I have suggested earlier, the military question becomes a significant focus for wider fears of national degeneration: fears provoked by the existence of physically inefficient city-bred, common soldiers and fossilised last-century commanders, representing an increasingly outmoded ruling-class order. For conservative imperialists the army, itself, is the mirror image of the class structure. This image is to be fortified by bolstering military consciousness in peacetime as a form of social control, as is evident in the activity of Brunton and others.
These concerns are echoed in Wells's delineation of the physical characteristics of the rival armies in the story. However, for Wells, war is not an agreed set of formulae, but a problematic activity, one which invites an inspection of wider aspects of civilisation. This is signalled aptly by his narrative spokesman, the war correspondent who, in a concrete way, needs to discover what kind of war is actually being fought in order to be able to write about it.

To start with, he takes the lieutenant's assessment at face value. The civilised enemy looks effete and a failure. They are well-fed, articulate and more educated; but civilisation, which Wells makes synonymous with the values of town life, has devitalised them. Wells draws on the prevailing discourse of urban degeneracy, which has influenced the critiques of the physical condition of the Boer War recruits, by writers like Maurice, Shee and others. Yet he objectifies by this discourse, not simply the working-class recruits, but the representative products of a wider organisation who are well-fed and educated - not simply stunted products of the abyss. These degenerates are, actually, rather effete by conventional military standards - despite their civilised 'purest water-company water' and their 'three meals a day since they left their feeding bottles' (117).

The correspondent, depressed by this particular product of civilisation, and disillusioned by war in general, composes his article which he decides to call "Is War Played Out?". He is now resigned to the inevitable victory of the lieutenant's 'cunning, elementary louts', with their 'sentimental patriotic' songs, over 'the townsmen at the game of war' (120).
However, the correspondent subsequently discovers that the armaments of the enemy are quite impervious to the gunfire of the lieutenant's men, 'a mechanism that was effectually ironclad against bullets, that could at a pinch cross a thirty-foot trench, and that seemed able to shoot out rifle-bullets with unerring precision' (128).

Wells reveals not simply the extraordinary technological advance but, more importantly, a qualitatively altered relationship between fighting men and their armaments. The rifleman is now sunk inside his machine, defined by the gadgetry at his command. War is no more a matter of individual heroics - 'flapping strenuousness of the half-wit in a hurry...that hysteria of effort which is so frequently regarded as the proper state of mind for heroic deeds' (133-4), which is how the lieutenant's soldiers have hitherto seen it. The outcome of war is now determined by 'alert, intelligent, quiet' technicians.

The discovery that the civilised products are in charge of such elaborate technology now forces a re-appraisal of what civilisation married to science can supply. Technology privileges mind over muscle, with the tank as the military arbiter. Mind is at the apex of evolutionary development, whereas the lieutenant's men are a kind of despised and decaying species. And the faculty of mind enables this new brand of soldier to place an ironic distance between himself and the business of war:

For the enemy these young engineers were defeating they felt a certain qualified pity and a quite unqualified contempt. They regarded these big,
healthy men they were shooting down precisely as these same big, healthy men might regard some inferior kind of nigger. They despised them for making war; despised their bawling patriotisms and their emotionality profoundly... They resented being forced to the trouble of making man-killing machinery; resented the alternative of having to massacre these people or endure their truculent yappings (134).

The military engineer is another variant on the 'coming man' whom Wells has certainly had in mind since as far back as 1891, but with increasing explicitness since 1898. And in Anticipations (1901), published while the war was still being waged, he delineated the hallmarks of this rational type: 'The new sort of soldier will emerge, a sober, considerate, engineering man' in place of hundreds and thousands of more or less drunken and untrained young men marching into battle - muddle headed, sentimental, dangerous and futile hobbledeboys - there will be thousands of sober men braced up to their highest possibilities, intensely doing their best (183).

And while not precisely specifying the emergence of the tank, Wells certainly expects war to become a more impersonal force with massive implications for mass society:

Such warfare as this inevitable precision of gun and rifle forces upon humanity, will become less and less dramatic as a whole, more and more as a whole a monstrous thrust and pressure of people against people (183).

The war correspondent now witnesses the defeat of the lieutenant's men by their technologically superior adversaries and proceeds to re-name his article "Manhood versus Machinery". He compares the 'sturdy proportions' of the prisoners to those of 'their lightly
built captors'. "Smart degenerates" he muttered. "Anaemic cockneydom" (137).

What Wells does is to effect here a deft transformation of the received discourse of urban degeneration. For the city is not merely a breeding ground for unhealthy inadequates, it focusses a conceptual space in which the application of mind through education, and particularly scientific education, can be promoted. He reverses the terms of the discourse which had stigmatised the city-dweller for his physical characteristics. But these characteristics seem no longer to carry any diagnostic meaning or value. For Wells the city registers a suppression of physical qualities in the face of mental prowess. And such qualities can now be exported by machinery to the battlefields of the world to subjugate and control primitive, barbaric but physically vigorous types. So now the urban 'degenerates' are 'smart', since the realm of the physical is no longer the only means of evaluating man's efficiency.

What conclusively raises the story above the level of social observation is the structure of the final sequence. Here the correspondent, in natural sympathy with the vanquished troops, picks up an objection from one of the defeated officers who has spent three years instilling in his men the message that 'shooting from the saddle charge', they cannot be expected to compete against 'ironmongery'. 'I'll call my article', meditated the war correspondent, 'Mankind versus Ironmongery' (138).

The correspondent's defensive observation that these impressive, victorious tanks are, after all, merely scrap metal, comes through in
a rather strange coda. But Wells himself rather unusually has
the last word. He qualifies his spokesman's scepticism with a
quizzical afterthought:

And he was much too good a journalist to spoil
his contrast by remarking that the half-dozen
comparatively slender young men in blue
pyjamas who were standing about their victorious
land ironclad, drinking coffee and eating
biscuits, had also in their eyes and carriage
something not altogether degraded below the
level of a man (138).

Wells appears to take account of the journalist's anxiety but rejects
it. The story reads like a qualified endorsement of the 'coming man'
of the machine, the man of mind.
Wells's Anticipations was serialised in the Fortnightly, April-December 1901, and appeared in volume form in November, two months after Webb's article urging a rapprochement between Fabians and the new social-imperialist Liberals. Whereas Rosebery did not noticeably respond to Webb's blandishments, the evidence of Wells's work provided Webb with high hopes of an alliance. Webb wrote to Wells for the first time in December, 'as a friend of Graham Wallas and Bernard Shaw whom you know':

I admire Anticipations greatly...I agree with you about the coming predominance of the man of science, the trained professional expert. But you see him - may I suggest? - too exclusively as an engineer, a chemist or an electrician. In the extremely complicated, densely-peopled world on a large scale that you foretell, there must inevitably be a great deal of what is called 'administration'. I do not mean the amateur business that is now called government - still less do I mean politics. But all experience shows that men need organising as much as machines, or rather, much more; that the making of such arrangements, and constant readjustments, as will ensure order, general health and comfort, and maximum productivity, among human beings, is a professional art in itself. 88

Anticipations of the Reactions of Mechanical and Scientific Progress Upon Human Life and Thought was a masterpiece of timing, running to seven editions in the first year after publication, and it was seized upon as the first truly systematic exploration of how the new century might develop.
The future for Wells had ceased to be staked out in a field of infinite speculation. The scientific romances and journalism of the 1890s had been marked throughout by a conscious juxtaposition of structuring devices which sustained a conceptual gap between the knowable and the unknowable, the secure and the threatening, the empirically observed and the mythical conceptualisation.

Now the future vision was becoming integrated into present time. Equally, the present moment was becoming articulated through an omniscient (rather than an investigative or exploratory point of view which could make the present available to the future); the seer rather than the investigator was to the fore in this work.  

It differs from the scientific romances in another sense. Whereas the scientific romance had tended to contrast the humdrum with the exotic, the familiar with the speculative (The War of the Worlds is the best example of this juxtaposition at work), Anticipations obversely registers the exoticism of the fundamentally mundane. Ordinary details of life, rather than being ironically contrasted with the fantastic, now accrue an almost innocent glamour in themselves. Anticipations registers the central importance of such matters. The materiality of life governed by the exigencies of work, trade and communications offers the possibility of faith in progress and the orderly conduct of human affairs. Whilst Wells had eliminated entirely the apocalyptic and spectacular transformation themes of the romances, Anticipations marks a significant engagement with a mode of writing which imprints quite a different representation of human capability. One suspects that Wells had the acutest of senses
for changes in literary and cultural fashion and that he put his energies into alternative literary modes to align himself with public taste.

A tone of expansive certainty suffuses the work as Wells describes apparently normative components of social organisation which will satisfy desire but are, in fact, directed at a distinctively integrating bourgeois sensibility. For example, whilst discussing the diffusion of cities he invokes new modes of communication to displace the concentration of energy and population centrifugally rather than in the centripetal way of the late century:

The whole of Great Britain south of the Highlands seems destined to become...an urban region, laced all together not only by railway and telegraph but by novel roads...and a dense network of telephones, parcel delivery tubes, and the like nervous and arterial connections (61).

Our sense of this exaggerated, tentacular vision is stirred by a sub-biological order of thinking which we associate with his early work. But in the spaces between these disembodied systems of communication, the urban region is presented as a more diverse territory than it might at first appear, although variegated and distributed within definite bounds:

As one travels through the urban region, one will traverse open, breezy, 'horsey' suburbs, smart white gates and palings everywhere, good turf, a Grand Stand shining pleasantly; garden districts all set with gables and roses, holly hedges, and emerald lawns; pleasant homes among heathery moorlands and golf links, and river districts with gaily painted boat houses peeping from the osiers (61-2).
This orderly, decorative, coy vision of a world below telegraph lines, peeping out from between roads and railways, may be pleasing enough but it is the projection of a commuter paradise passed off as a normative and universal possibility. It is a reassuring landscape, diverse but not anarchic, broken up but not broken down. While suggesting escape it is anchored to the world of work governed by rapid transport. It assumes a mode of production by which these structures can be effectively annexed to the margins of consciousness in the evening, at the weekend, or on holiday. It is characteristic of all Wells's Edwardian work that he omits almost entirely a discussion of economic production, whereas modes and means of consumption are omniverously tasted and consumed on the reader's behalf in the language of the copywriter:

To receive the daily paper a few hours late, to wait a day or so for goods one has ordered, will be the extreme measure of rusticity save in a few remote islands and inaccessible places (64).

We sense, at moments such as this, that Wells is administering not so much an analytically precise overview, as a salve to the material and ethical anxieties of the late-Victorian readership of the *Fortnightly*.

Wells's concern for social efficiency which underpins *Anticipations* can be focussed by dealing briefly with his view of motherhood and the position of children in relation to the family and the state. His response to Gissing's *The Whirlpool*, as we have seen, brings to the surface ideas which gained momentum during the 1900s - drawing strength from the 1890s debates on racial health and fitness described in chapter One. Such continuity of interests helps to show that Wells makes concrete in *Anticipations* interests and ideological
assumptions that have been present for several years. I have
alluded to some of these in the discussion of some writings of
the 1890s.

There is now explicit recognition of the role of motherhood
in the struggle for racial health, which is itself a reflection of
a more general concern with the health of the population in the
early years of the century. The twentieth century mother is
invariably middle class, property-owning and affluent enough to
provide her child with regular care and attention: Wells further
elaborates this image in Mankind in the Making (1903) which I discuss
shortly.

The female equivalent of the 'coming man', the expert, the
male engineer or Civil Servant mythologised by Sidney Webb, Wells's
'coming woman' has national responsibilities. The site of her
activity is the very antithesis of the late-nineteenth century
degeneration figured by the city; Gissing, as I have discussed,
had anticipated this maternal pastoral. Wells anchors it to the
integrating suburban dream:

A little private imperium such as a house or
cottage 'in its own grounds' affords; and
from that we pass on to the intense desire so
many feel - and just the women too, who wish
to mother the future - their almost instinctive
demand, indeed, for a household built and
ordered after their own hearts, such as in its
fullness only the countryside permits. Add to
these things the healthfulness of the country
for young children, and the wholesome isolation
that is possible from much that irritates,
stimulates prematurely, and corrupts in crowded
centres, and the chief positive centrifugal
inducements are stated, inducements that no
progress of interventions, at any rate, can
ever seriously weaken (49).
The city is a function of an age which Anticipations turns its back on. And echoing his review of The Whirlpool, Wells appropriately cites Gissing:

Well has Mr. George Gissing named nineteenth-century London in one of his great novels, The Whirlpool, the very figure for the nineteenth century Great City, attractive, tumultuous, and spinning down to death.(44).

The city has not disappeared, it remains the 'abyss'; that familiar configuration noted in the early Edwardian accounts by Charles Masterman, Jack London and others - specifically the world of the London poor. But Wells believes that it is the task of the man of the future to eliminate the worst excesses of urban degeneration and this task is to be manifestly a national one for the guardians of what he calls 'The New Republic'. The class of degenerates, 'this bulky irremovable excretion...of vicious helpless and pauper masses'(81) is a continuing problem for Wells, which is why, in a sense, his Anticipations must continue to treat it; not because the poor are actually multiplying furiously but because a more efficient society - with its more 'complex and exacting organisation' will necessarily disgorge its inefficient waste products in larger numbers. The language here 'anticipates' Tono-Bungay:

They are an integral part of this physiological process of mechanical progress, as inevitable in the social body as are waste matters and disintegrating cells in the body of an active and healthy man (81).

But since this class is ever present, the nation must eliminate it. Wells's anti-humanitarian position on the 'unfit' makes him a champion of fashionable 'negative' eugenic policies:
All this uproar one hears about the Rapid 
Multiplication of the Unfit and the future 
of the lower races takes on an entirely 
different complexion directly we face 
known, if indelicate, facts. Most of 
the human types that by civilised standards 
are undesirable, are quite willing to die 
out through such suppressions if the world will 
only encourage them a little (305).

It is perhaps not surprising to find that Wells was present in 
1904 to hear Francis Galton, addressing the recently founded 
Sociological Society, (June 1903), put the subject of Eugenics on 
the ideological map. 94

As I have noted in chapter One, the issue of the 'multiplication 
of the unfit' was a formulation that went back to the early 1880s. 
Eugenics had first been defined by Galton in 1883. Why conditions 
were more favourable for a concerted attack on the 'residuum' by the 
early 1900s is a complex question; but the demands of a more 
consciously imperialist ethos, the growing redefinition of the role 
of the individual in the state, the growing acceptability of 
collectivist ideas and changing perceptions within biological discourse 
of the relation between heredity and environment, can all be adduced 
as factors. Wells's work reflects these changes in a number of ways. 
In this passage, almost tailor-made to appeal to Webb's cult of the 
expert, he fuses several key contemporary anxieties:

The nation that produces in the near future the 
largest proportional development of educated and 
intelligent engineers and agriculturalists, of 
doctors, school masters, professional soldiers, 
and intellectually active people of all sorts; 
the nation that most resolutely picks over, 
educates, sterilises, exports or poisons its 
People of the Abyss,...the nation that by wise
interventions, death duties and the like, contrives to expropriate and extinguish incompetent rich families while leaving individual ambitions free; the nation, in a word, that turns the greatest proportion of its irresponsible adiposity into social muscle, will certainly be the nation that will be the most powerful in warfare as in peace, will certainly be the ascendant nation before the year 2,000 (212).

In the interests of national efficiency and future prosperity Wells was helping to make acceptable ethically contentious policies designed to eliminate all traces of urban degeneration; a creed with its high priests - the 'experts' - who towards the end of Anticipations are introduced as the guardians of 'The New Republic'. These guardians will:

...that a certain proportion of the population - the small minority, for example, afflicted with indisputable transmissible diseases, with transmissible mental disorders, with such hideous incurable habits of mind as the craving for intoxication - exists only on sufferance, out of pity and patience, and on the understanding that they do not propagate; and I do not foresee any reason to suppose that they will hesitate to kill when that sufferance is abused (229-300).

For Wells, by contrast to a more ethically circumspect sociologist like L.T. Hobouse, the argument against the abolition of individual freedom for certain designated groups of people was outweighed by the view that such groups would exert an intolerable burden on the state. For the state, itself, becomes for Wells the embodiment of ethical and social aspirations, in so far as its national and imperial efficiency is attributable to the sum total of personal efficiency. But the new Liberals, Hobouse in particular, tended to argue that there
was no necessary congruity of interest between the individual
and the state and that the causal relationship between personal and
national efficiency remained unproven.95

Wells develops his idea of the New Republic96 in the opening
chapter of Mankind in the Making, his successor to Anticipations
serialised in the Fortnightly (September 1902 - September 1903) and
published in September 1903. The essence of The New Republic is to
be judged by whether it conduces 'more or less to wholesome and
hopeful births'.97 It is the duty of the new republican not to
encourage incompetent breeding. In Mankind in the Making Wells
suggests more explicit eugenic palliatives. Significantly, he
supports negative eugenic rather than positive eugenic methods.
He does not think it possible to breed human beings from among the
best-off:

> While it may be impossible to select and
> intermarry the selected best of our race...
> we can do a thousand things to equalise the
> chances and make good and desirable qualities
> lead swiftly and clearly to ease and
> honourable increase (69).

He now backs the 'science' of heredity which claims that research
will lead to the systematic improvement of the birth supply, citing
scientists such as Karl Pearson, Weldon and Bateson, who were then
engaged in this field. Wells claims, a trifle disingenuously, that:

> this missing science of heredity, this unworked
> mine of knowledge on the borderland of biology
> and anthropology, which for all practical purposes
> is as unworked now as it was in the days of Plato,
> is...ten times more important to humanity than
> all the chemistry and physics, all the technical
> and industrial science that ever has been or ever
> will be discovered.
In a distinct shift of position, Wells now aligns himself rather late in the day with these investigators into heredity. This interest in the social application of heredity studies runs hand in hand with his scepticism over more anthropological approaches to breeding which had dominated the 1890s: he has in mind Nordau, and Lombroso. For Wells, as I have shown in chapter One, they were pessimistic, pseudo-scientists.

In *Mankind in the Making* even more than in *Anticipations* he stresses regenerative policies for racial health which are to become a characteristic feature of post-Boer War discussions. This frame of mind is recalled in his retrospective examination of late-Victorian and Edwardian culture, *The New Machiavelli* (1911), in a discussion between the narrator and Willersley (Graham Wallas) about regeneration, socialism and national efficiency. Regeneration will be effected within the middle-class family in a racially-efficient and once more pastoral setting. Sooner or later Wells arrives at this norm - a clean, bright nursery, a nurse always in attendance, the child exposed to fresh air but also continually checked, weighed and measured for its progress.

It is noticeable how responsible parenthood is associated only with mothers of this type. The mother is a child-bearer, but within a bourgeois marriage; she is set against the world of work, yet incorporated into a national campaign to further racial health. The ideology is explicitly class-based. Motherhood becomes important in so far as the parent is responsible for the welfare of the child with the aid of a nurse and material comforts. If, however, the mother
fails in her duty then (and this is a convention in Wells - the children of the future must not be sacrificed to the parents) the state must step in as a 'reserve guardian' of all children.

It is in the interests of children that Wells most frequently invoked the apparatus of the early twentieth-century state. So in Mankind in the Making he confronts the problem of unwanted children. Urging a basic minimum of clothing, cleanliness and physical growth, he believes that parents should be obliged to maintain their children to that standard - failure to do so would result in the child being taken away from the parent. The parents are charged with maintenance or in extreme cases put in 'celibate labour establishments' until they have worked off their debt to society. The parent is the 'debtor to society on account of the child' (99-100).

We can see how state intervention serves to promote the interests of the middle-class family through a tactic of inducing guilt by association. All aspiring groups must try harder to fulfill their natural obligation to the state. Wells believes this scheme would 'certainly invest parentage with a quite unprecedented gravity for the reckless, and it would enormously reduce the births of the least desirable sort' (101). This theme is reiterated in Wells's Fabian phase - particularly in his writings from 1906-7. Here Wells publicises The Endowment of Motherhood policy, a focus of Fabian feminist activity at this time.
The main topic of this section is Tono-Bungay (1909). It is beyond the scope of the chapter to examine the precise relationship between Wells's regenerative social prescriptions, 1901-5, and the development of his fiction from Kipps, (1905) to The History of Mr Polly, (1910). However, it is clear that each text reveals deeply ambivalent attitudes towards Edwardian society. Each is written out of a continuing preoccupation with the quest for a fictional mode which will permit characters and situations to be as far as possible representative. But the realisation of this mode is continually elusive, as Wells lights on one fictional mode after another to arrest his oscillating perceptions of how society should be read. Taking Tono-Bungay together with Kipps, (1905), In the Days of the Comet (1906), The War in the Air (1909), Ann Veronica (1910), The History of Mr Polly, (1910) and The New Machiavelli (1911), it is difficult not to agree with Christopher Caudwell's acid appraisal:

Wells is in the unhappy position of a tailor whose yard-rule alters capriciously in length overnight. Each morning he patiently measures off his yard of cloth, and the result is a long succession of inconsistent bundles of material. 99

Each of these texts deal with ideas which are relatively new to fiction; for this reason alone Wells's output is important. The History of Mr Polly alone achieves a satisfying fusion of form
and vision. However, if we take Wells's writings as a series of fictional responses to changing perceptions of society, we shall get the best out of his work of the years 1905-11. And while from amongst them it is Tono-Bungay which has been given the status of a 'condition of England' novel, it is certainly arguable that each text, in fact, registers formal responses to a variety of 'conditions' of English culture; each points to different approaches or ways in, and equally each exposes the limitations of those approaches, imposed by the choice of form. I want briefly to set Tono-Bungay beside *In the Days of the Comet* (1906), and *The History of Mr Polly* (1911).

The subjects and settings of these works are very different. *In the Days of the Comet* is set in industrial heartland, reminiscent of the territory mapped out by Arnold Bennett, whilst *The History of Mr Polly* describes the disillusionment of a south-coast tradesman. Both texts, however, display a process of disengagement from the messy, ungovernable world of the present moment. In *Comet*, the struggle between figures representative of capital and labour is swept away by the descent of the much-heralded comet which ushers in 'the change', a new order of peace and free love, whilst Mr Polly finds solace, and liberation from his stultifying personal and working life, in the pastoral of the Potwell Inn. Both texts, in fact, take off within the empty space between incoherent reality and some promised, orderly paradise (in Polly's case it is an order he must impose himself). Each assumes a version of crisis which is not resolved, but is displaced by the interposing of an entirely original mode of awareness. Polly contemplates his chaotic and futile past, just
as he is about to abandon it. The stile he sits on is both the extreme limit of containment and the beginning of the step outward to freedom. We witness the conflicts between labour and capital knowing that the dawn of the new order is about to whisk the here and now into memory.

*In the Days of the Comet* is an interesting failure; and it contains in its second half an embarrassing helping of utopian 'mish-mash' (in Caudwell's phrase from Engels). Wells offers us an idealistic anaesthetic for the dissection of the industrial world before the 'change'. But then only by establishing a distance from the contemporary world, through the neo-utopian mode, does it seem possible for Wells to examine this particular 'condition' of England in any depth at all. He needs the rupture between the realistic and the utopian mode which can effectively free him from the obligation to seek solutions to the difficulties of consciousness which the fiction has opened up.

Yet, for all the rather embarrassing passages of unironic idealism and the clashes of tone and vision, Wells manages, albeit in a very crude and attenuated way, to penetrate to the material structures which define the struggle between labour and capital; this, as far as I know, is unique in his writing before 1914. Before 'the change', *Comet* records through the experience of two autodidacts, industrial resistance to coal owners, an awareness of the hegemonic alliance between monopoly capital and the jingoistic popular press, and the more familiar Wellsian debate between the merits of science and socialism. The voice of working-class anger fleetingly articulates the gap between differing roads to salvation out of the industrial
crisis, which has been brought about by irresponsible capital:

Here's distress and hunger coming, here's all the capitalistic competitive system like a wound inflamed, and you spend your time gaping at the damned silly streak of nothing in the sky. 100

Momentarily, Wells interpolates his own schema through his spokesmen. The analogy, though, is with the diseased body. Such organic metaphors are never far from the centre of the analysis of England and the economic system which has it by the throat, figured as both diseased and disease inducing. According to William Bellamy's Rieffian interpretation of this novel, the paradisal order becomes the salve, which is applied to the Edwardian condition. But as I shall argue with respect to Tono-Bungay, the image of a diseased organism is, itself, an unsatisfactory vision, even as a conceptual response to the society it describes. The therapeutic argument, moreover, underestimates the conscious way in which Wells in Comet shows how society is actively controlled and shaped, and not passively carried to its observers who then are infected by its values.

Wells stresses the productive relations between employers and workers. In response to the dumping of iron ore into England by American industrialists, English employers safeguard their profit margins by sternly resisting wage demands. In a very characteristic passage which shows his panoramic ability to articulate the large movements of social consciousness, through striking juxtapositions, he describes the effect of dumping:

The whole effect upon the mind of a cool observer was a covey of unsubstantial jabbering minds drifting over a series of irrational economic cataclysms, prices and employment tumbled about like
Although the tone is sensational, more characteristic of the pot-boiling rhetoric of his next novel, the fantasy *The War in the Air* (1908), it is significant in that the vision attempts to encapsulate the sense of working-class impotence before the sheer irrationality of a system which is controlled by the decisions of absent, invisible plutocrats. This is a society in which the 'cool observer' can't find stasis and clarity; not for want of trying but because they are impossible to get at. Against that, though, we have to weigh the effect of metaphors of infection and corruption: 'choked with obsolete, inadequate formulae' (331), in 'an atmosphere that had corrupted and thickened past breathing; there was no cool thinking in the world at all' (339). Again we register that objectified distance from events invoked by the observer, who urgently seeks clarity from within the corrupted order. But whilst this oppositional consciousness may be unfocussed and unable to breathe, it has not yet caught society's disease. Whilst the residual organic metaphors are the expression of incoherence and frustration they don't obliterate that crucial distance, nor the health of the observer.

The role of the 'cool observer' in *Tono-Bungay* is, as I shall discuss, a critical question. By way of signalling its function, it is worth briefly considering a passage (Chapter Seven, part Three) in *The History of Mr Polly*, where Wells breaks off from the narrative of Polly's life and quite abruptly offers us a new perspective; that of...
'a certain high-browed gentleman living at Highbury' who (in the language of a journal such as the National Review), is wrestling with 'social problems.' Characters such as Polly, products of the lower-middle class, typify a society which 'declines in its collective efficiency and vigour, and secretes discomfort and misery' (216)...

Nothing can better demonstrate the collective dullness of our community, the crying need for a strenuous, intellectual renewal, than the consideration of that vast mass of useless, uncomfortable, under-educated, under-trained, and altogether pitiable people we contemplate when we use that inaccurate and misleading term, the Lower Middle Class... they are doing little or nothing for the community in return for what they consume; they have no understanding of any relation of service to the community....' (216-7).

It is an awkward intrusion, but a very revealing one for what it tells us about Wells's ambiguous relationship to his authorial point of view, which is at the heart of the problem besetting Tono-Bungay. By the time he comes to Polly, Wells seems to have settled his account with the analytical, distanced spectator in favour of the created, authentic life of his own lower-middle class creation, Polly himself:

I quote these fragments from a gifted if unpleasant contemporary for what they are worth...I come back to Mr Polly, sitting upon his gate and swearing in the east wind, and so returning I have a sense of floating across unbridged abysses between the general and the particular. There, on the one hand, is the man of understanding seeing clearly...the big process that dooms millions of lives...and giving us no help...by which we may get that better 'collective will and intelligence' which would dam that stream of human failure; and on the other hand, Mr Polly, sitting on his gate, untrained, unwarned, confused...with life dancing all about him (219).
This is less a plea for serious literary consideration of ordinary people, than a renunciation of the detached analytical voice of the Highbury high-brow. Wells's declared conceptual problem, 'floating across unbridged abysses between the general and the particular', applies with ironic pertinence to his novel of two years before.

Superficially, Tono-Bungay could be read as a vindication of the rhetoric of the man from Highbury. George Ponderevo, nephew of the comic projector Edward Ponderevo, is the principal spokesman who diagnoses English society as characterised by wasted effort, and contradictory, confused and ultimately futile gestures of assertion. However, Wells's novel undermines this work of cool observation in so far as Ponderevo himself becomes part of the very sickness he diagnoses.

In The War in the Air, The History of Mr Polly and In the Days of the Comet, Wells employs the modes of fantasy, pastoral and neo-utopia to comment upon English society. But in Tono Bungay, Wells creates a more insidious distance from the chaos and muddle of the present which renders the work of the all-presiding diagnostician futile and irrelevant.

The novel charts a process of renunciation of that critical space, because it assimilates the dislocated, sceptical and, at times, oppositional voice into the 'condition' of social and cultural sickness. The observer and what he observes, are implicated in the same sickness; society, or a version of the economic system by which it is regulated, becomes divested of a subject. Thus it cannot be objectified and coherently spoken about and acted on.
The diagnosis of society's degeneration is made explicit in David Lodge's powerful but over-simple reading of *Tono-Bungay*. Lodge has drawn attention to the resonating metaphoric patterns in the novel which testify to its coherence:

It is the language of the novel which binds it into a unified whole, setting up verbal echoes which establish connections between the many disparate subjects of George's discourse, and giving that discourse a consistent and individual tone of voice. George sees life in terms of society, and society as an organism or system, which is often spatially conceived in terms of architecture or topography and which is involved in a process of change and growth characterised by negative qualities of confusion, disorder, disarrangement, disturbance, degeneration, dissolution, disproportion, muddle and waste, and more concretely by cancer, disease, decay, festering, swelling and rot. The spectacle is huge, immense, stupendous — hence all the more strange and sinister.

This apparent coherence encourages a reading of the novel as a highly-wrought, pessimistic and ironic fable. The case can be put that the text records in a series of interlocking episodes a record of waste, failure and decay, actualised in a proliferation of moments. These moments comment back and forth on each other: George Ponderevo leaves decaying Bladesover only to find that London is controlled by the same patterns of private ownership and deference, reproducing an all-embracing parasitism. This 'theory of London' is itself challenged by 'great new forces, blind forces of invasion, of growth' — the unplanned development of lower middle-class housing and industrial sprawl. These developments are presented as images of social and aesthetic decay.

Edward Ponderevo's career records, too, a proliferation of ironies. Reacting against the inertia of Bladesover he invents a
bogus wonder- tonic. He accumulates the capital which enables him to enter the ranks of the new plutocracy - one mark of which is a man's ability to buy himself into the very landed society which is diagnosed as the key to small-town paralysis. His very success then leads to his undoing at the hands of Lord Boom (whose cause he has promoted); and his half-built extravaganza, Crest Hill, testifies to the ironic curve of his self-consuming adventurism.

Similarly, the 'quap' episode furnishes an ironic image of decay; it is literally the waste which is seen as the elixir which will revive Ponderevo's ailing business ventures. But, being radioactive cargo, it destroys the fabric of the boat which is carrying it back to England.

George experiences loss and disillusion in his relationships with women; passion itself is mere wasted expenditure. During and after the decline of his part in Ponderevo's commercial scheme he sees nothing but waste and decay around him. 'It may be', he says, 'I see decay all about me because I am, in a sense, decay' but then he announces his own destructive form of salvation: 'now I build destroyers' (300). The destroyer is a sinister image of creativity and invention but also of destruction and waste.

The problem with this attribution of ironic coherence falls into two parts. Firstly, there is the question of social and cultural waste; the vision of contemporary society as a proliferation of gestures of futile effort. The gestures can constitute either what is observed (most obviously, the self-consuming, commercial adventure of Ponderevo)
or the act of observation - George's successive voicing of uncertain and contradictory amorality. And this leads to the second component; the presiding vision of waste is apprehended through the eyes of a deliberately corrupted and corruptible point of view.

If Tono-Bungay records the collapse of that gap between the diagnostician and the condition, then in order to attribute coherence we logically have to accept the plausibility of the condition-of-England thesis, in order that it may justify the collapse of the narrator's authenticity. Yet we shouldn't be persuaded into believing that George's incoherence is proof of the aesthetic coherence of the novel. I want to show that this thesis is far more determined by ideological selectivity, which actually serves to obscure Wells's confusion over the form of the fiction. To accept the novel's metaphoric coherence is to accept both Wells's strategic use of organicism and the coherence of that reading of society.

One way of inspecting George's diagnosis is to focus on the term 'waste'. It is one of the dominant metaphors of society's condition in the novel. Had Granville-Barker not beaten him to the term as the title for his play (first produced in November 1907), it would have served Wells's purpose, as the term 'waste' had considerable contemporary currency. We can compare, as David Lodge does, Charles Masterman's The Condition of England (1909) with Tono-Bungay, where we find that Masterman invokes it to point up the concentration of wealth in Edwardian England. Capital accumulation is wasteful insofar as it does not commensurately benefit society as a whole:
public penury, private ostentation - that, perhaps, is the heart of the complaint. A nation with the wealth of England can afford to spend, and spend royally. Only the end should be itself desirable and the choice deliberate. The spectacle of a huge urban poverty confronts all this waste energy. 106

Despite the obsessively financial subject-matter of Tono-Bungay, it is difficult to find a similar definition of 'waste' - one which opens up to conscious agency the possibility of using capital productively. For Masterman, capital accumulation is 'waste' since it appears to have no objective other than self-aggrandisement, so perpetuating the spiral of acquisition. This process is made concrete in the commercial career of Ponderevo, but George's account of social waste is bereft of social agency or intentionality: a concentration of wealth is unrelated to poverty and underprivilege. So astonishingly, there is not a single discussion of poverty in the book, a strange omission in a 'Condition of England' novel. And this absence serves to highlight the inadequacy of a conceptual framework which does not take seriously the whole subject of economic and political power. This absence vitiates George's 'theory of London'.

The 'theory of London' which identifies architectural patterns, 'proliferating and overgrown elements from the Estates', shows how landed capital replicated itself architecturally, within the capital city. But when that theory is made to account for contemporary London, Wells dissolves its economic foundations into a vision of an uncontrollable cancer, freely admitting that the theory can't explain 'the presence of great new forces, blind forces of invasion, of growth' (81):
...the whole effect of industrial London...is to me of something disproportionately large, something morbidly expanded, without plan or intention, dark and sinister toward the clean, clear, social assurance of the West End. And south of this central London, south-east, south-west, far west, north west, all around the northern hills, are similar disproportionate growths, endless streets of undistinguished houses, undistinguished industries, shabby families, second-rate shops, inexplicable people who in a once fashionable phrase do not 'exist'. All these aspects have suggested to my mind at times...the unorganised abundant substance of some tumorous growth-process, a process which indeed bursts all the outlines of the affected carcass and protudes such masses as ignoble, comfortable Croydon, as tragic, impoverished West Ham. To this day I ask myself will those masses ever become structural, will they indeed shape into anything new whatever, or is that cancerous image their true and ultimate diagnosis? (81).

This diagnosis is, however, carefully arranged. The proliferation of instances of the morbid condition is a characteristic Wellsian device. But it is a disingenuous passage, admitting rather lazily what was by 1908 a rather tired comparison between the West End, which is 'structural', and the bulk of London's suburban and industrial territory which apparently is not; (his invocation of the 'once fashionable phrase' only reinforces this impression). The elaboration of disease imagery, paradoxically, belies his contention that the growth lacks any principle of organisation. The insistent rhetorical undertow, betrays rather the opposite sense that urban development presents itself as the emanation of a coherent and ordered organic design. This discourse serves, moreover, to obscure the origins of urbanism, so effacing the possibility of an organisational subject. There is a contradiction between Wells's analysis of landed
society as the key to historic London (and, by extension, to England), and the phenomena of early twentieth century urbanism in its industrial and domestic particularity.

There is also a further disjuncture between the 'cancer' of London and the Ponderevo's accumulation of capital. As I shall argue, Ponderevo's commercial adventure is expressed by and contained within a discourse governed by the notion of energy with its oscillating rhythms of concentration and dissipation, which promote 'force' and produce 'waste'. We find that there is little in the novel which identifies Ponderevo's accumulations as materially connected, at the level of either production or consumption, with the reproduction of labour power which is at the heart of the growth of West Ham or Croydon. Each is commended to us as variations on the presiding theme of waste and disease; both the specificity and the material relationship between each are dissolved and rendered obscure and purely phenomenal.

For Wells 'waste' has an all-embracing function. It is called upon to describe the social order as an energy system gone astray. The co-existence of the forces of growth and decay, of the concentration and dissolution of energy, as processes to be inspected in their own terms, owes in its teleological design a great deal to Spencer, who is a persistent if rather unacknowledged influence on Wells. It is worth noting that Spencer notes in First Principles (1862), that all evolution has to be 'deduced from the persistence of Force' which underlies his synthetic formula that:
Evolution is an integration of matter and concomitant dissipation of motion; during which the matter passes from an indefinite, incoherent homogeneity to a definite, coherent heterogeneity; and during which the retained motion undergoes a parallel transformation. 109

But Wells uses Spencer to turn his meliorist evolutionism on its head. The energy system also bears the influence of contemporary ideas about the laws of civilisation and decay popularised by writers like Brooks Adams, as well as the geo-physical ideas of Kelvin whose influence and importance I have previously noted. Brooks Adams elaborated a cyclical theory of change through history in _The Law of Civilisation and Decay_ (1895) which describes society in history as a continuing movement from barbarism to civilisation and back to barbarism. In his preface to the second edition (1896), Adams described how when surplus energy accumulates 'to preponderate over productive energy it becomes the controlling social force':

> Thenceforward, capital is autocratic, and energy vents itself through those organisms best fitted to give expression to the power of capital; when a social velocity has been attained at which the waste of energetic material is so great that the material and imaginative stocks fail to reproduce themselves, intensifying competition appears to generate two extreme economic types - the usurer...and the peasant'. 110

The trajectory of Wells's diagnosis however points in a quite opposite direction from the path he sought at the beginning of the century; and in fact marks something of a return to the more pessimistic, apocalyptic tenor of his mid-1890s work. When Wells invokes the term 'waste' in _Anticipations_ (1901), he does so in a positivistic spirit. He applies the term directly from biology to a particular social formation. The target is specifically the residuum.
the fallen class of urban degenerates who are inevitably thrown aside by a physiological process in the service of continual industrial production. This process is 'as inevitable in the social body as are waste matters and disintegrating cells in the body of an active and healthy man' (81).

As I have described, Wells is only too keen to invoke negative eugenic policies which will speed this process on its way in the name of national efficiency. But by Tono-Bungay the confident positivism which has led him to the Fabian ideology of social intervention and management has all but evaporated; and with it the belief in the literal and figurative value of the term 'efficiency'.

That confidence is well illustrated by Wells himself who reconstructs a conversation between himself and Graham Wallas in 1903, in The New Machiavelli (1911):

Order and devotion were the very essence of our socialism and a splendid collective vigour and happiness its end. We projected an ideal state, an organised state as confident and powerful as modern science, as balanced and beautiful as a body...the organised state that should end muddle for ever. 111

This novel charts the waste of the political career of the semi-autobiographical Remington, who is initially an ally of the Baileys (the Webbs) but subsequently alienated by their cold efficiency.

In Tono-Bungay, 'efficiency' - a function of the most productive use of energy, significantly becomes 'waste' - a function of un-
productive expenditure of energy and which has super-imposed on it a realisation of the futility of even trying to direct energy productively; so the term accrues a negative value and signals an absolute rejection of the positivism which has brought the notion of energy into the discourse of political and social reform in this period. But the only clarity which can be recuperated from the wasteland of England is that which coheres apart from positivism; hence George's flight into what is a form of messianic mysticism. And the engineer, the pre-eminent symbol for Wells of the early century regenerative revival, is now George - a vacillating, morally ambiguous tinkerer, turned destroyer, who now makes for the open sea of nihilism.

The ultimate reification of the process of social waste is expressed by George's notorious espousal of the principle of creative destruction. Throughout the novel, George plays with a quest for scientific truth which, after his student days, is translated into his pet aviation projects, and after Ponderevo's demise, the very topical activity of the manufacture of gunboats. Although the project can be read (certainly Wells encourages this) as one more variation on George's own immersion in the manufacturing of waste which he has continually highlighted as the keystone of the social progress, it is worth underlining the extent to which George's position reflects apparently, a key change in Wells's own philosophical stance. George speculates:

It is all one spectacle of forces running to waste, of people who use and do not replace, the story of a country hectic with wasting, aimless fever of trade and money-making and pleasure seeking. And now I build destroyers! (300)
Is the obvious self-irony yet another turn in the spiral of disengagement from coherence or does the ironic voice actually betray a philosophical position of Wells's own?

Certainly, in the austere championing of the transcendent power of machinery, George's words echo contemporary futurist obsessions, as in the work of T.H. Hulme and Marinetti.\textsuperscript{112} And Wells had outlined a distinctively new philosophy of warfare in \textit{First and Last things: A Confession of Faith and a Rule of Life} (1908). He wrote that creativity can emerge out of destruction: 'it is a cooperation for killing that carries with it also a cooperation for saving and a great development of mutual help and development within the war-making group.'\textsuperscript{113} War is now a necessary phase of human development. Wells, impatient with the idea that the individual matters, now takes up an elitist and mystical position, affirming the potential of destruction as shared by a collective consciousness:

\begin{quote}
Between you and me as we set our minds together, and between us and the rest of mankind, there is something, something real, something that rises through us and it is neither you nor me...I see myself and life as part of a great physical being that strains and I believe grows towards Beauty, and of a great, mental being that strains and I believe grows towards knowledge and power.\textsuperscript{114}
\end{quote}

Gone is humanistic assertion of planned order, the basis of Wells's national efficiency phase. This recalls rather Wells's apocalyptic vision of the militant state of the work of the late 1890s, shorn of the explicit evolutionary ethic and now more focussed on the innately powerful technology of destruction and its potential for collective transcendence of usual rivalries.\textsuperscript{115}
It is instructive to compare Wells's attitude towards warfare in *The Days of the Comet* (1906):

Of all the monstrous irrational phenomena of the former time, war was certainly the most strikingly insane...Save for the slaughter and mangling of a multitude of people, the destruction of vast quantities of material and the waste of innumerable units of energy, it effected nothing'. (375)

and *The War in the Air* (1908):

It is impossible now to estimate how much of the intellectual and physical energy of the world was wasted in military preparation and equipment, but it was an enormous proportion. Great Britain spent upon army and navy money and capacity that, directed into the channels of physical culture and education, would have made the British the aristocracy of the world. 116

The evidence suggests that George's quest for salvation expresses not just another phase of his failure to engage with humanity, but is an escape route from the contradictions of an Edwardian society, where Wells's desire for order and humanism confronts an increasingly irrational and concentrated form of capital expenditure - the European arms race. Wells ducks, by having George articulate this reorientation, whereas in his earlier work Wells has indicted the process of capital accumulation, which sustains the economic and political hegemony, he now jettisons this perspective and offers instead mystical incoherence.

I want now to discuss the important relationship between George and Edward Ponderevo, his uncle. Edward Ponderevo's career, his rise and fall, form the central trajectory of the novel, - intersecting with and taking off from George's narrative of his own life, and defined in a relatively defined place within the novels. We witness
the successive stages of his career, from Wimblehurst chemist
to inventor, capitalist, agent, plutocrat, through to his sudden
demise, escape and death. But whilst this career is inserted
into the narrative (and marked by a rhetoric which has its own
rhythms and which preserves its own internal momentum), it is
also a career which is seen and judged by George, an observer,
who is deeply compromised by his problematic relationship to his
uncle's enterprise. I would suggest that George's ambivalent attitude
towards the ethics of the manufacture of the wonder tonic helps to
preserve Ponderevo's career as little more than the sum total of an
elaborate variety of farcically comic turns, whilst at the same
time, the trajectory of the Ponderevo story is intended to represent,
in a concentrated form, the diseased organism of contemporary life.
Wells uses the unreliable, inconsistent and incoherent narrator to
deflate Ponderevo as an absurd figure whose schemes will be ultimately
self-defeating and neglible. But the comic mode of Ponderevo's
characterisation disguises George's own emptiness. It is a hollow
laughter, and behind-it the sad fact of Wells's own disenchantment
and confusion. In this characteristic passage, George displays his
uncle as an extreme symptom of a process from which he despairingly
recoils:

At the climax of his Boom, my uncle at the most
sparing estimate must have possessed in substance
and credit about two million pounds'-worth of
property to set off against his vague colossal
liabilities, and from first to last he must have
had a controlling influence in the direction of
nearly thirty millions. This irrational muddle of
a community in which we live gave him that, paid
him at that rate for sitting in a room and
scheming and telling it lies. For he created nothing,
he invented nothing, he economised nothing. I cannot
claim that a single one of the great businesses we
organised added any real value to human life at all (173).
George registers Ponderevo's career as a self-generating process which, as it gathers momentum, both engulfs him and furnishes him with the evidence he needs to damn Ponderevo's wasteful, futile and absurd commercial sorties; but by the same token, he condemns himself. The passage quoted is a late example of George's vacillation. Earlier, at the onset of the 'Tono-Bungay' project, having declared 'from first to last...I saw its ethical and moral values quite clearly' he is drawn into the project by Ponderevo's claim that trade is the activity of the moment:

Tono-Bungay shouted at me from a hoarding near Adelphi Terrace; I saw it afar off near Carfax Street, it cried out again upon me in Kensington High Street and burst into a perfect clamour...it certainly had an air of being something more than a dream...Yes I thought it over - thoroughly enough...Trade rules the world. Wealth rather than trade. The thing was true, and true too was my uncle's proposition that the quickest way to get wealth is to sell the cheapest thing possible in the dearest bottle (110).

The magic of promised wealth, the harnessing of the instincts of financial greed to the increasingly available technology of advertising and marketing, is described within the same rhetorical frame. George's ambivalence is registered in waves of attraction and repulsion, of commitment and disengagement, which, together express not so much a finely-tuned ironic sensibility as a hollow rhetoric which serves both George's diagnosis and Ponderevo's projector's patter. Taken together, these gestures seem merely to bounce off the impenetrable reality of the society which Wells has in fact turned his back on in a tone of voice which registers neither engagement nor interaction but the insistent self-displaying echo of the ineffectual and assertive self.
Another passage may help to illustrate how George's rhetoric works. He describes his uncle at the apex of his career, just before his sudden fall. He gives us Edward, the country gentleman, in front of his newly-built house, Crest Hill:

There he stands in my memory, the symbol of his age for me, the man of luck and advertisement, the current master of the world. There he stands upon the great outward sweep of the terrace before the huge main entrance, a little figure, ridiculously disproportionate to that forty-foot arch...There he stands, Napoleonically grouped with his retinue... Below are hundreds of feet of wheeling planks, ditches, excavations, heaps of earth...On either hand the walls of his irrelevant unmeaning palace rise...(214).

The language is trapped by a patronising rhetoric governed by the repetition of the flourish 'there he stands' in which the narrator's point of view is dispensed, within those confident clauses of attribution - 'the symbol' - 'the man of luck'. The entire thrust is towards a picture, not of the inappropriate and irrational expenditure of wealth, but of comic absurdity in which it is not Ponderevo's grandeur but his diminutiveness, powerlessness and passivity which strikes home. The momentum is sustained by a process of making and undoing, of concentration and dissolution - figured by the energy concentrated within the arch and its necessary dispersal in the heaps of earth and excavations. So Crest Hill is not so much an ironic symbol of Ponderevo's achievement, but is itself conceived as another symbol of presiding process of waste. Like the 'quap' generated by industrial production, it generates its own waste; less a monument than a living organism - an image, ultimately, of entropy. And the narrative voice charges what it diagnoses with the same tone with which it registers its dissent, so that the analyst and the object
of that analysis continually feed off one another.

Ponderevo's invention of 'Tono-Bungay' is, most obviously, a deliberately fraudulent scheme for exploiting a market to make fast money; that he should choose a patent medicine, a subject of topical concern, gives the project a satiric edge. But then Wells's point throughout the novel is that a society which can be seduced by such claims, and can permit such fraudulence, is manifestly sick and rotten. Coerced by George's narrative, we are encouraged to judge Ponderevo to be responsible for manufacturing a useless and wasteful produce (so adding to the total sum of moral sickness), but to view him as well as a figure on whom society, through the medium of the market, confers a specific significance. He is brought into life by the forces of capital and technology. Wells creates in Ponderevo a symbol of waste in action. But the means by which he is depicted, as an exponent of force, does encourage a half-hearted recognition of the material conditions out of which bogus markets can be created and exploited.

There is evidence that Wells endorses the vigour and inventive élan of Ponderevo. As we would expect from In the Days of the Comet and The War in the Air, he shows considerable understanding of the impact of the, still relatively new, forms of mass advertising and consumerism. But the energy and force which carries him from the obscure Wimblehurst chemist's shop, up the social scale into the ranks of plutocrats like Lord Boom, are for Wells important qualities - those of the social parvenu who, like Wells himself, resides in the lower-middle class, outside the patronage of landed society, or of the
educated university élites or of metropolitan bohemianism. Wells
drew on much the same qualities of inventive vigour to force the
literary world to attend to him in the 1890s.

Ponderevo represents, in a limited way, a challenge to the
hierarchies of the residual feudalism of rural Bladesover and the
existing financial hegemony centred on London. But his actions are
continuously displaced by a comic mode which renders him harmless
and irrelevant. The society in which he conducts his financial
brinkmanship is left untouched and untroubled, since the mode does
not allow the forging of a distinctive consciousness which can attract
the possibilities of irony. Ponderevo is insulated and objectified
as a figure of rebellious and unruly fun. The subversive potential
is dissolved by the comic mode, which fixes him as little more than
the sum of his own comic gestures and rhetorical reflexes. We can
see how this operates, early in the novel, when Ponderevo declares
his wish to shake up the sleepy Wimblehurst world which is 'under
the domination' of the Eastry estate - a grander version of Bladesover:

> Here's Lord Eastry... He doesn't want anything more to happen. Why should he? Any change 'ud
be a loss to him. He wants everything to burble along and burble along and go on as it's going
for the next ten thousand years. Eastry after Eastry, one parson down, another come, one grocer
dead, get another! Any one with any ideas better go away! They have gone away! Look at
these blessed people in this place! Look at 'em! All fast asleep, doing their business out of habit -
in a sort of dream... They don't want anything to happen either... I must invent something... Zzz...
Some convenience. Something people want... Strike out... You can't think, George, of anything
everybody wants and hasn't got? (57-8).

The vigour of this utterance attracts us while its tone surely distances
us. New possibilities are commended, such as inventiveness as a means
of escape from the rural somnolence which stultifies the spirit, yet the exaggerated idiosyncracies tip that rebellion into absurdity. Like George, whose own framing of his uncle continually oscillates between these perspectives, we can have Ponderevo all ways at once.

But the comic patter obscures the deficiencies in his own rebellion. There is a disjuncture, quite evidently, between the rural inertia against which he reacts, and the substance of his vigorous projector's enthusiasm. On closer inspection, his rebellious energy offers no answer to the stagnation of Eastry and Wimblehurst. It is essentially mere force and assertion in the market. What might be looked for is some urban-centred alternative to the decaying feudalism; what Wells offers us, instead, is a fantasy in which the stimulus of London is a backcloth against which the real effect is made-in the market. For it is the market which contains within it the potential to transcend city and country, but at the level of consumption not of production. The market is able to dissolve the cultural identities, the social specificity of differential environments in the universal appeal of mass consumption. And London is effectively a conceptual terrain where energy can be applied, assimilated and displayed; where the forces of desire (and for George, specifically erotic desire) can be experienced and released. As Ponderevo says; 'it's a wonderful place, George - a whirlpool, a maelstrom! whirls you up and whirls you down' (73). London is the setting for fantasy, 'the romance of modern commerce' (120), rather than a structural alternative to the decayed order which has attracted
so much critical attention; a mere Babylon or Vanity Fair. The rhetoric repeatedly discharges onto its own act of utterance:

Well, here we are, with power, with leisure, picked out - because we've been energetic, because we've seized opportunities; because we've made things hum when other people have waited for them to hum. See? (206).

The flippant phrase discharges what might be a more pregnant and sinister Darwinian implication. But Wells seems to have been attracted by the process of making things 'hum': in Anticipations we recall that he anticipates a time when 'to wait a day or so for goods one has ordered, will be the extreme measure of rusticity' (64).

Ponderevo's assertion of commercial force reflects this technological bias: 'energy' has 'put things in our grip - threads, wires, stretching out and out...to West Africa' (206). One of its vehicles is advertising which 'is going to revolutionise the world' (126). Wells is concerned with the possibilities of consumption, rather than production - of transcendent communication, rather than the conflicts of values embedded in contrasting environments.

It is also interesting to note that, in a novel which ostensibly deals with social and cultural degeneration, Wells does not embrace one discourse which was easily available to him - the familiar idea, that the countryside was being sapped by movement to the town of a population which in its turn would be sapped of vigour in the slums. In fact, he puts, through George, a quite opposite view:

One hears a frightful lot of nonsense about the Rural Exodus and the degeneration wrought by town life upon our population. To my mind the English townsman, even in the slums, is infinitely better spiritually, more courageous, more
imaginative and clever than his agricultural cousin...I do not share in the common repinings because our countryside is being depopulated, because our population is passing through the furnace of the towns. They starve, they suffer, no doubt, but they come out of it hardened, they come out with souls (59).

Wells here places himself decisively and refreshingly outside the powerful conservative-romantic cultural tradition. As numerous writers attracted to degenerationist arguments have demonstrated, there was a dominant feeling in the last years of the century and beyond, that the dissolution of the rural way of life was destructive of much that was valuable in English culture and traditions, as I have suggested in the section on Anglo-Saxonism in chapter One. For those who evaluated society in terms largely dictated by a view of cultural and social continuity, ideas of the progressive deterioration or degeneration of a social order had, as we have seen, a real if nostalgic appeal. Yet in one limited way, we can see this concern yields a profounder vision than Wells's espousal of the values of gesellschaft.

Within the dominant liberal ideology, Charles Masterman in The Condition of England (1909), paints a picture of considerable bleakness. The countryside is dominated by 'great landowners' who preside over 'aggregations of whole countries or estates dotted over many countries, each organised on the same plan of inherited tradition'. Masterman's main point is to show how, as a result of falling incomes and employment, the countryside is literally decaying through the continuous exodus of workers to the towns. Estates which cannot survive are bought up by nouveau riche industrialists, who instead of rejuvenating economic life turn
estates into playthings:

They convert the house into a tiny piece of the city, transplanted to the healthier air of the fields. They entertain themselves and their friends in the heart of an England for whose vanishing traditions and enthusiasms they care not at all. 119

Masterman applauds:

the peasant's resources, the peasant's vigour and resistance, the peasant's slow-moving mind... [the cities] with their unlimited demands for peasant energy and vigour open to him welcoming arms. The few that remain are coming more and more to present the appearance of a declining race. 120

For Wells, Bladesover is a repository of traditions whose passing causes no regret. Indeed the worst of Bladesover's sins is not that traditions are disappearing from it but that there is nothing in the static, somnolent culture worth staying for.

Vigour is not a function of existence but rather of assertion and energy, which the country stultifies and the city is more likely to promote. Paradoxically, Masterman, in his liberal concern for the preservation of traditional values, tells us more about the power structure, and the mechanics of the rural economy than does Wells, despite his emphasis on Bladesover as the 'clue' to London. Masterman is critical of the incursion of newly-acquired capital into the countryside because of its failure to meet fundamental social obligations. Contrast the comically subversive futility of Ponderevo's 'Merrie England' patter, as he tells of his wish to revive rural traditions: 'Merrymakings. Lads and lasses dancing on the village green. Harvest home. Fairings. Yule Log - all the rest of it' (200). Its appealing comic absurdity allows Wells to sidestep
some of the social and economic difficulties brought about by those changes in trade and modes of production in the rural economy, which Masterman touches on. For Wells, the rural economy, rather than suffering from both long-term and very recent dislocations, is preserved, timelessly, in a presiding stasis of exhaustion and staleness. This idealism permits him to project out of this terrain those reified forces of energy by which Ponderevo and George are framed and by which their morally uncertain attitudes are discharged onto an acquiescent civilisation.

It appears that the surface coherence that Wells seeks in Tono-Bungay is governed far more by the strategic manipulation of the narrative into eddies of rise and fall, attraction and repulsion, assertion and dissociation of energy, than by any sustained insight into society as a diseased and wasteful entity, apprehended in its social and economic specificity. The strategic rather than the coherent qualities of Tono-Bungay become more apparent once the novel is read not as a supreme 'Condition of England' fiction, but as a 'condition' of Wells's continuing quest for a fictional form in which to embody his turbulent and often radical attitudes to society.

In spite of literary modernism, and the growing influence of Freudian psychology after 1918, the concept of degeneration can be located in the persistence of positivism in a variety of forms well into the 1920s and beyond. It is possible to detect it in innumerable areas: the reaction to modernist tendencies in art, popular literature, such as the novels of John Buchan, descriptions of the
poor and the incursion of 'urbanism', debates among doctors about racial 'hygiene', and birth limitation, the deliberations of eugenists (who were gaining increasingly respectful academic attention) and the ultimate trauma of fascism with its only too recognisable repertoire of strategies. Degeneration was clearly far from spent.

While modernist literature turned its back on the syntheses of writers such as Wells, it was clear that by 1910 Wells was facing in a different direction from his younger contemporaries Joyce and Lawrence. If in this company he appeared rather late-Victorian, the fact was that works like Tono Bungay indeed contained strong lines of continuity with his earlier writing. If Wells's rejuvenated Spencerianism was inadequate to the task of anatomising Edwardian society, his relative failure should quite properly recall the exceptional nature of his success in the 1890s.

Wells's engagement with ideas of evolutionary degeneration took shape in the wake of the zoologists' work on lower organisms which first precipitated the concept of degeneration into English post-Darwinian scientific discourse. In The Time Machine, that unique degeneration fiction, and his 1890s work generally, Wells could offer insights into man's capacity for and vulnerability to destruction and annihilation at a period when English civilisation was being applauded as the natural triumph of the evolutionary process itself. There is little doubt that his prophetic zoological poetics reverberate more and more powerfully today in ways which neither Wells's modernist descendants, nor those who read him in the 1890s, could have believed possible.
NOTES AND REFERENCES

Place of publication is London unless otherwise indicated. Throughout, the journals The Contemporary Review, The Fortnightly Review and The Nineteenth Century are abbreviated to CR, FR and NC respectively.

Chapter One: The Concept of Degeneration

1. Tom Gibbons, Rooms in the Darwin Hotel. Studies in English Literary Criticism and Ideas 1880-1920 (Nedlands Western Australia, 1973), p.34.


5. Victor Harris, All Coherence Gone (1966).


14. E.R. Lankester, *Degeneration. A Chapter in Darwinism* (1880), p. 33. All page references are to this edition and are included in the text.

15. The full title is instructive: *On the Origin of Species By Means of Natural Selection, or The Preservation of Favoured Races In The Struggle for Life.*


21. Young, 'Malthus and the Evolutionists', p.139.

22. K. Marx to F. Engels, 7 January 1851, in Marx Engels Selected Correspondence, pp. 47-9.


24. F. Engels to L. Kugelmann, 27 June 1870, in Marx Engels Selected Correspondence, p.225.

26. T.H. Huxley, 'On the Natural Inequality of Man', NC, 27 (January 1890), 1-23 (p.20).

27. Young, 133.


29. Helfand, 166.

30. K. Marx to F.A. Sorge, 20 June 1881, in Marx Engels Selected Correspondence, pp. 322-3 (p.322).


38. G.J. Romanes, 'A Note on Panmizia', CR, 64 (October 1893), 611-12 (p.612).


40. Haeckel was relatively widely read in England; his History of Creation and the later The Riddle of the Universe (1900) were particularly well known in free-thinking secularist circles; see Susan Budd, Varieties of Unbelief (1977), p.133, 186.


For the American response to Weismann see D.K. Pickens, Eugenics and the Progressives (Nashville, Tennessee, 1968), pp. 43-4.

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44. Edward Westermarck, Memories of My Life (1929), pp. 77-8.

45. G.J. Romanes to James Romanes, Spring 1890, in The Life and Letters (1898), pp. 244-5.

46. Romanes to James Romanes, Spring 1890, pp. 244-5.

47. Romanes to Dyer, 26 September 1893, p.343.


54. Freeden, p.89.


56. Gold, 38; Ackerknecht, 49.


58. Ackerknecht, p.49.

59. Ackerknecht, p.50.

60. Gold, p.42.


As Carter points out (p.73), there was a closer relationship in France between the work of the mid-19th century pathologists, Morel, Moreau, and others, and literary representation of pathological states, than in England. For Carter, Zola's reading of Morel, Moreau and Prosper Lucas's *L'Hérédité Naturelle* (1850), in 1868-69, was just as vital to his deterministic conception of the Rougon-Macquart as the more celebrated influence of Claude Bernard. Certainly in terms of literary, scientific, cultural and historical developments, the discourse of degeneracy has claims to a greater centrality in France than in any other European state. There were several features, manifest in Great Britain, which were greatly magnified in France: the importance of Malthusianism, the population question, hereditary degeneracy, racism and anti-semitism.

Malthusianism and the question of population-regulation are closely intertwined. From the 1840s, the liberal philanthropic bourgeoisie paraded Malthusianism to prevent 'swamping' by working class families; but with growing internal political stability from the late 1870s, and the need to embark on imperialist expansion, the concern for over-population gave way to propaganda against sterility and for the need to breed for the state - leading to the formation of the National Alliance against Depopulation (1902). Malthusian tactics were then taken up by radical socialists and anarchists, such as Paul Robin, on behalf of the industrial working class against the liberal hegemony, in the form of illegal distribution of contraception, in the industrial struggle against the employer and the imperialist state; hence the concept of la greve des ventres - the womb strike (Donzelot 175-6). This was an indication of how more
politici\textsuperscript{c}ised the population-question had become in France (whereas in Britain the socialist prescription was to substitute for Malthus new means of land ownership, as a solution to the pressure of population and resources).

The penetration of hereditary degeneracy into French provincial life is instanced by Foucault (\textit{History of Sexuality} Vol. I pp. 31-2). A comparative study of the role of the family institution in France and Britain suggests itself from Foucault's cryptic suggestion that family organisation was used to 'support the great "manuevers" employed by the Malthusian control of the birth-rate, for the populationist incitements, for the medicalization of sex, and the psychiatrisation of its nongenital forms' (Foucault p.100). 'Degenerescence' and the 'heredity-perversion system', constitute for Foucault an entire social practice taking the 'exasperated form' of 'state-directed racism'. (119)

France has the dubious distinction of having a fully-fledged racist theoretician in the Comte de Gobineau, who propounded ideas of racial superiority and degeneration of the stock through intermixing, in his \textit{Essais sur l'in\textsuperscript{e}galit\textsuperscript{e} des races humaines} (1853-5).

A marked degree of racism of an anti-semitic cast was evident in France during the Third Republic: see, in particular, Edouard Drumont's notorious \textit{La France Juive} (1886) and preeminently the Dreyfus affair, see K.W. Swart, \textit{The Sense of Decadence in Nineteenth Century France} (The Hague, 1964), 146-7 and generally 148, 172-8; J. Donzelot, \textit{The Policing of Families} (1979) [trans. of \textit{La Police des Familles} (Paris, 1977)]; M. Foucault, \textit{The History of Sexuality} (1981) [trans. of \textit{La Volont\textsuperscript{e} de savoir} (Paris, 1976)].


64. Foster, p.12.

65. Foster, p.55. Wilde was sentenced on 25 May 1895.


73. Nordau, p.293.

74. Nordau, p.119.

75. Nordau, p.126.

76. Nordau, p.500.


78. Lombroso, p.6.


80. Lombroso, p.9.

81. Lombroso, p.95.


87. Nordau, Degeneration, p.15.


91. Mora, p.58.


94. Carlson, p.52.

95. Rosenberg, p.252.

96. In America, Herbert Spencer's influence was considerably greater than in Britain, although it was not inconsiderable there (as the work of such diverse intellectuals as Bagehot the political theorist, W.S. Jevons the economist and J. Hughlings Jackson the neurologist, testify). But in America, Spencer's championing of Progress as a synthesis of ideology and scientific naturalism was immensely attractive to a precocious and dynamic culture, at a period in which the laws of thermodynamics had been stated and formulated. Spencer's law of evolution relied heavily on the prevalence of 'force' working through the evolution and dissolution of a constant amount of energy measured by matter subjected to laws of motion. What was expenditure by the way of progress in one area was compensated for in another. All structures were subject to this law of progressive organic development. It is expressed in First Principles (1862; 4th ed. 1880):

'Evolution is an integration of matter and concomitant dissipation of motion; during which the matter passes from an indefinite, incoherent homogeneity to a definite, coherent heterogeneity; and during which the retained motion undergoes a parallel transformation' (p.396)

Spencer's influence can be traced in all kinds of American figures. Alienists such as Weir-Mitchell introduced 'force' into an analysis of the nervous system. The laissez-faire economic order which Spencer's evolutionary naturalism sustained and legitimised was preeminently suited to American capitalism. Apart from some critics of the 'survival of the fittest' idea, such as Edward Bellamy, Henry George and H.D. Lloyd (the author of a book on Standard Oil), evolution became virtually synonymous with that cast of Darwinism popularly known as 'Social Darwinism'. It can be widely seen in the
Racism at home was accompanied by a bout of national 
aggression abroad.

The elimination of the unfit, by the same ideology, but 
taking a non-Spencerian route by way of intervention in 
the evolutionary process, was more seriously pursued than 
it ever was in Britain. Even before the foundation of 
the Eugenics movement in Britain in 1903, sterilisation 
was carried out in penitentiaries and mental asylums, 
reaching a climax in the years after 1910. America had 
its Galton in the eugenist C.B. Davenport. The 
re-awakened interest in the families of criminals and 
deviants, with their tainted heredity, like the work on 
the Jukes (first published in 1877), resulted in several 
studies of similar clans and added to the credibility 
of hereditary degeneracy in the years until the first 
world war.

Spencerian evolutionism and other evolutionary concerns 
such as the reappearance of atavistic inheritance was a 
feature of the work of Jack London and Frank Norris.

Progressive eugenists, for whom racial hygiene could be 
a release from the worst degradations of motherhood, 
were to be found in figures such as Margaret Sanger (a 
friend of Havelock Ellis).

See D.K. Pickens, Eugenics and the Progressives (pp. 56-
58, 71-3, 75-8, 89), and Paul F. Boller, American Thought 
in Transition: The Impact of Evolutionary Naturalism 

99. Stephanie Shields, 'Sex and the Biased Scientist', New Scientist, 
80 (7 December 1978), 752-4 (p.752).
100. Herbert Spencer, The Principles of Ethics 2 vols, (1892-3), 
vol. I p.534, cited by Lorna Duffin, 'Prisoners of 
Progress : Women and Evolution', in The Nineteenth Century: 
Woman : Her Cultural and Physical World edited by 
image in this context surfaced a generation later when 
an expert on mental diseases, T.B. Hyslop, wrote 
in 1905 that: 'the higher women strive to hold the 
torch of intellect the dimmer are the rays of light for 
the vision of their progeny', T.B. Hyslop, 'A Discussion 
on Occupation and Environment as Causative Factors of 
Insanity', British Medical Journal (14 October 1905), 
941-5 (p.942). See S. Trombley, 'All that Summer She 


109. C. Lombroso, cited by Gould, p.120.


The work of Freud on hysteria provides a further case history of the gradual supplanting of degeneration, as a diagnostic tool, by more precise aetiologies. According to Lester Stewart ('Freud before Oedipus: Race and Heredity in the Origins of Psychoanalysis', Journal of the History of Biology 9 (1976), 215-28), it was necessary to reject 'the idea that...neuroses were based primarily on a hereditary disposition' in order to promote the 'discovery of sexual etiology'. From 1885 Freud's contact with Charcot in Paris had exposed him to the full might of the French psychiatric school, who through Morel, Magnan and Fére, made hereditary degeneration a central tool in the diagnosis of neurosis. (It is precisely the world in which Nordau's Degeneration is shaped). But by the early 1890s Freud was clearly anxious to limit degeneracy's importance. Hereditary degeneracy was to be considered only one of four aetiological factors in neurosis. By 1896 he wrote that heredity could be compared to a 'multiplier' in the human 'electric circuit', and the same year pronounced, provocatively, that 'heredity is seduction by the father' (Stewart p.226). The case-studies in hysteria which Freud and Breuer examined and documented 1893-5, had persuaded him to eliminate hereditary degeneracy. The case of Frau Emmy von M. was decisive. Freud admitted a neuropathic component in her family but detached the possibility of a hereditary pre-disposition from her proclivity to acquire hysteria. Noting her symptoms (alternations of melancholic depression and phobias, with inhibitions of the will) Freud claimed that these 'are regarded by the French school of psychiatrists as stigmata of neurotic degeneracy, but in our case they seem to have been adequately determined by traumatic experiences'(Breuer and Freud, Studies in Hysteria 1893-95, reprinted Harmondsworth, 1973, pp. 146-7.

Demonstrating a respectful and respectable conservatism on behalf of the patient, Freud says she:

gave us an example of how hysteria is compatible with an unblemished character and a well-governed mode of life...the moral seriousness with which she viewed her duties, her intelligence and energy, which were no less than a man's...her love of truth impressed both of us greatly...to describe such a woman as 'degenerate' would be to distort the meaning of that word out of all recognition. We should do well to distinguish between the concepts of 'disposition' and 'degeneracy' as
applied to people; otherwise we shall find ourselves forced to admit that humanity owes a large proportion of its great achievements to the efforts of 'degenerates'. (Breuer and Freud, p.165)

What Janet had diagnosed as feeble-mindedness, Freud saw as an 'excessive degree of mental mobility which leads to inefficiency...I believe that...what underlies dissociation is...the habitual coexistence of two heterogeneous trains of ideas' (Breuer and Freud, p.312).

By the late 1890s degeneracy had ceased to have any use for Freud, although he still called on heredity to explain sexual abnormalities in the family, which was now becoming the site of his sexual enquiries. And while theories of racial degeneracy were flourishing in Germany, England and, particularly, France, Freud, possibly influenced by his painful exposure to the antisemitism of Paris and Edouard Drumont (his La France Juive was published in 1886), was examining sexuality in the family and the emerging Oedipal relationship (Stewart, p.222).

Twenty years later, Freud claimed that degeneration theory was still widely in use by European psychiatrists. In Lecture 17 (1915-17), he indicated that the sexual aetiology which he had evolved to account for the precise workings and influence of 'the concealed motives which have often remained unconscious' (Breuer and Freud p.380), had made little headway in contemporary European psychiatry, which was still wedded to out-of-date, moralistic symptomology:

Psychiatry gives names to the different obsessions but says nothing further about them. On the other hand it insists that those who suffer from these symptoms are 'degenerates'. This gives small satisfaction; in fact it is a judgement of value - a condemnation instead of an explanation. We are supposed to think that every possible sort of eccentricity may arise in degenerates. Well, it is true that we must regard those who develop such symptoms as somewhat different in their nature from other people. But we may ask: are they more 'degenerate' than other neurotics - than hysterical patients, for instance...Once again, the characterization is evidently too general. Indeed, we may doubt whether there is any justification for it at all, when we learn that such symptoms occur too in distinguished people of particularly high capacities, capacities important for the world at large. (S. Freud, Introductory Lectures on Psychoanalysis reprinted (Harmondsworth, 1973), I (1973), pp. 299-30).
See further, Jean-Marc Dupeu, 'Freud and Degeneracy: A Turning Point?', Diogenes, 97 (1977), 43-64, for how Freud re-established a 'genealogy' of family perversion; and for Freud's indebtedness to late-nineteenth century biological ideas, see Frank J. Sulloway, Freud, Biologist of the Mind (1979).

126. Havelock Ellis to J.A. Symonds, 1 July 1892, cited by Grosskurth, p.116.
132. Nikolas Rose, 'The Psychological Complex: Mental Measurement and Social Administration', Ideology and Consciousness, no. 5 (Spring 1979), 5-68 (p.21).
135. Michel Foucault, The History of Sexuality, i, 124-5.
137. See the recent discussion of debates on the population question in Jeffrey Weeks, Sex, Politics and Society (1981), pp. 122-6; and for an analysis of populationist strategies in France, see J. Donzelot, The Policing of Families (1979) and M. Foucault, History of Sexuality p.100.

139. Galton, pp. 303-4.

140. Galton, p.304.

141. Galton, pp. 24-5.

142. Galton, p.25.

143. Jeffrey Weeks has recently addressed this problem; see Weeks, *Sex, Politics and Society*, pp. 131-2.

144. Francis Galton 'Hereditary Improvement', *Fraser's Magazine*, n.s. 3 (1873), 117-8, cited by G. Jones, *Social Darwinism*, p.100.


149. Galton, p.23.


155. The casual worker was a peculiar feature of the labour market of London during this period. See Stedman Jones, Chs. 1-7.


159. Booth, p.176.


164. As Helen Lynd stated:

   It is significant both of the facts in regard to unemployment, and of the attitude toward them that the word 'unemployed' used as a noun was first recorded by the Oxford Dictionary in 1882 and 'unemployment' in 1888.


178. The lecture was delivered at the Parkes Museum of Hygiene, 27 January 1885.


181. Cantlie, p.45.

182. Cantlie, p.52.


184. Williams-Freeman, p.5.

185. Williams-Freeman, p.25.

186. Williams-Freeman, pp. 34-5.

187. Williams-Freeman, p.35.


194. Earl of Dunraven (Windham T.W. Quin), 'The Invasion of Destitute Aliens', *NC*, 31 (June 1892), 985-1000 (p.988).


203. Thompson, p.805.


210. This racial consciousness, an expression of a whole complex of feelings, also took hold of America in this period; the war with Spain over Cuba of 1898, was the American imperial cause célèbre, as the South African War was to England. It released a crusading spirit of racial superiority - to free Cuba from the chains of Spanish rule in the name of the superior race. This was accompanied by an intensification of racial and religious hostility, principally against the inferior
negro, but also against the substantial population of recent immigrant minorities - Poles, Jews and Italians - while the values and culture of the Caucasian, Aryan, Teutonic and Anglo-Saxon type were revered. (See Paul E. Boller, American Thought in Transition: The Impact of Evolutionary Naturalism 1865-1900, pp. 199-212).

In England the Anglo-Saxon revival of the late 1890s was a recasting in Darwinian terms of an ideology of racial superiority which had been promoted by Carlyle, Knox, Kingsley and others in the 1840s and 1850s. Kingsley identified the superior and virtuous qualities in the Anglo-Saxon, Norse and Teutonic elements which had helped to regenerate the degenerate people of Europe after the collapse of the Roman Empire. And he condemned as heathen, races such as the Malays and Dyaks. For Robert Knox, Races of Man (1850), race itself was the key to the perpetuation of civilisation. But there was little in English racist thought which could match the output of Knox's French contemporary - Count de Gobineau. (Reginald Horsman, 'The Origins of Racial Anglo-Saxonism in Great Britain before 1850', Journal of the History of Ideas 37, (July - September 1976), 387-410 (pp. 405-7).


215. This is reflected in the late-nineteenth century folk song revival associated with S. Baring Gould, Cecil Sharp, Percy Grainger and others. According to Vic Gammon, in an illuminating article, Hubert Parry's inaugural address to the Folk Song Society juxtaposed 'folk music...among the purest products of the human mind', with contemporary popular music derived from 'our terribly overgrown towns' and the 'boundless regions of shame' (Journal of the Folk Song Society I (1899), 1., cited by Vic Gammon, 'Folk Song Collecting in Sussex and Surrey 1843-1914', History Workshop Journal no. 10 (Autumn 1980), 61-89 (p.80).

217. Relevant here is the application of regenerative pastoral ideals to corrective social schemes for the London poor. The schemes of Octavia Hill and Henrietta Barnett posed, against the degradation of the East End, the freedom of sunlight and fresh air where the idealised cures, 'sweet, subtle, human sympathy, and power of human love' could flourish; see Geoffrey Pearson, The Deviant Imagination (1975), p.192 and chapter seven.


222. Kelvin, p.368.

223. Loren Eiseley, Darwin's Century (1959), p.241. The original quotation from Hutton reads: 'the result therefore of our present enquiry is, that we find no vestige of a beginning, - no prospect of an end', (Theory of the Earth (1788), p.304. This is also cited by J.D. Burchfield, Lord Kelvin and the Age of the Earth (1975), p.49).

224. Eiseley, p.235. In the sixth edition of The Origin of Species, Darwin was clearly influenced by Kelvin's projection of how much time for future evolutionary development could be guaranteed by the sun's energy. He changed 'a secure future of...inappreciable length' to 'great length' in the sixth edition; see Peter R. Morton, 'Biological Degeneration : A Motif in H.G. Wells and Other Late Victorian Utopianists', Southern Review 9 (1976), 93-112 (p.95 footnote 9).


227. Eiseley, p.247. The telescoping of evolutionary development helped to promote among biological thinkers a sense of irregular and sudden species transformation, and stimulated tendencies which the re-discovery of Mendel seemed to symbolise. The geneticist De Vries acknowledged his debt to Kelvin in 1904 (Eiseley, p.248).


Wood, p.170.

Peter R. Morton 'Biological Degeneration', p.95, (footnote 11).

The Royal Society address of 1893 led Karl Pearson, the following September, to recall the Kelvin-Huxley debate a generation earlier. Pearson was sympathetically disposed to the problem of 'intensity and rapidity of action in the transmutation of species', 'Politics and Science', *FR*, n.s. 56 (September 1894), 334-51 (p.349), but believed that such questions could be examined in the laboratory with the aid of microscopes. For Pearson, Kelvin was too teleological and necessitarian in his inferences: 'In the chaos behind sensations in the "beyond" of sense-impressions, we cannot infer necessity, order or routine, for these are concepts formed by the mind of man on this side of sense-impressions' (K. Pearson, *The Grammar of Science* (1900), p.451, cited by Henry Adams, *The Education of Henry Adams* (Boston, 1918), pp. 450-1.

Chapter Two: The Rural Terrain: Thomas Hardy
1883 - 1895


Quotations from the notes, from 1884, are taken from the unpublished manuscript of 'Literary Notes - I' and Literary Notes - II' on microfiche, Dorset County Reference Library, Dorchester, and follow Hardy's own pagination.

2. This notebook is entitled Facts from Newspapers, Histories Biographies and other chronicles - mainly local, and includes, in addition, a small number of entries from literary sources; abbreviated in subsequent references to 'Facts Notebook'.


6. Annie Besant claimed that it was as a result of the land question that she became a socialist in 1883, leaving the Malthusian League (whose panaceas inevitably were stuck in the furrow of population-limitation) and which enjoyed unexpected publicity during the 1880s through its vociferous battles on land reform with the new socialist parties - particularly the S.D.F. See Annie Besant, An Autobiography

7. ‘The Future of the Radical Party’, FR, n.s. 34 (July 1883), 1-11 (p.l.).


13. Thomas Hardy, The Mayor of Casterbridge (1886; New Wessex ed., 1975), p.234. All page references are to this edition and are included in the text.


15. 'Facts Notebook', p.117.

16. The early 1840s marked something of a watershed between this primitive culture and the accelerated social change which was rendering that culture obsolete, in the span of Hardy's own life. One symbol of this world is the obsolete man-trap which Timothy Tangs dusts down, in an attempt to exact a primitive retribution from Fitzpiers in The Woodlanders (though it is Grace Melbury whose dress is caught). Hardy remarks that the man-trap was in use 'down to the third decade of the nineteenth century' and that 'by the year 1840 the use of such implements was well-nigh discontinued', The Woodlanders (1887; New Wessex ed., 1975, pp. 360-1).

17. Lucas Malet, Colonel Enderby's Wife (1885) v, p.233. See my discussion of the slum enclave in the 1880s, in the next chapter. It is worth noting that the symbolic passage of the female philanthropist through the slum
appears in earlier texts, but without evolutionary overtones. The heroine of Rhoda Broughton's *Not Too Wisely, But Too Well* (3 vols. 1867; reprinted 1967), Kate Chester, who nurses a 'mortal fear of men of the lower orders' (p.178), enters with a 'philanthropic basket on her arm' (p.162) 'a narrow bricked passage...down into the region of back slums and alleys, where the sun has far too good taste to show its grand kingly face' (p.104).

18. The impure stream, as an image of environmental degeneracy, can also be found in a description of rural blight, with the implication of Darwinian struggle, in another novel composed in 1885, Gissing's *A Life's Morning* (written September-November 1885, but not published until 1888). Emily Hood and Wilfrid cross a common outside the town of Dunfield:

Emily tried to believe that this at length was really the country; there were no houses in view, meadows lay on either hand, the leafage was thick. But it was not mere prejudice which saw in every object a struggle with hard conditions, a degeneration into coarseness, a blight. The quality of the earth was probably poor to begin with; the herbage seemed of gross fibre; one would not risk dipping a finger in the stream which trickled by the roadside, it suggested an impure source.


20. Merryn Williams shows in *Thomas Hardy and Rural England* (1972) pp. 201-5, that Hardy saw Dorchester in some respects as the modern city in miniature. The population of surrounding small towns and villages - e.g. Cerne Abbas - was stable or even falling in the years 1841-1901. The population of Dorchester, on the other hand, and especially the parish of Fordington (the 'Durnover' of Casterbridge), increased throughout the century. After 1850 the town prospered but also attracted a growing pauper population. It was, Williams suggests, 'the nearest thing Dorset had to an industrial slum' (p.201).


26. It is just possible that Hardy may have read and studied Abbé Mouret's Transgression between completing the serial version and the volume of The Woodlanders, but there is no evidence from a recent authoritative edition of The Woodlanders, edited by Dale Kramer (1981), that alterations were made which could admit such an influence.

27. '1867 notebook', p.63, cited by Björk as Appendix to 'Literary Notes - I', Text, p.190 (item 190).


La Faute de l'Abbé Mouret provides Hardy with an extraordinarily rich and, at times, suffocating example of the naturalist approach to organic nature. The novel ostensibly charts the conflict between flesh and spirit, desire and renunciation in a country priest. But the subject of the novel is rather nature itself. Page after page of natural description culminate in a nightmarish sequence in which the priest imagines his church, to which he has re-committed himself, invaded, overrun and destroyed by an eruption of organic life.

Given Zola's ironic invocation of a state of erotic and paradisal nature, in which a peasant girl and a sensual cleric commune, Abbé Mouret may have suggested the plenitude of nature of 'The Rally' phase of Tess, where there are obvious Edenic overtones in Chapters 19 and 20. And the description of Tess's exposure to a 'profusion of growth, gathering cuckoo-spittle on her skirts... staining her hands with thistle-milk and slug-slime' (Tess of the D'Urbervilles (1891; New Wessex ed. 1975), p.150), has both the erotic suffusion and botanical exactness of many of Zola descriptions in La Faute de L'Abbé Mouret. This is also the conclusion of Björk in his commentary on Hardy's use of notebook entries from the novel (Björk, 'Literary Notes - I', Notes to


38. Hardy, 'Unpublished Literary Notes', I, 244.


41. *Tess of the D'Urbervilles* (1891; reprinted 1975, New Wessex edition) p.290. All page references are to this edition and are included in the text.


44. Huxley, p.165.

45. Huxley, p.165.

46. Huxley, p.165.

47. Huxley, 'On the Natural Inequality of Man', *NC* 27 (January 1890), 1-23, (p.20).

48. Hardy describes the hunters, ironically, as part of the phenomenal world of Nature. He thus rhetorically sidesteps the society-nature dichotomy by calling the birds the 'weaker
fellows in Nature's teeming family' (302), only to reveal the more emotive and vicious animal-like 'nature' below the civilised exterior: 'rough and brutal as they seemed just then, they were not like this all the year round, but were, in fact, quite civil persons' (302). Tess's shame at the onset of her gloom, provoked by the suffering of the birds, is based, suggests Hardy, 'on nothing more tangible than a sense of condemnation under an arbitrary law of society which had no foundation in Nature' (303). The law from which Tess suffers is here revealed to be chaotic and self-evidently non-ethical and the very reverse of Huxley's claim that 'society differs from nature in having a definite moral object' (Huxley, 'The Struggle for Existence', p.165).


52. Morton, p.49.

53. F.E. Hardy, The Life of Thomas Hardy, pp. 214-5.


55. Laird, pp. 9-10.

56. Laird, p.10.

57. Hardy to Arthur Locker, 18, 23, 29 November 1889, in The Letters of Thomas Hardy 1840-1892, i, 202-3.


61. Laird, p.31.


64. British Library (hereafter BL), Additional MS 38182, 'Tess of the D'Urbervilles', fol. 1; see Laird, p.143.


66. BL Add. MS 'Tess', fol 2; see Laird, p.144.

67. Tess MS, fol. 323.


70. Tess of the D'Urbervilles (1891), III, 140-1. In the 1912 Wessex edition, 'mailed' is revised to 'armed'.


73. Jacobus, 323-9.

74. Tess MS, f.49; see Jacobus, p.326.

75. Tess MS, f.50; see Jacobus, p.326.

76. Jacobus, p.326.

77. Jacobus alludes to the change in Clare's confession. There is no indication in the ur-Tess that Clare was to confess his own past sexual affair. He only admits his unbelief. The change is 'motivated by Hardy's need to make out his case for Tess'.

Before her seduction, Hardy comments in the manuscript version that 'a familiarity with his presence, which her conductor had carefully cultivated in the young girl, had removed most of her original shyness of him' (f.73). Tess's familiarity is shown in the earlier version of the scene where she is being taught to whistle by Alec. Tess purses her lips (as he instructs) 'laughing however', which is revised to 'laughing distressfully however' (f.57). When she finally produces a note, 'the momentary pleasure of success got the better of her; and she involuntarily smiled in his face like a child' (f.57). This last phrase is deleted from the revised manuscript version and 'her eyes enlarged' is substituted (f.57) (Jacobus, p.326).

79. Thomas Hardy, Jude the Obscure (1895; New Wessex ed., 1975), p.37. All page references are to this edition and are included in the text.

80. The marriage of two cousins from the same tainted stock would certainly have been ill-advised, if contemporary accounts of the significance of heredity factors for married couples were consulted. Thus S.A.K. Strahan, Marriage and Disease (1892):

Young men and women should be told of those diseased conditions, as insanity, epilepsy, scrofula and drunkenness, which are more certainly transmitted from parent to child, and be impressed with a lively sense of the terrible responsibility resting upon those, who themselves bearing such brand of unfitness, continue their kind, bringing immense suffering upon the earth, which would never have existed had they exercised discretion and self denial. (p.4).

Hardy's plot confirms deterministic prognoses like Strahan's. And this hereditary doom enters via the rural myth - Sue's and Jude's own rationalisation of their unfitness for marriage. Yet, paradoxically, few characters in fiction have been as exercised by the 'terrible responsibility' of marriage, as Sue herself.

Strahan also warned, solemnly, that 'those of neurotic family should never forget that the safety of their children wholly depends on their choice of partners' (p.98). And as well as the standard warnings to habitual drunkards, 'they have inherited an unstable nervous system which renders them liable at any time to fall victim to this vice' (p.117), Strahan noted that 'child suicide' had become of late 'so painfully common'. The reason, he said, is the hereditary increase over two generations. He cited Maudsley: 'if the child's family history be enquired into, it will be usually found that a line of suicide, or of melancholic depression with suicidal tendencies, runs through it'.

The suicide of Jude's son Father Time conforms biologically to the hereditary diagnosis; from this point of view, Jude's suicidal tendencies spring from his mother's own suicide by drowning. Jude articulates his own sense of unfitness: 'Marriage with a blood relation would duplicate the adverse conditions' (Jude p.113).


82. Rosanna Ledbetter, A History of the Malthusian League, pp. 131-142.

84. T.C. Allbutt, 'Nervous Diseases and Modern Life', *CR*, 67 (February 1895), 210-31.

85. Allbutt, 211-4.

86. Allbutt, p.214.


88. F.E. Hardy, *Life* p.259. It is possible that this topic may have been prompted by an article in that month's *New Review* on the subject. See Ludwig Buchner, 'The Brain of Women', 9 (August 1893), 166-76.


94. F.E. Hardy, *Life*, p.266. The subject of female hypnotism was evidently of considerable topical interest. Strindberg dealt with the subject in *Miss Julie* (1888), and the reviews of the first English production of Ibsen's *The Master Builder* in February 1893 reflected current curiosity in the subject; see John Stokes, *Resistable Theatres* (1972), pp. 159-64.

95. Romanes had been a member of the *Savile* since 1879. Other members were Lankester 1869, Maudsley 1871, Spencer 1883, Rolleston 1888 and Allbutt, 1891.

In 1891 Hardy was elected to the *Athenaeum* where he joined Romanes, who was elected in the same year, Galton, who had joined in 1855, Spencer 1868, Allbutt 1880 and Lankester 1889; see *The Savile Club 1868-1923*, [Privately printed for the Committee of the Club] (1923), pp. 99-186, and *The Athenaeum; Rules and List of Members 1891* (1891), p.64, 74, 94.


98. 'The Tree of Knowledge', p.682.

99. 'The Tree of Knowledge', p.681.

100. Grant Allen, 'The New Hedonism', FR n.s. 55 (March 1894), 377-92. I draw attention to this article as a possible source for Gissing, in the next chapter.

101. See A.R. Cunningham, 'The "New-Woman Fiction" of the 1890s', Victorian Studies, 17 (December 1973), 177-86.

102. See Thomas Hardy to Florence Henniker, 29 June 1893 and 16 September 1893, in Collected Letters, ii, 18, 33.

103. Thomas Hardy, 'The Tree of Knowledge', p.681.


105. 'Unpublished Literary Notes' II, 19.

106. 'Unpublished Literary Notes' II, 73.


109. Patricia Gallivan, 'Science and Art in Jude the Obscure', in The Novels of Thomas Hardy, edited by Anne Smith, (1979), pp. 126-44. See 'Unpublished Literary Notes' I, 244-5.

110. 'Unpublished Literary Notes' II, 37-43.

111. 'Unpublished Literary Notes' II, 43-62.

112. 'Unpublished Literary Notes' II, 77.

113. 'Unpublished Literary Notes' II, 78.

114. 'Unpublished Literary Notes' II, 22.

115. 'Unpublished Literary Notes' II, 79. Hardy wrote in appreciative terms to the author, Chavelita Clairmonte, (George Egerton was a pseudonym) in December 1895, of Keynotes, saying how much he 'felt the verisimilitude of the stories, and how you seemed to make us breathe the atmosphere of the scenes'. He was returning her
compliment, for Clairmonte had read Jude in the month of its publication (November) describing Sue as 'a marvellously true psychological study of a temperament less rare than the ordinary male observer supposes'; see Thomas Hardy to Chavelita Clairmonte, 22 December 1895, in Collected Letters ii, 102 and the editors' annotation of this letter.


118. R.Y. Tyrell, 'Jude the Obscure', FR, n.s. 59 (June 1896), 857-64, cited by Cox, p.295.


121. Havelock Ellis, 'Concerning Jude the Obscure', Savoy Magazine, 6 (October 1896), 35-49, cited by Cox, 300-315 (p.311).

It is worth including a comment of Ellis's libertarian friend, Edward Carpenter to Kate Salt - the sensitive if unstable lesbian wife of the humanitarian, Henry Salt. It is not surprising, given Carpenter's openly acknowledged homosexuality, and the candour on emotional and sexual matters which characterises the correspondence, that he should commend Jude to her for the clarity with which the women in the novel are drawn: Carpenter's perspective merits inclusion in a 'heritage' of criticism of Jude: Jude the Obscure is a wonderful piece of work. Both Arabella and Sue are marvellously drawn - both so true to life, Arabella not an uncommon character, Sue less common and more difficult to delineate, and yet she is so clearly shown. Arabella's sex instincts are so keen that she sees some things in Sue's character which Sue herself hardly perceives. Hardy's clear impartial handling is very remarkable - but I think he is wickedly tantalising and cruel in his plots. I suppose he would say, so is life. (Edward Carpenter to Kate Salt, 7 March 1896. Unpublished letter in Carpenter Collection, Sheffield City Library, MS 354/41).

122. The translator of Schopenhauer's Studies in Pessimism: A Series of Essays (1891) (the edition which Hardy read and passages from which he transcribed into his
'Unpublished Literary Notes' II), refers to a passage in the third essay, 'On Suicide':

According to Schopenhauer moral freedom - the highest ethical aim - is to be obtained only by the denial of the will to live. Far from being a denial, suicide is an emphatic assertion of this will. For it is in fleeing from the pleasures, not from the sufferings of life, that this denial consists.


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124. In Pater's *Marius the Epicurean* (1885), Hardy found a telling source for Jude's ironic cultivation of 'obscurity'. Hardy copied extracts from Marius into his first literary notebook in 1888. One particularly suggestive entry is worth citing:

> The individual is to himself the measure of all things...The exclusive certainty to himself of his own impressions...(Having learnt that) to move afterwards to that outer world of other people as if taking it at its own estimate would be possible only as a kind of irony ('Unpublished Literary Notes' I, 255).


126. Hardy to Edmund Gosse, 10 November 1895, in *Collected Letters*, ii, 93.


128. Hardy to Florence Henniker, 10 November 1895, in *Collected Letters* ii, 94-5.
Chapter Three: The Urban Terrain: 
George Gissing 1880-1897

1. See Jacob Korg, Introduction to George Gissing: Notes on Social Democracy (1968), i-vii.


4. See John Lucas, 'From Naturalism to Symbolism', in Decadence and the 1890s, edited by Ian Fletcher (1979), 131-48 (p.137).


6. Despite his expressed hostility to many aspects of the science of his-day, Gissing's diary, in particular, provides ample evidence that he persisted with works of evolutionary or more specifically Darwinian determinism through 1889-1896: A.H. Buck, Treatise on Hygiene (167); W.B. Carpenter, Principles of Mental Physiology (167); Paul Bourget, Essais Psychologiques (169); T.H. Ribot, Hérédité (170); C. Darwin, Origin of Species (170); Havelock Ellis, The New Spirit (232); Grant Allen, Evolutionist at Large (240); Grant Allen, Darwin (244); C. Darwin, Voyage in the Beagle (251); T.H. Huxley, Science and Culture (254); K. Pearson, Grammar of Science (283); E.B. Tylor, Anthropology (285); M. Nordau, Degeneration (365); C. Lombroso The Female Offender (385); H. Spencer, Education (396); T.H. Huxley, Physiology (397: Christmas Day!); C.H. Pearson, National Life and Character: A Forecast (401); H. Spencer, Man versus the State (403).

9. Workers in the Dawn i, 1.
10. Workers in the Dawn i, 106.
11. George Gissing, The Unclassed 3 vols (1884; revised edition 1895; reprinted Brighton, 1976), p.66. All subsequent page references to the revised edition are included in the text.
12. The Unclassed (1884), i, 183.
13. The Unclassed (1884), i, 180.
14. The Unclassed (1884), ii, 249-50.
15. Adrian Poole, Gissing in Context (1975), p.66.
17. The Unclassed (1884), i, 274-5.
18. The Unclassed (1884), i, 50.
21. Poole, Gissing in Context, p.70.
22. Poole, p.70.
23. George Gissing, Demos (1886; reprinted Brighton, 1972), p.33. All page references are to this edition and are included in the text.
24. A similar conclusion is reached by Rod Edmonds, 'The Conservatism of Gissing's Early Novels', Literature and History no. 7 (Spring 1978), 48-69 (p.57).
27. Darwin, p.29.


33. 'Olalla', p.178.


36. Malet, i, 4.


38. Malet, ii, 260.


40. Gissing, *The Unclassed* (1884), i, 297.

41. George Gissing, *In The Year of Jubilee* (1894; reprinted Brighton, 1976), p.244. All page references are to this edition and are included in the text.

42. See Edmonds, 'The Conservatism of Gissing's Early Novels', 57.

43. George Gissing, *The Nether World* (1889; reprinted Brighton, 1974) p.8. All page references are to this edition and are included in the text.


47. Gissing, The Unclassed (1884), i, 106-7.
48. The Unclassed (1884), i, 106-7.
49. The Unclassed (1884), ii, 184.
50. The Unclassed (1884), ii, 185.
51. The Unclassed (1884), ii, 227.
53. Isabel Clarendon, ii, 269-70.
56. George Gissing, New Grub Street (1891; reprinted Harmondsworth, 1968), p.204. All page references are to this edition and are included in the text.
57. See Goode, George Gissing, p.115.
58. George Gissing, Born in Exile (1892; reprinted Brighton, 1978), p.146. All page references are to this edition and are included in the text.
62. Gissing read James on 16 April 1892, and Meredith on 6 November 1892; see The Diary of George Gissing, p.365.
63. Henry James, The Tragic Muse (1890), p.344.
64. Gissing read Degeneration 8-9 March 1895; see The Diary of George Gissing, p.365.
65. George Gissing, The Whirlpool (1897; reprinted Brighton, 1977), p.156. All page references are to this edition and are included in the text.


73. This incident recalls Nora's action in *A Doll's House*. She intercepts Krogstad's note, which requests her father's signature as security for the loan Nora has secured from him, and then forges the signature; see H. Ibsen, *A Doll's House* (1888; translated by M. Meyer, 1980).


76. The most elaborate analysis of this ideological formation is by Anna Davin, 'Imperialism and Motherhood', *History Workshop Journal* no. 5 (1978), 9-65.


84. My attention was drawn to this reference by Edward Royle in an unpublished communication to 'The Roots of Sociology' Conference, *Past and Present Society* (1978).

85. Grant Allen, 'The New Hedonism', FR, n.s. 55 (March 1894), 377-92, (p.392). My attention was drawn to this quotation by Edward Royle, see note above.


89. Goode, p.185.

90. Wells, 'The Novels of Mr. George Gissing', 200.

91. Wells, 'The Novels of Mr. George Gissing', 198.

92. Wells, 'The Novels of Mr. George Gissing', 198.

93. Wells, 'The Novels of Mr. George Gissing', 200.

94. Wells, 'The Novels of Mr. George Gissing', 199.

95. Wells, 'The Novels of Mr. George Gissing', 199.

96. Wells, 'The Novels of Mr. George Gissing', 199.


98. Gissing in Gettmann (ed.), p.47.

99. Goode, *George Gissing*, p.188.

100. Poole, *Gissing in Context*, p.203.
Chapter Four: The Conceptual Terrain: H.G. Wells 1891-1910

2. 'Zoological Retrogression', p.252.
5. 'On Extinction', p.624.
11. Bergonzi, p.163.
15. The idea of the coming man, which appears to date from the 1890s, had considerable currency in the years after the Boer War, propelled by the Nietzschean idea of the übermenschen and the collectivism of the reforming New Liberalism. It is a nebulous yet suggestive formulation. The initial title of Gissing's novel Our Friend the Charlatan (1899) was 'The Coming Man'. W.T. Stead published a series in his Review of Reviews.
later collected together in a volume published in 1905, which was entitled Coming Men on Coming Questions. The series was addressed to problems that the anticipated Liberal government would need to tackle, and was written by men whose political prospects appeared bright – Haldane, Winston Churchill, Keir Hardie, and Ramsay McDonald among them. A characteristic 'coming man' was T.J. McNamara (Liberal M.P. for North Camberwell), eulogised by Stead as 'typical of the new generation. A self-made man, promoted from the ranks for sheer merit, and destined to go far.' (Coming Men p.43). The type was satirised by Shaw as the polytechnic-educated chauffeur Straker, in Man and Superman (1903) (first performed, 1905).

19. 'The Rate of Change', in Philmus and Hughes, p.131.
21. Darko Suvin, Metamorphoses of Science Fiction : On the Poetics and History of a Literary Genre (New Haven, 1979), pp. 7-8. According to Suvin, The Time Machine is a work of 'cosmic estrangement'. Science fiction can deal with the norms of any age 'subject to a cognitive view'. Unlike myth, 'which claims to explain once and for all the essence of a phenomena', science fiction can 'first posit them as problems and then explore where they lead'.
23. 'Zoological Retrogression', p.249.
25. The series of ironic revelations which comprises this famous sequence is cogently discussed by Bergonzi, The Early H.G. Wells, pp. 47-59.

27. 'Human Evolution', p.593.


Wells's essay can also be read in the light of Huxley's statement of the incompatibility of evolutionary and ethical development. In the Prolegomena to Evolution and Ethics (1894), Huxley writes:

> Just as self assertion, necessary to the maintenance of society against the state of nature, will destroy that society if it is allowed free operation within; so self-restraint, the essence of the ethical process, which is no less an essential condition of the existence of every polity, may, by excess, become ruinous to it.


Huxley, of course, does not adequately reconcile the ethical process with the cosmic process, a division which many progressive contemporaries saw as putting back the cause of liberal thinking. Huxley's biological frame frustrates his ethical beliefs. He is unable to speak to man as a social animal with a social purpose and provides no explanatory framework within which to place the economic forces which are really tearing man into competing fragments, which he interprets as an essentialist clash between two orders of man. He is, in a sense, re-invigorating the mind against body split. It would take the next generation of liberal sociologists and political thinkers to tackle the inherent contradiction in a system which purports to sustain individual liberty, while subverting it through an economic order which crushes the many in the name of the few and the weaker in the name of the stronger. This is the problem for 'new liberals' like Hobhouse, Hobson, and others; how to move towards a collectivist approach to social organisation which guarantees individual liberty while mitigating the excesses of laissez faire capitalism.

Wells promotes an ideology of ethical materialism to preserve an equilibrium between the demands of ethics on the one hand, and nature on the other. On the one side, the 'artificial' process, or cultural process, on the other the natural struggle for survival; one is a precondition of the other and both are necessary for human evolution if man is not to degenerate.


34. Philmus and Hughes, p.185.

35. H.G. Wells, 'Morals and Civilisation', FR, 61 (February 1897), 263-8 (pp. 264-7). All page references are to this edition and are included in the text.


37. 'The Novels of Mr. George Gissing', 198.

38. 'The Novels of Mr. George Gissing', 199.

39. 'The Novels of Mr. George Gissing', 200.


41. Searle, p.38.

42. See E.P. Thompson, 'The Peculiarities of the English' in The Poverty of Theory and Other Essays (1978), pp. 35-91 (pp. 67-8).


44. General Frederick Maurice 'Miles', 'Where to Get Men?', CR, 82 (January 1902), 78-86; 'National Health: A Soldier's Study', CR, 83 (January 1903), 41-57.

45. George F. Shee, 'The Deterioration in the National Physique', Nineteenth Century and After, 53 (May 1903), 797-805.

46. It was the occasion of the Boer War which elicited from Karl Pearson a statement, which probably comes as close as any to an accurate expression of 'Social Darwinism' as conventionally understood:

> This dependence of progress on the survival of the fitter race, terribly black as it may seem to some of you, gives the struggle for existence its redeeming features; it is the fiery crucible out of which comes the finer metal...[When wars cease]...mankind will no longer progress...[for]...there will be nothing to check the fertility of inferior stock; the relentless law of heredity will not be controlled and guided by natural selection.

See Bernard Semmel, Imperialism and Social Reform: English

47. See Searle, The Quest for National Efficiency, p.111.

48. Address delivered as Lord Rector to the students of the University of Glasgow, 16 November 1900, in Lord Rosebery, Miscellanies : Literary and Historical, 2 vols (1921), ii, 250-1.


50. The title of Charles Masterman's high church, radical-liberal manifesto of 1901, The Heart of The Empire, containing essays by Masterman, Pigou, Trevelyan, and an incisive attack on jingoism, in the most radical essay in the collection, by G.P. Gooch.


52. Its circulation at home and abroad had risen to 300,000 by 1890; see J.R. Tye, Periodicals of the Nineties (Oxford, 1974), p.27.

53. W.T. Stead, 'How the Other Half Lives' (a review of B.S. Rowntree, Poverty : A Study in Town Life (1901)) Review of Reviews, 24 (December 1901), 642-5 (p.642). To be fair to Stead, he also reversed the connection by invoking the British concentration camps in South Africa to point up the domestic question:

> When the camps three thousand miles from our shores have been abolished, is it too much to ask that some attention may be paid to mitigating the terrible conditions which prevail in those at our very doors? (p.645).

And in another review of Rowntree a month later, which exploited his study of York to indict London's poverty, Charles Masterman was even more forthright:

> To choke and sterilise a population of seven millions is an operation compared with which the holocaust in the Concentration Camps of South Africa fades into insignificance. (Charles Masterman, 'The Social Abyss', CR, (January 1902), 23-35, (p.34).

55. Searle, pp. 112-3.
58. Searle, p.125.
59. Sidney Webb, 'Lord Rosebery's Escape from Houndsditch', Nineteenth Century and After, 50 (September 1901), 366-86 (p.386); see Semmel, Imperialism and Social Reform, p.73.
66. Semmel, p.76.
67. Brunton, 1844-1916, was Consulting Physician to Barts. Hospital, Chief Medical Officer for the City of London Cadet Brigade, Vice-Chairman of the Executive Council of the National League for Physical Improvement and a member of the Council of Boy Scouts.
68. See Hynes, The Edwardian Turn of Mind, p.21.
70. Brunton, Letter to The Lancet, 14 February 1903, in Collected Papers.
73. Brunton, Preface to Collected Papers.
74. J.B. Atkins in Manchester Guardian, 23 July 1903, in Brunton, Collected Papers.
75. Verbatim report of Speeches delivered on June 28th 1905 at the Mansion House, in *Collected Papers*.

76. Verbatim report of Speeches delivered on 28th June 1905 at the Mansion House, in *Collected Papers*.

77. Report of the Inter-Departmental Committee on Physical Deterioration, pp. 1904:
   - Vol XXXII, Vol 1. Cd. 2175 Report and Appendix
   - Vol 2. Cd. 2210 List of Witnesses, Minutes of Evidence
   - Vol 3. Cd. 2186 Appendix and General Index


85. *Physical Deterioration Report I*, 88. Among the report's other recommendations were an end to the rural exodus to the towns, the encouragement of cadet corps and clubs, compulsory drill in continuation classes (though not in schools), no conscription, (but detention in labour colonies for those incapable of an independent existence): all this in conjunction with slum clearance schemes (92). The report concluded by hoping that

   The facts and opinions...collected will have some effect in allaying the apprehensions of those who, as it appears on insufficient grounds, have made up their minds that progressive deterioration is to be found among the people generally. (*Physical Deterioration Report I*, 98-9).

With hindsight it would surely have been remarkable had any other conclusion been reached. Nevertheless, the measured tone of this sober, officialese manages to disguise the futility of the whole enterprise.

86. H.G. Wells, 'The Land Ironclads', *Strand Magazine*, 26 (December 1903), 751-64, reprinted in *The Complete Short Stories of H.G. Wells* (1927), pp. 115-138. All page references are to this edition and are included in the text.
87. **Anticipations** (1901), p.91. All page references are to this edition and are included in the text.

88. Sidney Webb to H.G. Wells, 8 December 1901, in *The Letters of Sidney and Beatrice Webb*, ii, 144.

89. Hynes, *The Edwardian Turn of Mind*, p.93.

90. See Hynes, pp. 93-102.

91. Wells's new house at Sandgate, 'Spade House', built on the proceeds of his fiction, was designed by architect Charles Voysey for cleanliness and efficiency. There were to be no Victorian dust-traps.


93. The most readily available source for this line of social investigation is the collection *Into Unknown England*, edited by Peter Keating, (1976).

94. H.G. Wells was one of several speakers present at an early meeting of the Sociological Society who replied to Galton's opening address, 'Eugenics Its Definition Scope and Aims', on May 16 1904. The Society was first launched in June 1903; in its wake came The Statistical Society and the Eugenics Education Society, both of which soon gained considerable prestige. The Statistical Society under the encouragement given by Arthur Newsholme also confronted the issue of eugenics.


Wells's response to Galton's opening address revealed some interesting areas of disagreement. Wells regretted that through Spencer the idea of 'evolution' and the 'survival of the fittest' were connected; 'The implication is that the best reproduces and survives. Now really it is the better that survives, and not the best' (*Sociological Papers*, pp. 59-60). Wells rejected therefore Galton's positive eugenic programme which sought to promote certain human qualities from each class. For Galton, qualities 'that everyone except "cranks" would take into account when picking out specimens of his class...(would be)...health, energy, ability, manliness and courteous disposition' (46). But Wells suggested that this formulation did not allow for those such as criminals, who exercised their intelligence 'under impossible (social) conditions'... 'Many eminent criminals appear to me to be persons superior in many respects, in intelligence, initiative, originality, to the average judge' (59). Wells did not accept that those qualities which ensured survival, in a world of unequal opportunity, were necessarily
socially acceptable. Wells was prepared to champion amoral intelligence and vigour against Galton's more old-fashioned liberal approach. Positive eugenics, which entailed selecting the 'best' in human nature, would not work: 'the conscious selection of the best for reproduction will be impossible...to propose it is to display a fundamental misunderstanding of what individuality implies'. However, negative policies were essential. 'It is in the sterilization of failures, and not in the selection of successes for breeding, that the possibility of an improvement in the human stock lies' (59-60). And for Wells, the State, in the interests of the whole race, should be invested with the compulsory powers, negatively to select out groups of failures.


96. As I have tried to show, Wells was constantly preoccupied with the idea of an élite group of intelligent men to lead society forward. The highly intelligent vanguard, driven by various states of disembodied intelligence and mind, occur successively in The War of the Worlds (1898), When the Sleeper Awakes (1899), The First Men in the Moon (1901) and in Anticipations, in the form of the Guardians of the New Republic. By 1905, these 'Guardians' had further evolved into the notorious Samurai who first made their appearance in A Modern Utopia (1905). The Samurai were an essential part of Wells's Utopian scheme. A 'voluntary nobility', like Plato's guardians in The Republic, they resembled 'Knights Templar' and bore a name that recalled 'the swordsman of Japan': so far as the Samurai have a purpose in common in maintaining the state and the order and progress of the world, so far, by discipline and denial, by their public work and effort, they worship God together

This identification of a progressive élite fell on fruitful soil. The Fabian, Sidney Olivier, writing to Wells in 1905, probably because of common friends, Shaw and Graham Wallas, expressed support for the Samurai idea:

I recognise your trumpeting Angel of the Samurai as my desire for the League of Sane Men. [Olivier's conception had dated from 1897]. I enclose one of my testimonials to the claim of Samuraiship. (Sidney Olivier to H.G. Wells, 29 May 1905, in Letters and Selected Writings of Sidney Olivier, edited by Margaret Olivier (1948), p.127).

By 1907, A.R. Orage's influential periodical the New Age reported in its first edition a 'First public conference
on Mr. H.G. Wells's "Samurai" (New Age, I, n.s. (2 May 1907), 9-11). In fact some enthusiasts set up a Samurai Press; see Harold Munro and Maurice Browne, Proposals for a Voluntary Nobility (Samurai Press 1907). Two months later Beatrice Webb reported that she had entertained a group of Cambridge undergraduates - young Fabians down for the long vacation. Could these have approximated to Wells's definition of Samurai?:

They are a remarkably good set of hardworking, clean living youths - mostly clever and enthusiastic and who look upon us as the Patriarch of the Movement. I am becoming more and more convinced that the Community has to take hold of the problem of clearing the base of society - using its powers to improve the circumstances - physical and mental of the lowest class. Mainly from the stand point of material welfare we have to do that - in order to hold our own with such highly regulated races as the Germans and the Japanese. (B. Webb to Mary Playne, 21 August 1907, in The Letters of Sidney and Beatrice Webb, ii, 272).

As Norman Mackenzie comments, the group of young Fabians included Rupert Brooke, Hugh Dalton and Clifford Allen. It was clear at this time that the Webbs and Wells were now locked in battle for the hearts and minds of young Fabians. In 1907 Wells was attracting large audiences - a source of continuing irritation to the Webbs, (Mackenzie, ii, 262-3).

97. H.G. Wells, Mankind in the Making (1903), p.17. All page references are to this edition and are included in the text.


100. H.G. Wells, In the Days of the Comet (1906), p.395, reprinted in The Works of H.G. Wells (1926-7). All page references are to this edition and are included in the text.


102. H.G. Wells, The History of Mr. Polly (1910), p.215. All page references are to this edition and are included in the text.

104. H.G. Wells, *Tono-Bungay* (1909); reprinted in *The Works of H.G. Wells* (1926-7), p.81. All page references are to this edition and are included in the text.

105. Granville Barker's play opened on 24 November 1907 at the Imperial Theatre, Westminster. 'Waste' was also one of four alternative titles that Wells had in mind for the novel. See Bernard Bergonzi, *Introduction to Tono-Bungay* (1966).


111. H.G. Wells, *The New Machiavelli* (1911), p.145. 'Muddle' is a key diagnostic term in this work:

   'Muddle' said I, 'is the enemy'...It was muddle that had given us all the still freshly painful disasters and humiliations of the war, muddle that gives us the visibly sprawling disorder of our cities and industrial countryside, muddle that gives us the work of life (p.141).


114. Cited by L. Herbert, p.144. It is worth noting that *Tono-Bungay* appeared in serial form in the *English Review* (December 1908 – March 1909) (volume form February 1909). Composed in 1908, the novel is virtually contemporary with *First and Last Things*.

115. And there is a striking parallel to be drawn with Shaw's weapon manufacturer, Undershaft in *Major Barbara* (1907), whose faith is to 'give arms to all men who offer an honest price for them, without respect of persons and principles:
to aristocrat and republican, to Nihilist and Tsar...(to)...all causes and all crimes'. Again the arms dealer, backed by a simplistic Nietzschean creed, is likewise no respecter of ideologies but will transcend them in the interests of the destructive principle alone. *Major Barbara* (1905; reprinted Bodley Head Shaw Vol 2 1971), p.168.


119. Masterman, p.204.

120. Masterman, p.199.
Whenever possible first editions of works are cited. The last reference will indicate the edition used in the text.

A few items published after 1910 are included in Section B, as primary material.

Unless otherwise stated, the place of publication is London.

A. Manuscript Material

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