THE EUGENICS MOVEMENT AND THE EUGENIC IDEA IN BRITAIN, 1900 - 1914:

A HISTORICAL STUDY

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ABSTRACT

This research falls into two parts. The first part begins with some observations on the methods employed in the writing of intellectual history. These observations are essentially critical and lead on to a detailed discussion of some proposed alternatives. The first chapter does not claim to have solved difficult theoretical and methodological problems but rather to have made possible greater clarity and awareness of what the problems are.

In the light of these considerations an examination is then made of the relationship between Darwinian Biology and the major social doctrine claiming inspiration from it, namely, Eugenics. With reference to this connection the central argument maintained is that there were systematic links between Darwinism and Eugenics. An attempt is made to analyse those links firstly by examination of certain theoretical features of Darwinism itself and secondly by an examination of the misreadings of Darwinism practised by Eugenics. This analysis is complemented by a detailed investigation of the structure of Eugenic thought as it appeared in Britain before the First World War.

The second part then extends this general picture by means of a number of case studies of Eugenic thinking and action on specific issues. The issues studied are those at the centre of controversy. during the period namely pauperism, alcoholism and mental deficiency. The priority in these case studies is the further development of the account of Eugenic thought but in each case there is an attempt, firstly to assess the impact of the Eugenic idea on public opinion and secondly, especially in the case of mental deficiency, to assess what legislative impact, if any, the Eugenic idea may have had.

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Part I - THE THEORETICAL STRUCTURE OF EUGENICS

In the first part of this research I have tried to accomplish three different objectives and in this introduction some of their purposes and limitations are explained. The first chapter, perhaps unusually in a study of the history of ideas, devotes considerable space to some discussion of how to approach this kind of historical writing and more specifically to an analysis of the work of two particular contemporary writers in this field. Hopefully this exercise has been more than just sterile exegesis. I have tried to bring out the presuppositions of much conventional history writing, primarily with a fairly detailed look at Lovejoy. This has been done through the analysis of other perspectives to show what possible criticisms can be made of those presuppositions.

There is a very thin line here dividing internal and external forms of criticism. The difficulty, it seems to me, has been well put by J.R. Searle: "if internal he (the critic) must learn enough about the subject to see where its regular practitioners are going wrong, to correct their mistakes, and in that sense to do it better than they do it" - "If, on the other hand, he tries to make purely external attacks - the practitioners of the subject are doing such and such, but they should be doing so and so - there is a danger that his criticisms may simply amount to a preference for doing something else altogether" (1). I have tried to get round this difficulty towards the end of Chapter One by an example from the history of botany which shows the weaknesses of some of the conventional approaches.

The presentation of alternative perspectives has forced the closer consideration of some of the major questions in writing the history of ideas. The value of the exercise is not in any easy methodological 'pay-off' but in the view that sustained analysis of particular styles of history writing makes for clarity of thought when one approaches one's own material. What can be said by way of conclusion to this point is that the results of this chapter were to give the rest of the research, to use the conventional jargon, a strongly internalist flavour (2).

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The second chapter begins the actual analysis of Eugenics by trying to establish with some precision its connection with Darwinism. It illustrates one of the great difficulties in writing intellectual history, namely, boundary problems. Some attempt is made to resolve these by analysing certain aspects of Darwin's writings without deviating too much into properly philosophical or biological territory. The problem that I am trying to deal with here is that while at one level the links between Darwinism and the social doctrines 'borrowing' from it have always been obvious the precise connections have seemed (at least to me) irritatingly vague (3). In this chapter I tried to show how those connections might be possible.

Finally in Chapters Three and Four the attempt is made to present as accurate a picture as possible of the Eugenic doctrine as it emerged in Britain befort the First World War. There were methodological difficulties here, of course, which are discussed in the appendix to Chapter Three. The material is divided firstly into an analysis of the major concepts deployed by the Eugenists in their account of the biological effects of modern society and secondly an analysis (in Chapter Four) of the structure of their proposed solutions. It seemed useful at that point to add a brief account of some of the contemporary reactions to the Eugenic doctrine.

FOOTNOTES

(1) Times Literary Supplement 21 Nov 1975

(2) The distinction is, of course, a familiar one. For an interesting discussion in the biological field see Garland Allen - Genetics, Eugenics and Society: Internalists and Externalists in Contemporary History of Science (Social Studies of Science 6(1976)105-22)
(3) For different angles see K.E. Bock - Darwin and Social Theory (Philosophy of Science 22(1956)123-134); R.J. Halliday - Social Darwinism (Victorian Studies XIV(1971)389-405); J.A. Rogers - Darwinism and Social Darwinism (Journal of the History of Ideas XXXIII (1972)256-280)

Chapter I - WRITING THE HISTORY OF IDEAS

"Tout le monde admet que l'esprit d'une époque marque toutes les activités de l'homme. Le difficulté ne consiste pas tant à faire des rapprochements, qu'à les justifier. Un esprit serieux repugnera toujours à passer d'une thème politique à une forme architecturale, d'une pratique religieuse à une doctrine scientifique. Cette voltige intellectuelle range de déconsidérer l'histoire des idées au près de bons esprits, ou négligeant les contingences, les données materielles et techniques, les traditions propres à chaque science et à chaque art. Pourtant les rapprochements s'imposent". (J. Roger - Les Sciences de la Vie dans la pensée français du XVIII siècle).

Traditionally the academic study of the history of ideas has dealt with a number of problems that can usefully be separated into the internality of texts and relations between texts. A number of major problems have recurred: problems of interpretation and meaning; problems of the forms of language ; problems of the division of texts into different spheres and genres. The fact that these spheres and genres are not watertight itself engenders a whole series of problems concerned with the relations between texts: questions of relations between philosophy and the sciences; between sciences and ideologies; indeed questions about the nature of interpretation itself.

More recently another range of issues has come to be seen as central, namely the relations between texts and social organisation (in the widest sense). This has led to studies of both a macro-type (relations between texts and types of society for instance) and a micro-type (relations between texts and an author for instance) (1). Often, perhaps even usually, these two aspects are seen as complementary. So, to take a famous example, the 'rise of science' has often been seen as the product of people concerned with practical or technical problems (navigation, ballistics etc.,) which problems were themselves produced by new social practices or organisation. These are crude descriptions but not so as to be unrecognisable.

It seems reasonable to say that the dominant position in this field of study is what might be called a history of ideas/sociology of

knowledge couple. The complementary relation between these two approaches is one of continuism/reductionism. That is to say that the history of ideas (beyond the merely mechanical recapitulation of what has been said in the past) deploys concepts usch as "tradition", *spirit of the age* (2) *influence^{*} and various developmental principles whose combined effect is to display continuities and connections and erase apparently superficial düfferences. This can be seen both in its programmatic statements and in empirical work. For Lovejoy, the history of ideas, "is concerned only with a certain group of factors in history, and with these only insofar as they can be seen at work in what are commonly considered separate divisions of the intellectual world; and it is especially interested in the processes by which influences pass over from one province to another" (3). Lovejoy shows the effect of such ideas in the following quotation (one of many that could be cited): "... while in an age in which many men of science were also theologians, this change in the religious and ethical application of the conception (the Platonic conception) tended, of itself, to promote a kindred change in scientific ideas" (4).

The presuppositions behind these statements blend easily with the various kinds of sociologism and psychologism. That is to say that the sociology of knowledge deploys concepts whose tendency (even if denied) is to reduce forms of discourse to effects of social practices. Thus, for Gasman, Marx and Darwin were "representative authors of the age" while according to Pickens many upper-middle class Americans "merely projected their class prejudices as objective laws of civilisation and nature" (5). The sociology of knowledge is replete with these kinds of assertions which may have a psychological reference thrown in. Thus for Zilsel - "The individualism of the new society is a presupposition of scientific thinking. The scientist, too, relies, in the last resort, only on his own eyes and his own brain and is supposed to make himself independent of belief in authorities" (6).

In recent work in the field of intellectual history considerable dissatisfaction has been expressed at both the limitations of and unconvincing results of these approaches. This dissatisfaction has been uneven (different in the history of the sciences from say the

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history of political theory) but has had a common element in the search for more adequate concepts or possibly even a general doctrine. Two theorists who have made a considerable impact with contributions in this field are L. Althusser and M. Foucault. What follows is not primarily an exegetical exercise but an attempt to establish both the fact and the effects of distinctively different theoretical approaches, and to see what lessons may be learned from their writings.

"The reader should realise that I am doing all that I can to give the <u>concepts</u> I use a <u>strict</u> meaning, and that if he wants to understand these concepts he will have to pay attention to this rigour, and, in so far as it is not imaginary, he will have to adopt it himself". L. ALTHUSSER (7).

The first of the authors to be considered is a marxist philosopher not unassociated with the structuralist current in France, (8). In his book For Marx ¹problematic¹ is one of two concepts introduced as essential to his work - "the indispensable theoretical minimum" (9). Given this indispensibility it seems appropriate to ask the following questions. Why are the old concepts unsatisfactory? In what way(s) are the new concepts different and better? How do the new concepts work? It is convenient to begin with Althusser's review of the Recherches Internationales studies of the Young Marx (10). The theoretical problem here concerns certain readings of Marx's early writings which "depend(s) more on free association of ideas or a simple comparison of terms than on a historical critique" (11). The results of such readings are not insignificant; they may be "the preconditions of a real understanding of the texts" (12); they may "open up interesting perspectives" (13). However these readings are based on a certain theoretical position - "the comparison, opposition and approximation of elements that culminates in a theory of sources or, what comes to the same thing, "in a theory of anticipation" (14). This theory has three suppositions: firstly an analytic one - a theoretical system is reducible to its elements which makes possible (a) thinking "any element of this sytem on its own" (15) (b) comparing the element of one system with another similar element of another system; secondly a teleological one - this "institutes these elements as elements in order to proceed to their measurement according to its

own norms as if to their truth" (16). These two suppositions depend on a third which regards "the history of ideas as its own element, maintains that nothing happens there which is not a product of the history of ideas itself and that the world of ideology is its own principle of intelligibility"(17).

When this theory is applied Marx's thought is reduced to its elements, materialist and idealist, and these elements are weighted against each other to "determine the meaning of the text under examination" (18). Thus in general: the positions ascribed involve reducing a text and therefore missing the level of meaning and unity; they are teleological, which seems to mean here that these readings do not explain how these different elements are combined together; they are of little use since all the authors in Recherches Internationales studies use them and yet all disagree as to when Marx became a materialist.

It is the first point which is crucial to Althusser's critique. Given the decomposition into elements, "who can really decide what meaning they constitute once they are assemble together in the effective living unity of a text" (19). Althusser pursues the ultimate logic of the analytico-teleological theory (as he calls it); he asks what would be thought of someone who espoused, say, the philosophy of the 1844 manuscripts: would we regard it as idealist or materialist? marxist or non-marxist? Or should we regard its meaning as in abeyance, waiting on a stage it has not yet reached? (20). Again he emphasises that in the teleological treatment the question of the totality cannot be raised before the final synthesis. The ultimate logic of this method appears to be that it cannot recognise anything other than itself. The critical thrust is now switched. Previously this method could only rub materialist and idealist elements together rather like a tribesman rubs sticks, with less result in the former case. Now it posits a relation, one of form and content or content and conceptual expression with materialism and idealism playing the obvious roles. In addition the idealist form is often characterised as a question of terminology. There are other variants of this position, e.g., where the polarity is consciousness and tendency. In this variant the tendency must be the motor of Marx's

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development and must involve for example the objective content of the 1843 manuscripts from the viewpoint of developed Marxism.

For Althusser this procedure is Hegelian because it merely provides a retrospective abstraction of the result (i.e., developed Marxism) which is precisely what is to be explained. Thus the positive implications of the criticisms of the analytico-teleological method would seem to be that (a) the existence of the 'effective living unity' of the text must be demonstrated since up to now it has merely been asserted; (b) this must be done without recourse to the ultimately Heglian, analytico-teleological method, the essential concepts of which are (i) elements (the possibility of decomposition; the possibility of thinking them in isolation); (ii) the concept of tendency; (iii) the concepts of form and content and their variants.

Althusser proposes three "Marxist principles of a theory of ideological development" (21) namely (1) every ideology must be regarded as a real whole, internally unified by its problematic, so that it is impossible to extract one element without altering its meaning; (2) the meaning of the ideology depends on its relations to the existing ideological field and on the social problems and social structure which sustain the ideology and are reflected in it; (3) the developmental principle of a particular ideology is to be found outside it - this at two levels, "its author as a concrete individual and the actual history reflected in this individual development according to the complex ties between the individual and this history" (22). The notion of ideology is the prerequisite to all the proposed new principles, e.g., the problem of the effective unity of a text becomes the problem of the unity of ideology though the question of unity remains. With this shift to ideology is opened up a distinct set of determinations with two levels, namely ideology in relation to the ideological field and ideology in relation to the social structure which sustains it and is reflected in it.

Thus far and at the level of formal definitions Althusser has given us a rigorous answer to the questions originally posed. The new concepts are different because (a) they effectively characterise the unity of an ideology, (b) they open the realm of ideology to determinations outside its domain. Althusser takes up first the relation of ideology to the ideological field - "everything is in play between the rigour of a single thought and the thematic system of an ideological field" (23). For Althusser the ideological field is not available in any texts as such so that for example it is not the library Hegel that is of interest but rather the Hegel of the neo-Hegelian movement, "a Hegel already made to contradict himself, invoked against himself, in despite of himself" (24). Marx learned to think within this objective environment which was not of his own making. Neither can the presence of an author, and so by extension the ideological field, in another ' author's works be read off from a filiation of explicit references.

The problem then is to think the unity of the ideological field but Althusser proposes to do this by way of posing the question of the internal unity of Marx's thought in relation to Feuerbach. This is the problem the Recherches Internationales commentators cannot grasp, namely what "constitutes the basic unity of a text, the internal essence of an ideological thought, that is, its problematic". Here Althusser extends his definition of problematic as "the concept that gives the best grasp on the facts without falling into the Hegelian ambiguities of "totality" (25). In more detail, (1) totality tends to think the empty unity of the described whole whereas (2) problematic thinks a determinate unitary structure which makes possible (a) the thinking of the unification of the elements of the thought (b) discovery in the unity of a determinate content and therefore the meaning of the elements (c) the positing of the relation of the ideology to the problems left or posed to every thinker by the historical period in which he lives" (26).

In an important footnote at this point Althusser recasts problematic in terms of a metaphor congruent with his own philosophical practice of interrogation. The concept of problematic, "brings out ... the system of questions commanding the answers given by the ideology" i.e., one asks the question of the ideology's own questions. This is the internal level. But there is a level of external determinations, i.e., the problematic is itself an answer, not, at this level, to its own internal questions "but to the objective problems posed for the

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ideology by its time". This sets the space for a crucial Althusserian thesis, namely the deformation of ideology. Since the problematic is an answer itself to objective problems of the time it is the latter which constitutes the essence of the problematic. The methodological injunction is, "a comparison of the problems posed by the ideologue (his problematic) with the real problems posed for the ideologue by his time, makes possible a demonstration of the truly ideological element of the ideology, that is what characterises ideology as such, its deformation" (27).

Returning to the development of the main them Althusser takes as his example the Critique of Hegel's Philosophy of Right. The splitting of this text into Feuerbachian and non-Feuerbachian elements clearly will not do. It is not that new objects (politics, classes) are introduced - what is important is the modality of reflection on these objects. Problematic is now situated at the level of the actual relation of reflection to its objects so that it is not limited to any particular set of objects but is "the concrete determinate structure of a thought and of all the thoughts possible within this thought" (28). Thus the correct question here would be - does Marx think the State, private property etc., on the basis of Feuerbachian suppositions or not?

To take stock at this point; Althusser regards, surely correctly, two elements as essential to his break with the old methods, viz: (a) the question of unity (b) the relation, to put it crudely, between the realm of ideas and the realm of other practices. His intervention in these questions is represented by two key terms, namely problematic and deformation. These problems in their general form, are not new. Althusser's comment that academic orthodoxy "regards the history of ideas as its own element, maintains that nothing happens there which is not a product of the history of ideas itself" (29) seems rather one-sided. Academic orthodoxy and Althusser himself, tend to divide up the world, at least initially, into 'ideas' and 'non-ideas'. Both, again, believe there is some connection between these two spheres and therefore become involved in problems which are essentially problems of correspondence, e.g., how far can we say that certain ideas are in some way bound up with certain states of society, that for example German theory (philosophy) in the early nineteenth century had some special relationship with German ^{\$}backwardness^{\$} or to take another example, that Darwinism was in some way related to ^{\$}bourgeois Society^{\$}.

As far as the first question is concerned namely the problem of the characterisation of ideas Althusser claims to have solved this by means of the concept of problematic. Three definitions of problematic have been presented, namely, an internal essence or effective unity model, a question and answers model, and a modality of reflection model. The objects characterised included "ideology", 'ideological field^{*}, ^{*}text^{*}, ^{*}individual^{*}s thought^{*}. It may be added that three of Althusser's English commentators offer additional models, all different. B. Brewster, Althusser's English translator, states in his glossary to For Marx that a problematic can only be discovered on the model of the Freudian analysts's reading of his patient's utterances" (30). P.Q. Hirst, in a book claiming inspiration from Althusser argues that problematic is to discourse as langue is to parole in Saussure's linguistics (31). Lastly, A. Hussain argues that, "The problematic is to discursive practice what forces and relations of production are to the production of goods" (economic practice) (32). All the currently fashionable analogies would seem to be exhausted at this point. This is a somewhat confusing situation (perhaps even a *symptomatic* one) and requires fresh examination of a more critical nature of Althusser's text (33).

It must be said that in the last analysis Althusser's discourse here moves in a circle of equivalent definitions which are all based on the mysterious 'unity'. Take, for example, the idea of ideological field, Althusser makes some important methodological gestures in this area but his real claim is to "go further than the unintentional presence of the thoughts of a living author to the presence of his potential thoughts" (34). And just as the individual's thought is characterised by a unity, so is the ideological field of potential thoughts - yet we are no nearer to knowing how we may construct this unity, other than that it may be made up of more than one problematic. When Althusser takes up an example to explain this unity (Critique of Hegel's Philosophy of Right) for all his impressive definitions, all he tells us is that the text must be examined for Feuerbachian suppositions, coupled to the general idea that these presuppositions are in some way primary over the range of (empirical) objects that a theory discusses. But again this is hardly a great innovation. Certainly the use of terms such as "potential" and "all the thoughts possible within the thought" implies perhaps of "grammar" of thought which would "generate" all the thoughts within it and the use of "unconscious" and "dragged up from the depths" perhaps authorises the Freudian analogy. But these are analogies of the most tenuous kind, and it would not be unfair to say, little more than glosses on Marx"s off-the-cuff comments on these matters (35).

There is more to be said on the second major area, i.e., the correspondence between ideas and other practices (36). The essence is contained in what was referred to above as the question and answer model. For Althusser ideologies must be examined at two levels. Internally one asks the question of their questions, or rather what the questions are that produce the answers that the ideology offers. Externally however, the ideology as a whole is an answer to certain objective problems. Thus, "a comparison of the problems posed by the ideologue (his problematic) with the real problems posed for the ideologue by his time makes possible a demonstration of the truly ideological element of ideology, that is, what characterises ideology as such, its deformation" (37). A slightly glib summary might be to say that at the internal level ideology gives real answers to false problems. Externally it gives false answers to real problems.

In relation to ideas the level of "non-ideas" is allocated two roles: (i) directly as a result of the break with the "eclectic" method it is the level of the developmental principle of the ideology: (ii) it is the essence of a problematic. Althusser puts this rather crudely in places but the essential idea is contained in the statement that the truth of ideology is in the facts themselves. A propos Marx this question of the facts and deformation of the facts governs Althusser's whole account not only of the German theoretical context but also how it was that Marx broke away from it. But it must be said that this is in the form of imputed correspondences between (i)social structure (social problems), (ii) a certain class/stratum experience, (iii) a certain type of theory, i.e., post-Hegelian philosophy. For Althusser early nineteenth century Germany was characterised by an inability to realise its bourgeois revolution and this deeply marked German ideology. Germany could not, as it were, "take part" in history. This inability was thought by intellectuals in forms "characteristic of their social circle: the petty-bourgeoisie of functionaries, teachers, writers, etc.," (38). Their thought was a "counterpart to Germany^{*}s historical underdevelopment" (39).

What is never clear in these explanations is why it is that a certain class, the petty-bourgeoisie, should produce a certain theoretical form, idealist philosophy. What were these "characteristic forms" they were "hopeful, nostalgic, idealised" (40). Did not non-German petty-bourgeois circles also think in these forms? Did not other social circles also think in these forms? Nevertheless it was as a result of this that German idealist philosophy developed. The question remains as to why the petty-bourgeoisie should not produce a political or a sociologistic or even an astrological account of their country's 'problems'. The space is then set for Marx to be the one who does (literally) go to real problems - "But when he got there (Paris), he made the fundamental discovery that France and England did not correspond to their myth, the discovery of the class struggle of flesh and blood capitalism, and of the organised proletariat" (41). Clearly this (rather) positivist version can be jettisoned (42) but this is irrelevant. If the real problems, rather than being 'really there¹ are designated by historical materialsim (presumably the only alternative open to a marxist) then we do not have a comparison between a theory (German idealism) and a "reality" (German 'backwardness') but between one theory and another; in which case the means of establishing ¹deformation¹ disappear unless some other criteria are set up.

"What one is seeing then, is the emergence of a whole field of questions, some of which are already familiar, by which this new form of history is trying to develop its own theory ..." M. FOUCAULT (43).

M. Foucault, less of a marxist and perhaps less dogmatic than Althusser, has devoted greater effort to producing new ways of writing the history of ideas. His criticism of the conventional approaches is

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sharp and fundamental. "But archaeological description is precisely such an abandonment of the history of ideas, a systematic rejection of its postulates and procedures, an attempt to practice a quite different history of what men have said" (44). The Archaeology of Knowledge is a militant book whose opening battle cry is a call for the destruction of the old methods - "We must question these readymade syntheses, those groupings that we normally accept before any examination, those links whose validity is recogniesed from the outset; we must oust those forms and obscure forces by which we usually link the discourse of one man with that of another; they must be driven out from the darkness in which they reign" (45).

Foucault's criticisms are of two kinds. The first appear to form part of what is conventionally known as structuralism though Foucault himself denies this (46). Much solemn and it would appear fruitless effort has gone into defining this term. The general drift is surely clear. If there is need of a formula it is well put by G. Deleuze, while discussing Foucault himself - "Une destruction froide et concertée du sujet, un vif dégout pour les idées d'origine, d'origine perdu, d'origien retrouvee, un demantelement des pseudo-syntheses unifiantes de la conscience, une dénonciation de toutes les mystifications de l'histoire operees au nom du progres, de la conscience et du devenir de la raison ... (47). Structuralism, this quotation surely allows us to add, is a cultural mood: it comprises a fascination with language in itself as it were, rather than as a means of expression, the extension of this notion to the arts (and thus the affinity with modernism), attacks on traditional views of reason and ethics and so on. In Foucault's own phrase, "Structuralism is not a new method; it is the awakened and troubled consciousness of modern thought" (48).

The second group of Foucault's criticisms, what might be called the technical criticisms, would seem to be worth pursuing. Foucault emphasises that the conventional history of ideas makes much of the mapping of antecedents, i.e., the discussion of 'anticipations', 'forerunners', 'foreshadowings' and so on, and he points out, irrefutably, that to pursue this exercise some notion of identity and difference must be employed. The main thrust of his criticism is that

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this notion (or notions) is much more problematic than conventional history of ideas allows. Indeed it is argued that the apparent resemblance between formulations may be an "effect of the discursive field in which it is mapped" (49). Consequently the reliance placed by the history of ideas on the similarity of words and themes is likely to be fundamentally misleading. It appears to me that this is the basis for all his attacks on the notions used in the history of ideas - all of them come back to this principle of identity (50).

The second half of the technical criticism refers to what may be called the relation between a work and its author. Here further allusion to general structuralist themes is unavoidable. One can only confess (a confession of inadequacy, no doubt) that the structuralist imagination seems to be populated with books that write themselves, pictures that paint themselves and so on. It is in this sense that Foucault shares the general exultation - "However, since the beginning of this century, psycho-analytical, linguistic and then ethnological research has dispossessed the subject of the laws of its desire, the forms of its speech, the rules of its action, and the systems of its mythical discourses" (51). The danger in interpreting this is being unfair - what it appears to mean is that there are certain aspects of human behaviour or activity whose rules are not understood by human beings engaged in those activities or behaviours though they are able to operate the rules - the favourite example is, of course, language (52). The status of this general cultural theme is slightly to one side of the question of its implications in the history of ideas. What is being attacked is "the desire to make the human consciousness the originating subject of all learning and all practice" (53), and this statement forms the springboard for Foucault's own work.

In order to discuss these themes in relation to concrete material I have used as a central focus chapter five of Foucault's third book The Order of Things (Classifying). This chapter may be said to work at two levels - firstly there is a characterisation of eighteenth century natural history as part of a 'classical' episteme having certain features in common with other discourses; and secondly there are the consequences of his discussion for the traditional problems of characterising natural history. It is this latter aspect I want to focus on.

The general facts are familiar. One of the major debates of eighteenth and nineteenth century biology had been that between fixism and evolutionism, this issue not being finally resolved until Darwin. It seems to be generally agreed that "precursors" of evolutionary thought included Maupertuis and Buffon (54) though Lamarck remains the obvious candidate (55). The question that has been asked (or rather it is rarely asked but 'answered' in the affirmative) is, as Foucault puts it, "could one not, for example, constitute as a unity everything that has constituted the evolutionist theme from Buffon to Darwin" (56). The question is rhetorical for Foucault is firmly convinced that this is not a fruitful strategy since, "the same thematic is articulated on the basis of two sets of concepts, types of analysis, two perfectly different fields of objects: in its most general formulation the evolutionist idea is perhaps the same in the work of Benoit de Maillet, Bordeu or Diderot and in that of Darwin; but, in fact, what makes it possible and coherent is not at all the same thing in either In the eighteenth century, the evolutionist idea is defined on case. the basis of a kinship of species forming a continuum laid down at the outset (interrupted only by natural catastrophes) or gradually built up by the passing of time. In the nineteenth century the evolutionist theme concerns not so much the constitution of a continous table of species as the description of discontinuous groups and the analysis of the modes of interaction between an organism whose elements are interdependent and an environment that provides its real conditions of life" (57).

This will be pursued by taking up some themes already raised in relation to the history of ideas, specifically by a comparison of Foucault and Lovejoy. I think it would be generally agreed that there is some warrant for this. Both authors deal with theories called evolutionist. At first glance their respective positions are clear. "In roughly the third quarter of the century theories which may, in the broad sense, be called evolutionistic multiplied", says Lovejoy (58), giving Diderot and Maupertuis as examples while for Foucault, "There is not and cannot be the suspicion of an evolutionism or a

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transformism in Classical thought" (59).

Certain aspects of eighteenth century biology appear in Lovejoy's classic study as effects of much older ideas (60). Precisely such an effect was the difference of position on species. Lovejoy's starting point is modes of thought about classes of objects (irrespective of their nature). The first of these modes involves the postulation of sharp, clear-cut differentiation whereas the second sees such divisions as a merely heuristic device having no real counterpart in Nature. The link between the first of these modes and post-Renaissance biology is made on the authority of Daudin and what is essentially the speculation that Cesalpino began his work De Plantis having read Aristotle's logical and scientific writings. The effect of the second mode is found via Locke¹s nominalism (Locke himself being quoted to the effect that biological species were merely verbal). But the principle of continuity implied this rejection of species "even more potently because it had a still greater body of tradition behind it" (61).

Buffon attacked the systematists "repeating the customary phraseology about the continuity of the chain" (62). These age-old principles are thus seen to have exerted considerable effects. "Thus the general habit of thinking in terms of species ... was beginning to break down in the eighteenth century. In an age in which, more than in any preceding period, the principle of continuity was reckoned among the first and fundamental truths, it could not have been otherwise" (63). Lovejoy uses this material to illustrate one of his constant preoccupations, namely the discovery of new possibilities in old ideas. Even where the principle of continuity did not encourage biologists to reject the notion of species (64) it did encourage them to search for "missing links" that would fill the gaps of the complete chain that it indicated on a priori grounds - "The metaphysical assumption thus furnished a program for scientific research" (65). This argument enables Lovejoy to locate both the obsession with missing links (e.g., Trembley's Hydra) and microscopy. In the latter case because it was argued in the eighteenth century that biological microscopy confirmed the principle of plenitude.

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Foucault's approach to these problems is somewhat different. He begins by briefly indicating his objections to previous accounts, stressing (the point made above), "above all the application of categories that are strictly anachronistic in relation to this knowledge" (66). In Foucalut's account the change to eighteenth century natural history from previous ^{*}biology^{*} was a function of an ^{*}epistemic^{*} change. Natural history became the "nomination of the visible" (67) not in the empiricist sense of suddenly looking at things empirically but the construction of a new kind of visibility (68). So that for Foucault, "it was the same complex of negative conditions that limited the realm of experience and made the use of optical instruments possible" (69), i.e., the significance of microscopy is determined by the construction of the new domain rather than as an incidental confirmation of age-old philosophical notions a la Lovejoy. A similar comment applies to Foucault's treatment of missing link-ism, but both this and evolutionism require the sketching of Foucault's whole discussion.

Foucault is concerned to separate two ways of doing natural history which, though familiar in appearance, were not, in fact, rooted in a "conflict between the great intuitions of Nature" but rather lay "in the necessity which at this point rendered the choice between two ways of constituting natural history as a language both possible and indispensable" (70). For Foucault eighteenth century natural history was governed by a relation between structure and character. The first of these was constructed by applying to any organism or distinguishable parts thereof the four values of form, quantity, proportion and situation. This stage still left everything designated in its concrete individuality. But for the process of knowledge to be complete character had also to be identified, that is, it was necessary to "situate these natural entities within the system of identities and differences that unites them to and distinguishes them from all the others" (71). There were two modes of solving this problem of structure and character, either the system(s) (the major representative being Linnaeus) or the method and both these modes offered ways of limiting the number of comparisons that had to be made between natual entities. Briefly, the solution proposed by the system was to select a structure arbitrarily for purposes of comparison (in Linnaeus^{*} case the organs of fructification) whereas

that proposed by the method was to make exhaustive comparisons but only within empirically constituted groups in which the number of resemblances was manifestly high.

However there was an outstanding problem and it is here, in Foucault's presentation, that the question of continuity makes its appearance. For the whole operation to work it was essential that there was not just an endless series of individual descriptions of representations. "In order that the simplest character can become apparent, it is essential that at least one element in the structure examined first should be repeated in another" (72). There had to be continuity in Nature and this requirement took a different form in the systems and the method. It is here that, as with Lovejoy, Buffon and Bonnet make their appearance but as it were in response to completely different stage directions and reading a different script. "In the methods, on the other hand, since resemblances - in their massive and clearly evident form - are posited to start with, the continuity of nature will be ... a positive requirement: all Nature forms one great fabric in which beings resemble one another from one to the next; so that any dividing line that indicates not the minute differences of the individual, but broader categories, is always unreal" (73), and Buffon and Bonnet are cited to this effect. Thus, "In the eighteenth century, the continuity of nature is a requirement of all natural history ... Only continuity can guarantee that nature repeats itself and that structure can, in consequence, become character" (74).

I think it has been shown that these two authors set up quite different explanatory contexts which generate quite different theoretical "spaces" for the question of species. The effects of this on their treatment of evolutionism can be seen in the way they deal with particular authors. Lovejoy is concerned only with forms of evolutionism that involve what he calls the temporalising of the principles of continuity and plenitude. In this context he turns his attention exclusively to J.B. Robinet and C. Bonnet. Robinet may be taken as a convenient example as he is discussed by both Foucault and Lovejoy.

For Lovejoy Robinet's merit lies precisely in his "philosophical

acumen as well as originality in penetrating to new implications, or possible new interpretation of old assumptions. His merit lay in the characteristic which Grimm found to be his principal defect; he has in a high degree the esprit de systeme, and insisted on carrying out what he conceived, sometimes rightly, to be their full consequences premises which his predecessors had left undeveloped" (75). From the principle of plenitude and a notion of perfectibility Robinet appears to arrive at an idea of the *germs* of things which contained "within themselves an internal principle of development which drives them through a vast series of metamorphoses ... " (76). From this Robinet appears to derive the notion that Nature must always be in a transitory form which Lovejoy calls the "apparently evolutionistic transformation of the principle of plenitude" (77). This is not to say that the law of continuity was neglected. With Robinet it was stretched to the point that "the only way to save the principle, therefore, is by supposing all things to have some degree of measure of any quality which is possessed by anything" (78), on the grounds that any qualitative distinctions would involve a break in the chain. Lovejoy takes us through some more derivations of these principles to arrive at Robinet's final notion of the "prototype", that is, that all living things are built up of ultimate units of the same general shape and homogeneous in their properties.

Foucault's approach is again different. Having established the discursive requirement within the structure of natural history he is concerned with the juxtaposition of this and perception of time. The fixism/evolutionism polarity is a false reading of the real situation. In natural history time was the dimension of catastrophe, accident and the whole range of physical changes of which the earth was capable which, as it were, irrupted into the chain and table of beings. There was on the one hand a variety of models of spatial configurations of taxonomic continuity; there was on the other hand a series of disturbing events of a geological and climactic nature. "The eras of Nature do not prescribe the internal time of beings and their continuity; they dictate the intemperate interruptions that have constantly dispersed them, mingled them, separated them, and interwoven There is not and cannot be even the suspicion of an them. evolutionism or a transformism in Classical thought; for time is never

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conceived as a principle of development for living beings in their organisation; it is perceived only as the possible bearer of revolution in the external space in which they live" (79).

Having arrived at this startling conclusion Foucault proceeds to deal with apparently evolutionist thought as an effect of the necessity to conceive the unity of the taxonomic table with the series of successive events, Robinet lies at the end of one route of conceiving this unity. The role of time may be seen as causing the variables of the table to assume all possible values successively - "exterior elements intervene only insofar as they occasion the emergence of a character. And that emergence, though it may be chronologically determined by such and such a global event, is rendered a priori possible by the general table of variables that define all the possible forms of the living world" (80). This being the case, "a principle of modification must be defined within the living being, enabling it to take on a new character when a natural revolution occurs" (81). At this point another choice opens up which Foucault regards as having two solutions (either Maupertuis' or Robinet's). Robinet's solution is to attribute a project or nature stretching from a prototype to a terminal species. Thus Foucault attempts to explain rigorously Robinet's obsession with similarities to human forms in the mineral, animal and vegetable worlds. What for Lovejoy is an overzealous and "unhappy" excess (82) is for Foucault the effect of a position that "the signs of continuity throughout such a history can no longer be of any order other than resemblance" (83).

The account presented so far shows how it is possible that a rejection of the methods and doctrines of the history of ideas may lead to quite different accounts of familiar questions and problems. Is it possible to move beyond this to some positive methodological guidelines? In its most general form Foucault's programme could not be said to suffer from an excess of modesty. "In other words the archaeological description of discourses is deployed in the dimensions of a general history: it seeks to discover that whole domain of institutions, economic processes and social relations on which a discourse formation can be articulated: it tries to show how the autonomy of discourse and its specificity nevertheless do not fit the status of pure ideality and total historical independence: what it wishes to uncover is the particular level in which history can give place to definite types of discourse, which have their own type of historicity and which are related to a whole set of historicities" (84). The rejection of the unities of the history ideas constitutes a release - a whole domain of statements is set free on the basis of which a new type of study can be pursued, enabling the historian finally, "to restore to the statement the specificity of its occurrence" (85); secondly the isolation of the "statement/event' makes possible the grasping of relations other than those between the statement and its author (intentions, expressions, etc.,); thirdly it leaves the way open to describing other kinds of unities, "by means of a group of controlled decisions" (86).

These points may seem vague but can be quite vividly illustrated by reference to material which I think shows quite convincingly to the non-specialist certain advantages of Foucault's approach. This material concerns an event in the history of biology to which Foucault attaches great significance, namely the disappearance of animal semantics. The essential point is as follows; "Until the time of Aldrovandi, history was the inextricable and completely unitary fabric of all that was visible of things" ... Then, by about the middle of the seventeenth century "the whole of animal semantics has disappeared, like a dead and useless limb" (87). This event is crucial to Foucault's periodisation of the classical phase of natural history beginning with Ray. What do other accounts tell us of this event and its significance?

It goes without saying that the accounts offered by contemporary botanists almost reek of positivism. "The classification of plants was not seriously attempted until about the sixteenth century. Up to this period botanical knowledge has scarcely advanced since the time of the classical writers such as Theophrastus (372-287 B.C.) and Discorides (first century A.D.). Moreover it has become involved in a mass of superstition. The invention of printing made possible the publication of herbals. At first these merely reproduced the inadequate descriptions of plants of the early writers, and the accumulated folk-lore associated with them. But the Revival of

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learning stimulated thought and the spirit of enquiry. Men began to dissentangle fact from fiction" (88). But even historical specialists present fundamentally similar accounts.

The older writers allude darkly (as though it were hardly decent) to ^{*}curious^{*} or ^{*}strange^{*} observations. A. Davy de Viroille seems to find it not at all worthy of investigation that John Bauhin's Historia Universalis Plantarum, "was, in fact, a vast compilation of everything that had been written on plants since Antiquity" (89). The view that most historians seem to share is best expressed in the forthright language of the nineteenth century (the author is talking about the situation in roughly 1500): "... for botanical literature had sunk so low, that not only were the figures embellished with fabulous additions, as in the 'Hortus Sanitatis', and sometimes drawn purely from fancy, but the meagre descriptions of quite common plants were not taken from Nature, but borrowed from earlier authorities and eked out with superstitious fictions. The powers of independent judgement were oppressed and stunted in the Middle Ages, till at last the very activity of the senses, resting as it does to a great extent on unconscious operations of the understanding, became weak and sickly; natural objects presented themselves to the eye even of those who made them their study in grotesquely distorted forms; every sensuous impression was corrupted and deformed by the influence of a superstitious fancy" (90).

The basis of these positions must be that the change from animal semantics to classification in the ¹classical period⁹ was an effect of some [•]spirit^{*} or of new information or data. Both older authors (91) and more recent writers (92) use these arguments. The various categories of influence remain extremely problematic (93). Foucault has brilliantly described the positions taken up by these authors -"The [•]biology⁹ (and learning in general of the period appears to them as structurally weak; a common ground where fidelity to the Ancients, a taste for the supernatural, and an already awakened awareness of that sovereign rationality in which we recognise ourselves, confronted one another in equal freedom" (94). If we follow Foucault and reject the teleologies of reason and the psychologism we have to deal with the real situation in which "the great tripartition, apparently so

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simple and so immediate, into observation, Document and Fable, did not exist" (95).

Whatever its rights and wrongs Foucault's rejection of these assumptions enables him to propose far more interesting avenues of explanation, c.f., the following on Aldrovandi - "And indeed, for Aldrovandi and his contemporaries, it was all legenda - things to be read. But the reason for this was not that they preferred the authority of men to the precision of the unprejudiced eye, but that nature, in itself, is an unbroken time of words and signs, of accounts and characters, of discourse and forms ... To know an animal or a plant or any terrestial thing whatever, it to gather together the whole dense layer of signs with which it or they may have been covered ... Aldrovandi was neither a better nor worse observer than Buffon; he was neither more credulous than he, nor less attached to the faithfulness of the observing eye or to the rationality of things. His observation was simply not linked to things in accordance with the same system or by the same arrangement of the episteme" (96).

While this explanation remains sketchy and intuitive it does seem to offer a more appealing line of explanation than the assumption of collective psychosis if not stupidity made by other authors. The following features may be noted. Firstly there is the centrality which Foucault gives to animal semantics compared to other authors" neglect: secondly there is the determination not to apply possibly inappropriate categories; thirdly there is the rejection of any account cast in the form of the growth of reason; and finally there is the refusal to resort to psychological speculation in order to explain discursive change. No instant, definitive conclusions are possible from this analysis. It is clear that the critical stances of these authors are more impressive than their positive achievements. Although Foucault's work elicits admiration (97) much of it remains limited in empirical reference and extraordinarily vague (98). Althusser'is rigorous but tends towards dogmatism. Nevertheless these authors in their attempts to break away from the conventional methods have not only revealed many of the distortions induced by the unthinking acceptance of time - honoured categories but have given some indications, of other possibilities. It can do no harm to be 'influenced' by their work.

Chapter I - FOOTNOTES

- Often the relation between history of ideas and sociology is conceived along the lines of the title of W. Stark's book - The Sociology of Knowledge: An essay in aid of a deeper understanding of the history of ideas (Routledge Kegan Paul 1958)
- For some interesting remarks on this in the context of the arts see
 M. Peckham Man^{*}s Rage for Chaos (N.Y.: Schocken Books 1967)
- 3. A.O. Lovejoy The Great Chain of Being (Harper Torchbook ed. 1960) p.16
- 4. op.cit. p.251
- 5. D. Gasman The Scientific Origins of National Socialism (Macdonald 1971) D.K. Pickens - Eugenics and the Progressives (Nashville: Vanderbilt U.P. 1968)
- 6. Zilsel Sociological Roots of Science (American Journal of Sociology 47 (1942) 544-562) p.546
- 7. L. Althusser For Marx (Allen Lane 1969) p.164. His emphasis.
- 8. At various points in his books Althusser praises Foucault for instance. There is a long review of Foucault by one of Althusser's leading disciples, D. Lecourt, in La Pensée No. 152 (August 1970) pp.69-87 Cf. also Althusser's presentation of P. Macherey - La Philosophie de la Science de G. Canguilhem (La Pensée No. 113 (1964) 50-74) For a useful if somewhat breathless survey see J.M. Broekman - Structuralism: Moscow - Prague - Paris (Dordrecht: D. Reidel 1974)

9. FM pp.32-3

11. FM p.55

^{10.} FM p.51

- 12. ibid.
- 13. FM p.56
- 14. ibid.
- 15. ibid.
- 16. FM p.57
- 17. ibid.
- 18. ibid.
- 19. FM p.59
- 20. FM p.60
- 21. FM p.62
- 22. FM p.63
- 23. FM p.64
- 24. FM p.65
- 25. FM pp.66-7
- 26. FM p.67
- 27. ibid.
- 28. FM p.68
- 29. FM p.57
- 30. FM p.254

- 31. P.Q. Hirst Durkheim, Bernard and epistemology (Routledge Kegan Paul 1975) pp.10 and 179-80
- 32. A. Hussain in Theoretical Practice 5 (Spring 1972) p.19
- 33. Our concern here is principally with the eight important pages, 63-70

34. FM p.66

- 35. See quote from Marx FM p.49 and references to him p.69
- 36. It is argued that it is precisely one of Althusser's achievements to have overcome this polarity. See, for example, P.Q. Hirst's Problems and Advances in the theory of ideology (Cambridge University Communist Party 1976)
- 37. FM p.67
- 38. FM p.75
- 39. ibid.
- 40. ibid.
- 41. FM p.81
- 42. Cf., Althusser's self-critical remarks FM p.187. For an interesting attempt to apply this idea to nineteenth century views of poverty see G. Stedman Jones - Outcast London (Oxford University Press 1971) and comments in K. Williams - Problematic History (Economy and Society 1(1972) 457-481)
- 43. M. Foucault The Archaeology of Knowledge (Tavistock Press 1972) p.5
- 44. M. Foucault op.cit. p.138

45. op.cit. p.22

- 46. See the introduction to M. Foucault The Order of Things (N.Y.: Vintage Books 1973) and Foucault - Monstrosities in Criticism (Diacritics fall 1971)
- 47. G. Deleuze Un Nouvel Archiviste (Critique 26 (1970) 195-209)p.204
- 48. Foucault Order of Things p.208
- 49. Archaeology p.143
- 50. This point is clearly made in Foucault's reply to questions from the Cercle d'Epistemologie translated in Theoretical Practice 3/4 (1971) See p.113
- 51. op.cit. p.112. It is strongly implied (same page) that this "dispossession" is an abomination (like the dialectic, no doubt) to the bourgeoisie. But no evidence is offered on this score.
- 52. This might seem extraordinarily revolutionary if it had ever been thought or assumed that the "subject" had a knowledge of his involuntary muscle movements or his cerebral localisation or many other aspects of the "subject". Did psychiatrists before Freud or linguists before Saussure think the "subject" "possessed" the laws of the mind or language? However, these differences seem to me irresoluble. Foucault summarises these general themes in a brilliant conclusion to his Archaeology of Knowledge. It takes the form, appropriately enough, of a dialogue.
- 53. Theoretical Practice 3/4 p.112
- 54. Cf., J.W. Burrow "Diderot, Buffon and Maupertuis in the eighteenth century had held evolutionary views ..." p.27 of his introduction to the Penguin edition of Darwin's Origin of Species (Harmondsworth 1968)
- 55. Cf., Jean Rostand "This theory (fixism) had been called in question by Buffon about 1740, when he proffered his reflections on the deterioration of species as a result of extraneous

circumstances; and certain philosophers, including Maupertuis and Diderot, had gone so far as to present rather ill-defined systems of transformism ... A real scientific transformism made its appearance for the first time in 1809, with the publication by Jean Lamarck (1774-1829) of his Philosophie Zoologique ..." p.187 of The Development of Biology in G.S. Metraux and F. Crouzet (eds.) The nineteenth century world (Mentor 1963) Cf., also J. Rostand

vol. II (Thames and Hudson 1964)

57. op.cit. p.36

56. Archaeology p.35

- 58. Lovejoy op.cit. p.268
- 59. Foucault The Order of Things p.150. In this context *classical thought* means the period before Cuvier.
- 60. So, for example, though Diderot and Maupertuis are mentioned they are not treated in any detail on the grounds that "these two expressions of transformism were independent of the group of ideas which concerns us here". Lovejoy op.cit. pp.268-9
- 61. op.cit. p.229
- 62. op.cit. p.230
- 63. op.cit. p.231
- 64. Not the least of the mysteries of Lovejoy's account is the apparently utterly arbitrary nature of the effects postulated.
- 65. op.cit. pp.231-2
- 66. Order of Things p.127
- 67. op.cit. p.132

pp.511-518 in R. Taton (ed.) The Beginnings of Modern Science

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- 68. Foucault's argument is heavily condensed here.
- 69. Order of Things p.133
- 70. Order pp.139-40
- 71. Order p.138
- 72. Order p.145
- 73. Order p.146
- 74. Order p.147
- 75. Lovejoy p.270. For another account of Robinet see J. Roger Les Sciences de la Vie dans la XVIII Siecle (Paris: A. Colin 1963) pp.642-651. Roger is rather sceptical of Robinet[®]s evolutionism. I find Lovejoy[®]s exposition here even more trying than usual since on his own account Robinet[®]s originality, if such it be, appears to be derived from "Turgot[®]s and Rousseau[®]s notion of perfectibility ... applied ... to all living things". pp.272-3
- 76. Lovejoy p.274
- 77. Lovejoy p.275
- 78. Lovejoy p.276
- 79. Foucault p.150
- 80. Foucault p.153
- 81. ibid.
- 82. Lovejoy p.279 and p.281
- 83. Foucault p.151

84. Archaeology pp.164-5

85. op.cit. p.28

- 86. op.cit. p.29. The rest of the archaeology then elaborates in a kind of recapitulatory exercise in which Foucault uses material from his other books to show how historians begin to grasp this new domain of statement/events.
- 87. Foucault The Order of Things p.150
- 88. J.M. Lowson Textbook of Botany (University Tutorial Press Ltd (13th edition) 1962) p.310. And compare the following from P. Mann - Systematics of Flowering Plants (Methuen 1952). "Then gradually botanists began to turn from the exhausted manuscripts, and to look around them at the living herbs, to watch them growing, to think afresh and for themselves, and to draw what they found". p.4
- 89. A. Davy de Viraille Botany in R. Taton History of Science vol. I. part I. ch. 5. One is forcibly reminded of Foucault's phrase "the stark impossibility of thinking <u>that</u>". Order of Things p.15
- 90. J. von Sachs History of Botany 1530-1860 (Clarendon Press 1890) p.15. What for Foucault is central pops up in a footnote in von Sachs'- "Besides the herbals mentioned in the text, which may be regarded as scientific works on botany, a considerable number of books on the signature of plants were written in the sixteenth and seventeenth centuries in the interests of medicine or medical superstition". op.cit. p.16 footnote
- 91. Cf., Nordenskjold History of Biology (Kegan Paul 1929) p.191 "It was not until the great geographical discoveries of the 16th and 17th centuries introduced the knowledge of a great number of new life forms that it was an inevitable necessity to widen the biological classification if the material collected was not to accumulate into an absolutely intractable mass".

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Cf., also H.S Reed - A short history of the plant sciences (Waltham Mass. Chronica Botanica Co 1942)

- 92. H. Goerke In his biography of Linnaeus (N.Y. Charles Scribner 1973) says that "interest in nature acquired a new impetus during the Renaissance through the rediscovery of the intellectual world of Ancient Greece, but it was the discovery of new continents and regions, with many hitherto unknown animals and plants, that showed the necessity for a comprehensive arrangement and classification". p.90
- 93. Again it is useful to emphasise, on my reading at least, none of Foucault's "facts" is in dispute. Cf., Goerke "Probably the most striking thing about Ray's zoological writings is the absence of the fabulous animals, which were still to be found in the works of Conrad Gesner (1516-1565) and his followers. It is justifiable to call Ray the founder of taxonomy as an independent branch of biology". op.cit. p.92
- 94. Order of Things p.32
- 95. Order of Things p.129. This is not to say that even non-specialist authors have not attempted at least obliquely, to raise questions about the 'forms' of perception. Cf., the following "Herbals and bestiaries showed common flowers and familiar animals in a convention that contradicted everyday experience, but these images had two sources of power: they symbolised knowledge and authority, and they were the accepted hieroglyphs which demonstrated the diverseness of God's creation and his direct concern for Man. At the back of the eye which looked at nature was a pseudo-botany, a pseudo-zoology, and pseudo-topography". (J.R. Hale - Renaissance Europe Fontana 1971) (N.Y.: Harper and Row 1971) p.43
- 96. Foucault Order of Things pp.39-40
- 97. For a recent appraisal in the field of classification see V. Pratt - Foucault and the History of Classification Theory (Stud. Hist. Phil. Science 8(1977) 163-171)

98. Briefly for example - Foucault, though erudite, is very economical in his studies. One wonders whether eighteenth century Botany wasn[•]t a little more complicated than Linnaeus vs. the French. For vagueness Cf., the following, "The fundamental codes of a culture ... establish for every man, from the very first, the empirical orders with which he will be dealing and within which he will be at home". Order of Things p.20

Chapter II - THE THEORETICAL ROOTS OF EUGENICS: FORMS OF DARWINISM

"Certainly populations differ markedly in, for instance, mortality rates, but in what sense can one say that a population with a high mortality rate is less well adapted to its environmental conditions than one with a low mortality rate is to its". J.A. Harrison and A.J. Boyce.

"These doctrines were turned to account by very different schools of social philosophy. Pessimistic and optimistic, aristocratic and democratic, individualistic and socialistic systems were to war with each other for years by casting scraps of Darwinism at each other". C. Bougle.

The two quotations heading this chapter, and their implications, embody for me some of the critical issues that need to be considered in any examination of the theoretical context in which the eugenic idea emerged in Britain. Given that the context of this research limits the many possibilities that could be pursued this chapter will focus attention on the connections between Darwinism as a biological discourse and the social doctrines claiming inspiration from it. Briefly, in what follows, it will be suggested that the links between Darwinism and eugenics, at least, are not simply a matter of an accident of borrowing but are built round certain fundamental problems in both discourses. Darwinism contains certain difficulties and ambiguities that made it open to certain readings and Eugenics, not entirely "innocent" in the matter, performed the misreadings appropriate to its needs. The previous chapter has suggested that the analysis of the links between different theoretical structures presents great difficulties and has tended too frequently in the past to lead to the juxtaposition of elements on the grounds of their similarity. It is popular conventional wisdom that Darwin borrowed a basically economic model for his notion of the Struggle for Existence and that this formula found its way back into a variety of biologistic social doctrines (1). This might be illustrated diagrammatically as follows:

Malthus Darwinism Social Darwinism Eugenics

There clearly were resemblances between Darwinism and certain nineteenth century social doctrines and while it is no function of the present study to furnish a taxonomy of approaches to this phenomenon it is clear that they have tended to treat these similarities as a straightforward borrowing, requiring little more than exegesis, or to regard the borrowing as a falsehood and to confront the falsehood with the truth and thus dissipate it. There is no doubt much to be said for these approaches but perhaps it may be possible to follow a third which is more concerned with the nature of the links between different types of discourses. Some work by P.Q. Hirst (2) has the virtue of focussing on what kinds of questions might be asked (and indirectly the notion of "reading"). Hirst clarifies borrowings as of two kinds namely, metaphorical and analogical. About these he then asks the following questions: what is the source of the metaphor/analogy e.g. original scientific texts, popular notions etc?; what theoretical function does the borrowed element have in the structure that borrowed it?; what is it in the discourse that necessitates such borrowing? These questions then lead on to further interesting possibilities. The first question implies questions as to the level of knowledge of the borrower and the nature of the domain of the borrowing. The second and third questions imply further questions about the theoretical level and degree of generality at which (in this case) the metaphors and analogies operate in the discourse e.g. illustration, similar problem, wholesale transference etc.

There seems little possibility of directly 'applying' this schema to eugenics for a number of fairly obvious reasons. The demarcations are not so clearcut as in Hirst's material and clearly some categories would be difficult to apply for example the level of knowledge of the borrower. It may indeed be better to describe eugenics as an 'extension' of Darwinism rather than a borrowing from it. Nevertheless Hirst's points have the great advantage of firstly, directing attention to certain essential questions about the mechanics of such theoretical transitions and secondly, emphasising the necessity to make careful distinctions within theoretical systems. Before approaching the question of borrowing or extension then, it is necessary to examine in more detail that which is to be borrowed. In order to proceed however the ground must be cleared a little. The historian or sociologist concerned with the history of ideas is likely to find himself on difficult terrain here, a terrain not only well surveyed but already occupied by well-organised and prestigious forces. There are philosophers, especially those interested in biological problems and practising biologists, especially those interested in the more general implications and historical background of their work and, almost all of whom, if one might use the expression, are card-carrying Darwinists. My strategy here will not be to criticise these approaches, which would be inappropriate (if not impertinent) but hopefully to clear a little space on this rich terrain of Darwinism in which it may be possible to say something useful in connection with eugenics.

There has been a considerable debate amongst philosophers which is helpful from the point of view of clarification (3). Much the most active and prolific of these philosophers defending Darwinism has been M. Ruse (4) and a quotation from him will provide an example of the point to be made here. Ruse is desperately worried that there might be, "a crippling tautology at the heart of Darwinian theory" (5). Behind that little phrase lie all the heroic assumptions of the philosophical approach. If there is a tautology Darwinism will fail to meet the grounds laid down for scientificity by philosophers and will thus be crippled. The concern with which this prospect is viewed by Darwinians is understandable. However suppose this assumption is dispensed with. Suppose that it is assumed that one discourse (philosophy) cannot establish the conditions of scientificity for other discourses (the sciences) or any other conditions of any other discourses for that matter. It may then be possible to relax on the matter of the tautology. It may be that there is a tautology at the heart of Darwinism and that it is possible to ask interesting questions about it, such as why is it there, what effects does it have on biological practices, or on the relations between Darwinism and other discourses.

It is not possible to develop in detail here the argument that the philosophical assumption should be dropped. What is at issue is what might be called philosophy³s legislative illusion i.e. that is can establish conditions for other discourses outside their practice.

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While it is no doubt an oversimplification the central project of Western philosophy has been the theory of knowledge and in recent times this has increasingly been focussed on the question of the status of science. Certainly it can be said without fear of contradiction that this is the way philosophy has been read by many outside its domain. Science and the 'scientific method' are widely accepted as the royal roads to true knowledge. These strategies seem to involve as a necessary effect on essentialism whereby philosophy itself becomes a kind of master discourse. In other words one can always ask the question: if only philosophy can establish the grounds of scientificity, or the conditions of truth what validates philosophy's claim? The answer surely must be circular. However all that one can say here is that this position has come under increasing fire from a number of points of view (6) enough to make it at least plausible to pursue other modes of investigation.

These all too brief observations on philosophy have already raised, by implication at least, an issue which will be considered further, namely the question of tautologousness or otherwise in Darwin^{*}s theory. Having sidestepped philosophy it is necessary to make some observations about biologists^{*} views with reference to this same issue. The intention is the same, not to criticise modern biologists, but simply to indicate a space not fully occupied by them.

While the philosophers may resort to their time honoured principles of established grounds of validity or ever more complex logical reconstructions of what Darwin really said or meant, the scientists are likely to resort to the complex versions of contemporary Darwinian genetics of which they are the acknowledged masters. An authority of Mayr's stature bluntly states the position, "Unfortunately, Darwin sometimes also used Spencer's slogan, "survival of the fittest", and has therefore been accused of tautological (circular) reasoning: "What will survive? The fittest. What are the fittest? Those that survive". To say that this is the essence of natural selection is nonsense! This is not at all Darwin's reasoning. For him, the probability of reproductive success of an individual is determined by its genetic constitution. At a given time in a given environment each genotype has a different fitness, that is, a different probability of

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reproductive success. The word fitness simply designates that fact that a superior genotype has a greater probability of leaving offspring than an inferior one. Natural selection, simply, is the differential perpetuation of genotypes" (7). Unfortunately this appears to restate the difficulty in modern jargon, an interpretation which gains some support from the following formulation which appears slightly later in the same text: "It happens not infrequently in nature that, for one reason or another, a superior individual fails to reproduce while an inferior one does so abundantly" (8).

The difficulty here is surely plain and not new. Either superiority and inferiority are only identified by reference to reproductive success as in the first formulation or the act of identifying superiority/inferiority is separate from the measurement of reproductive success and not to be "read off" the latter as in the second formulation. Again let me emphasise that to make this point casts no aspersions on, nor indeed may have any implications for, the practices of biologists, past or present - it is simply to say that the issue is not resolved by translation into modern terminology.

The ground clearing that has been done so far revealed some clues which may perhaps be followed up. Is it not strange that 120 years after its initial publication and after enormous advances in the biological sciences there is still intense discussion as to not only what the theory means but whether it is tautological or not? This alone surely constitutes some evidence of internal ambiguity, an idea which even Darwin^{*}s staunchest philosophical defender concedes (9). This feeling of wonder is reinforced, for the layman at least, by the realisation that when evidence is proffered on behalf of natural selection it in invariably of a limited kind and fits the categories exactly - one cannot, in other words, avoid the work of H.B.D. Kettlewell on the moth biston betularia (10). Why does Biston fit so nicely and is there any basic difficulty in the Darwinian doctrine?

The great advantage of biston (to borrow a phrase of Darwin) is that it enables us to more than "dimly see why the competition should be the most severe between allied forms which fill nearly the same place in the economy of nature" (11). Relating biston back to general

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Darwinian propositions it is clear that the advantage of this example is that it is possible to say that this particular organism, looked at from this point of view (colouration), in this particular set of circumstances (environmental changes) can be seen to have a beneficial variation, an advantage which in turn has led to a greater survival rate of one organism rather than the other. The biston example brings into play all the key components of Darwinian analysis, namely, organic variation, environmental factors and therefore a selection process the effect of which is differential levels of adaptation (12). Biston quite clearly enables one to identify a beneficial variation and then check independently its greater survival rate. It is the favourite example of natural selection because it brings out so clearly the centrality of adaptation.

To assert that the central theme in Darwinism is adaptation is by no means controversial, if not indeed a truism. At least at the level of rhetoric Darwin's concern is obvious (13). Is there a clear concept of adaptation in the Origin? It would be quite futile to compete with other in composing yet another potted reconstruction of what Darwin said so the following argument remains narrowly focussed on a limited number of points. The notion of adaptation is perfectly understandable at a commonsense level; fish can swim, arctic creatures have white coats, bees carry pollen and so on. Darwin's problem was how these adaptations had come about, rejecting explanations referring to divine intervention or other miraculous causes. His argument required him to go to great lengths to establish first of all that there was much variation amongst organisms both under natural and artificial To this end he produced a wealth of evidence and indeed conditions. the general proposition would appear to be beyond dispute. The concept of adaptation has to link the two halves of this enormous problem the facts of organic variation on the one hand and the facts of environmental variations on the other. Adaptation is linking concept - something must be adapted to something.

However there is a little more than this. The image constantly recurs in the Origin (it has already been quoted above) of what Darwin calls the economy or polity of nature. 'Nature' is to be seen as a structured set of places. This set is in a continuous dymamic process

which need not necessarily be the result of dramatic climatic or other change. "For as all the inhabitants of each country are struggling together with nicely balanced forces, extremely slight modifications in the structure or habits of one inhabitant would often give it an advantage over others; and still further modification of the same kind would often still further increase the advantage" (14). Now adaptation is surely, for Darwin, to be seen in this context, namely, the occupation of places. As he puts it, "Thus it will be in nature; for within a confined area, with some place in its polity not so perfectly occupied as might be, natural selection will always tend to preserve all the individuals varying in the right direction, though in different degrees, so as better to fill up the unoccupied place" (15). And the concept is further refined to be a matter of the degree of occupancy of a place. This is confirmed by the specific examples he discusses as his argument proceeds and indeed by his whole approach. Take the following - "Look at a plant in the midst of its range, why does it not double or quadruple its numbers? We know that it can perfectly well withstand a little more heat or cold, dampness or dryness, for elsewhere it ranges into slightly hotter or colder, damper or drier districts. In this case we can clearly see that if we wished in imagination to give the plant the power of increasing in number we should have to give it some advantage over its competitors, or over the animals which preyed on it" (16).

Elsewhere Darwin gives a lengthy imaginary illustration (his term) of natural selection at work involving the mutual adaptations of plants and bees. This is done by the postulation of mechanisms of adaptation which would then lead on to reproductive success: "I can see no reason to doubt that an accidental deviation in the size and form of the body, or in the curvature and length of the proboscis, far too slight to be appreciated by us, might profit a bee or other insect, so that an individual so characterised would be able to obtain its food more quickly, and so have a better chance of living and leaving descendants" (17). Darwin's constant use of the term 'profitable variations' (18) is surely then to be taken in this sense with reference to the degree of occupancy of some place in the polity of nature. His argument in the Origin then takes the form of what might be called a mode one, that is to say, a statement of the relation between more or less adapted organisms and their reproductive success to the effect that the more adapted will live and the less adapted will die. In such a form the argument does not appear to be a definition or circular. It leads on to and has natural links with experiments of the Kettlewell type.

There are two points that can be made about this concept of adaptation. It appears to involve the corollary that it cannot be used without reference to specific sets of circumstances concerning both organisms and environments. The Kettlewell experiments, as has been shown, fit this concept of adaptation precisely. It is reasonable to argue that industrial pollution opened up a new place in the polity of nature and that one type of organism was better placed than another type of the same organism to exploit that place by virtue of being less visible. If the philosophers must have their conditions of falsifiability, then surely in this context had Kettlewell found the white moths expanding in population then something would be wrong with the proposed explanation. It remains the case that no general principles can be constructed. We can only see degrees of adaptation after they have occurred and we can only see them in their specificity. We can only painstakingly investigate specific sets of circumstances. Darwin appears to touch on these difficulties when he says, "We see nothing of these slow changes in progress, until the hand of time has marked the long lapses of ages, and then so imperfect is our view into long past geological ages, that we only see that the forms of life are now very different from what they formerly were" (19).

Secondly the strong and regularly quoted examples of Darwinian principles all refer to very clearcut types of adaptation - indeed, at first glance perhaps colouration is the most obvious type of adaptation. It is not at all obvious what other types of changes might be adaptive e.g. internal organic characteristics or behavioural ones. Adaptation is clearly achieved on many dimensions of which external appearance is only one. The difficulty is therefore to measure it in a convincing way. Again Darwin appears to recognise this when he says, "but probably in no case could we precisely say why one species has been victorious over another in the great battle of life" (20).

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Because of these characteristics there seems to be implicit in the structure of the argument another approach to the question of adaptation which cuts through these difficulties. When Darwin talks, as he constantly does, of profitable or injurious variations this can be taken to mean profitable or injurious to survival. I would suggest that many of Darwin's readers have found in his argument (because it is implicitly there) what might be called a mode two form of natural selection along the following lines: those that die are least adapted, those that survive are most adapted. This mode is not contingent but, as many have argued, is a definition. It can be used to derive general statements about organisms irrespective of their specific natures or those of their environments. Of course when this mode is applied to, say, Kettlewell^{*}s moths, it generates a correct statement but that is because we have reasonable grounds for assessing (independently) adaptation in these circumstances. This then is the heart of the Darwinian tautology. The concept of adaptation, central to Darwin[®]s interest and argument can be expressed in a form which links adaptive characteristics with reproductive success, in that the latter follows from the former. But it can also be expressed in the form of an identity of adaptation with reproductive success i.e. those that survive, survive (21).

What has been argued so far concerns the general Darwinian doctrine and while this is, of course, central, the main focus of this research is on the application of Darwinism to human populations. This was a question which concerned Darwin himself and to which he devoted his work The Descent of Man (22) an examination of which reveals, I think, further difficulties and ambiguities in Darwinism. It has been suggested above that adaptation is the central issue and that Darwin's constant use of the phrases economy and polity of Nature indicates a vision of Nature as an endlessly changing series of meshings between environment on the one hand and organisms on the other. There is no necessity to limit the changes in organisms to purely physical ones but there would seem to be certain difficulties with extending the notion to human beings who are characterised by continuous manipulation of their environments.

Take the following formulation from the Descent, "If then the

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progenitors of Man inhabiting any district especially one undergoing some change in its condition were divided into two equal bodies the one half which included all the individuals best adapted by their powers of movement for gaining subsistence or for defending themselves, would on average survive in greater numbers, and procreate more offspring than the other and less well-endowed half" (23). Darwin has described here a state of affairs supposedly exemplifying natural selection. But other scenarios are surely possible. It might be supposed that the less well-endowed brethren build a stockade and develop a division of labour in which the longer-legged of them do the hunting and the shorter-legged look after domestic animals. Would this also be natural selection in operation? Surely in this second case circumstances are such that the polity of nature is being systematically manipulated by the organisms. Doubtless one can find amongst other creatures cases of cooperation and division of labour but among humans these characteristics appear to have a centrality and significance not shared by other forms of life (24).

Having demonstrated various anatomical and physiological links between Man and other organisms, Darwin^{*}s approach in the Descent is, as in the Origin, to proceed from establishing a struggle for existence to natural selection. "Natural selection follows from the struggle for existence; and this from a rapid rate of increase" (25). He quotes evidence of a struggle for existence amongst contemporary savages and civilised populations. This evidence includes all forms of checks on population growth i.e. not only the more obviously destructive forces like war and pestilence but also prudential restraint from marriage and poor housing conditions. The argument here is the familiar one that but for such checks populations would grow very quickly. Darwin's account of such checks in the Descent consists of a chronological sequence of types the stages being primaeval, savage and civilised. Amongst the progenitors of Man, ¹periodical dearths¹ are selected as the most significant item, "but checks of some kind, either periodical or constant, must have kept down their numbers, even more severely than with existing savages" (26). Amongst savages and civilised persons checks take a rather different form.

While all this seems quite uncontroversial it clearly involves a

shift in the definition of the struggle for existence. It includes not only externally imposed effects - disease, climate, food supply, etc. (the same type of phenomena as are discussed in Chapter 3 of the Origin) but also what can only be called social events e.g. wars and individual practices e.g. abortion and infanticide. Leaving aside the question of whether these phenomena are adequately conceptualised as [•]biological[•] once the concept of the struggle for existence is broadened to include them a number of effects tend to follow. In the Origin the struggle for existence derives its significance from its connection with the concept of adaptation. The deaths that take place in Nature^{*}s realm must be related to adaptation to be of any importance. Those with the comparative disadvantages in the myriad places of the economy of Nature will tend to die. On the broader definition however this connection cannot be sustained. What is the comparative disadvantage of those killed by infanticide? Indeed since those suffering death by abortion or infanticide are never exposed to places in the polity of Nature what knowable biological effects can their deaths have? (27). It is clear that in the Descent Darwin is drifting towards a mode two view of selection. His procedure is to aggregate a whole series of disparate phenomena (mortality due to overcrowding, famine, infant mortality, war, beasts of prey, etc.) under the rubric of $checks^{T}$ and then to assume that because people die from these various causes they must in turn be having selective effects.

This new flexibility in the notion of the struggle for existence is paralleled by a broadening of the notion of natural selection and doubtless for the same reason. It arises from the fact that Darwin must grapple with the natural selection of both individual and social characteristics. He appears to take the position that Man^{*}s corporeal structure was produced by what might be called individual natural selection. The discussion of bipedality and of the functional separation of locomotion and prehension is all predicated on the assumption that such developments would have given individual men an advantage, whereas the development of what Darwin calls Man^{*}s social habits and intellectual faculties appears to be an effect of what might be called group natural selection. Thus, "We should, however, bear in mind that an animal possessing great size, strength and ferocity, and which, like the gorilla, could defend itself from all enemies, would not perhaps have become social: and this would most effectually have checked the acquirement of the higher mental qualities such as sympathy and love of his fellows" (28).

But even here Darwin's view of developments is not entirely clear. In Chapter two, on the "manner of development" he makes a distinction between the physical capacity for making weapons (i.e. a complicated hand structure) and a process of learning to do these things in fact - which, on his own account, not every primeaval man actually did (29). How can this state of affairs be related to the general conditions for natural selection - "modifications in structure or constitution which do not serve to asapt an organism to its habits of life, to the food which it consumes, or passively to the surrounding conditions, cannot have been thus acquired" (30). Clearly some primeval men had modifications which they did not as individuals exploit (31). This presumably explains Darwin*s later observation that, "natural selection sometimes acts on the individual, through the preservation of variations which are beneficial to the community. A community which includes a large number of well-endowed individuals increases in number, and is victorious over other less-favoured ones; even although each separate member gains no advantage over the others of the same community" (32).

Nevertheless it is when Darwin moves on to Man⁴s social habits and intellectual faculties that the necessity for broadening the concepts of the struggle for existence and natural selection becomes most apparent and the theoretical difficulties involved in this broadening become most severe. Three aspects of his discussion deserve further comment. The first concerns Darwin⁴s use of the ⁴tribe against tribe¹ formula to explain human evolution and specifically his identification of the intellectual faculties with techniques. The following passage situates this point: "At the present day civilised nations are everywhere supplanting barbarous nations, excepting where the climate opposes a deadly barrier, and they succeed mainly, though not exclusively, through their arts, which are the products of the intellect. It is therefore highly probable that with mankind the intellectual faculties have been mainly and gradually perfected through natural selection" (33). This passage illustrates the new breadth of natural selection, now to include any kind of conquest of one group of men by another which deprives it of even a tenuous connection with the organism/environment link so central to Darwin^es earlier formulations. Additionally, in order to make natural selection apply to nations Darwin here takes the development of ^earts^e as an index of intellectual faculties or capacities. This is not argued for, nor is it intuitively obvious, and if the identity argument is denied then the natural selection one falls too.

A second aspect is Darwin's account of moral faculties and his use of the term instinct in this connection. Darwin argues from some residual instinctive sympathy that Man is gradually driven in the direction of adjusting his behaviour to the demands of the group -"Consequently man would be influenced in the highest degree by the wishes, approbation and blame of his fellow men, as expressed by their gestures and language" (34). This is again subsumed under the general formula of benefit to the tribe - "No doubt the welfare and happiness of the individual usually coincide: and a contented happy tribe will flourish better than one that is discontented and unhappy" (35). But this formulation is plainly inadequate. The account of primeval man responding to the wishes of his fellow men, leaves unexplained what those wishes will be and how they are determined. If instinctive sympathy is sufficient explanation then no reference to the wishes of the community is required; if reference to the wishes of the community is necessary then it must be more than an aggregation of individual instinctive sympathies. Not surprisingly Darwin is completely lost when it comes to dealing with the actual wishes of actual communities - "Hence the strangest customs and superstitions, in complete opposition to the true welfare and happiness of mankind, have become all-powerful throughout the world" (36). Faced with reality he is driven to ethnocentric labelling, vacuous rationalism and vague appeals to the "impressible" brain (37).

A final difficulty concerning the individual/group formulations is raised by Darwin himself. It is, of course, the selfishness problem. As he puts it, "It is extremely doubtful whether the offspring of the more strongly sympathetic and benevolent parents, or of those who were

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the most faithful to their comrades, would be reared in greater numbers than the children of selfish and treacherous parents belonging to the same tribe" (38). Darwin's resolution of this difficulty is a pot-pourri of utilitarianism, habit, the instinctive sympathy, the advantages of tribal example, topped off by natural selection. The tribes that included the *good guys* (as it were) would triumph over the other tribes. As Darwin put it, "At all times throughout the world tribes have supplanted other tribes; and as morality is one important element in their success, the standard of morality and the number of well-endowed men will thus everywhere tend to rise and increase" (39). But this is to solve the problem by abandoning it. Not least Darwin does not explain what the gain is to a tribe that conquers another but more important he does not deal with the selfish members of the tribe who might simply exploit the benefits of the tribe's 'success' to augment their own reproductive performance. In the end presumably the superior tribe would be brought down to the level of all the others.

The theoretical difficulties resulting from the subtle alteration that Darwin effects in his concepts in order to apply them to human societies become more sharply outlined as he approaches civilised society. But it is there from the beginning, indeed implicit in his whole standpoint. The very opening questions of the Descent betray the conceptual ambiguities outlined: "The enquirer would next come to the important point, whether man tends to increase at so rapidly a rate as to lead to occasional severe struggles for existence, and consequently to beneficial variations, whether in body and mind, being preserved and injurious ones eliminated. Do the races or species of man, whichever term may be applied, encroach on and replace one another, so that some finally become extinct" (40). The attempt to assimilate social phenomena to biological concepts is almost explicit in this passage and yet throughout Darwin^{*}s text unexplained categories referring to such phenomena periodically surface like so many recalcitrant corks.

The reductio ad absurdum comes with a reference to the Greeks whose decline is explained by small size, multiplicity of states, the practice of slavery, and sensuality, none of which appear to be

notably biological, nor indeed to have anything to do with natural selection, assuming that term is to retain any coherent meaning (41). But there are many other examples. The references to checks in civilised societies (with their selective effects) include the death rate among the "poorest classes" and among the "overcrowded". As has been argued it is stretching credibility to equate the selective effects of those phenomena with places in the polity of nature. An overcrowded dwelling is not an environment to its inhabitants in the same way that a tree is to biston betularia. The primary check to the growth of human populations is *gaining subsistence* and *living in comfort*. A notion like comfort clearly cannot be reduced to an organism/environment relationship but implies and requires normative assumptions. The whole of human history between the progenitors of man and Victorian England is labelled tribe. Nowhere is this term defined or explained and it plainly means whatever Darwin wants it to mean. Business and professional activity is described as a struggle for existence "so that the able in body and mind succeed best" (42).

It is not surprising then that Darwin's failure to think through these issues led him to accept without question the eugenic arguments of his time even when they flagrantly parted company from the structure of his theory. Thus he quotes Greg approvingly - "given a land originally peopled by a thousand Saxons and a thousand Celts and in a dozen generations five sixths of the population would be Celts but five sixths of the property, of the power, of the intellect, would belong to the one sixth of Saxons that remained. In the 'eternal struggle for existence' it would be the inferior and less favoured race that had prevailed - and prevailed by virtue not of its good qualities but of its faults" (43). This is a theory of racial types which has none of the characteristic elements of the Darwinian analysis (variation, changes over time, adaptation, relation to the environment, etc.).

Thus far I have tried to show how, even in the hands of its inventor and foremost exponent the theory of natural selection when applied (at least without further theoretical development) to human societies tended to produce propositions not only contrary to common sense but also incompatible with Darwinism itself, that might indeed be called

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misreadings (44). It has further been suggested that these ambiguities and difficulties drew towards themselves certain extraneous theoretical ideas so that by the turn of the century Darwinism was not just the theory in the Origin of Species but that theory plus various accretions. It remains now to examine some of the accretions not, it must be said, in order to develop a systematic classification but simply in order to provide further illustration of the theoretical mechanisms at work and of the intellectual context in which eugenics was born. This will be done firstly by a look at some of the 'biological' social theory published at the turn of the century and secondly by some discussion of the notion of degeneration and associated ideas.

It will have become clear that the two major mechanisms of as it were, misreading the Darwinian theory were firstly, the suppression or redefinition of important conceptual distinctions and secondly, the extension of the Darwinian concepts into non-relevant domains which often involves the surreptitious introduction of new or different concepts. The texts to be considered all provide useful illustrations of these mechanisms at work. D.G. Ritchie was clearer than most about the nature of his project, namely, firstly to prove that, "the theory of natural selection lends no support to the dogma of laissez-faire" (45) and secondly to discover, "in what form, if any, can the theory of natural selection properly be applied to the intellectual moral and social development of man" (46). Nevertheless the method of achieving it involved the transformation of the Darwinian concepts into empty abstract formulae which made possible the introduction of entirely new contents. Thus, "natural selection operates in the highest types of human society as well as on the rest of the organic realm, but it passes into a higher form of itself in which the conflict of ideas and institutions takes the place of the struggle for existence between individuals and races" (47). The point here is that *higher form* is quite gratuitous since no principles were provided for the derivation of the forms or the definition of higher or lower More fundamentally it is rather difficult to see how there (48). could be such concepts within the Darwinian framework as the theory is purely concerned with adaptation to given environments: one form of adaptation cannot behigher or lower than another; indeed the whole

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theory had to be "translated" into something quite different.

Haycraft likewise made convenient adjustments to Darwinian concepts: "The struggle for existence between members of the same community is not therefore so much a struggle for existence as a struggle for the superfluity of the good things obtainable" (49). Here the biological struggle for existence was simply equated with a human contest for scarce goods. Harvey similarly drew on such amendments to Darwinism: "That a state is an organism, and that the facts of struggle, selection and cooperation exist in all organisms or collective life is abundantly clear" (50).

The extension of Darwinian principles usually took the form of a search for equivalents. Thus, according to Ritchie, there were two causes of variation in the animal world, sex and the direct action of the environment. It was then necessary to investigate what corresponded to these in the world of human institutions. As a result he argued that the equivalent of sex was the "mingling of races" (51). Harvey following the same line of reasoning concluded that, "The whole history of Great Britain, of its internal institutions and its external empire is a record of variation and adaptation by compromise, and this has been made possible by the fact that the British are a composite people" (52). Elsewhere Ritchie concluded that ideas had "the same tendency to variation that we find throughout nature" (53). He was followed in this practice by Harvey who discussed for example Puritans, Jesuits and Quakers as different ^evariations^e (54).

Another group of ideas which became attached to Darwinism were those going under the various names of degeneration, diathesis and neuropathic taint (55). This idea is usually credited to B.A. Morel who used it as a general label to cover all pathological deviations from the normal type. These he argued were transmitted through heredity and obeyed a law of gradual progression towards death i.e. in each succeeding generation the deviators became more serious. In the words of one of its most popular exponents, "The degenerate individual deviates from the racial type either through a check in development or through erratic formation. Arrested development results in atavism, where the individual comes to a stop at an early point on the road over which the species has travelled, and cannot go further. Erratic development leads to monstrosities, which do not correspond to any point which the species in its normal development, has ever passed. All the anomalies of degeneration can be referred to these two formulas - arrested or aberrant development; atavism or monstrosity - but as a rule they combine the two" (56).

The application of these doctrines led to the identification of various susceptible "types" e.g. t.b., alcoholism and other disorders which (by modern standards) were not well understood. Thus for example, "a phthisical type of person is one who comes of a family liable to fall a prey to this microbe and he is recognisable by many distinctive characteristics of hair and complexion, and by qualities of temperament, feature and figure" (57). Equally it was possible to identify good types - "One cannot look at a lowland Scot without feeling that his stock had in days gone by and for many centuries, run the gauntlet of oatmeal porridge and cold east wind" (58). Generally speaking in the field of mental disorders the theories of degeneration involved the assumption of an equivalence of such disorders. "Degeneracy in the parent may be evidenced by insanity of all kinds, epilepsy, alcoholism, moral perversion and the like - and the presence of any such element of degeneracy in the parent is apt to engender in the offspring similar defects or a state of general instability" (59). It was further assumed that all such disorders were rooted in organic "Degenerative disorders are more or less interchangeable and factors. are merely proofs of an unstable nervous organisation. Where such conditions do not develop they may exist in a latent state, and pass as a legacy to another generation. Whether the neuropathic taint be manifest or latent, we are apt to find, on careful examination, indications of degeneracy" (60).

These views and doctrines were so widely accepted in the late nineteenth century both in medical and other circles, that one authority could comment that, "with the close of the year 1883 the degeneracy doctrine may be regarded as having practically been accepted in biology, in anthropology, in sociology, in criminology, in psychiatry, and general pathology" (61). This broadly speaking remained the case until the war though by then certain elements of the doctrine, particularly the notion of stigmata of degeneration (physical signs and correlates), had come in for severe criticism and were partially discredited. In general it seems that these ideas survived rather longer in Britain than elsewhere (62).

Degeneration and diathesis had the dual characteristic of theoretical closure and empirical openness. Notions of heredity in medical discourse took the form of general designations, that is, they were empirical devices that aggregated much clinically observed pathological variation. Such designations created no open problems which could be posed and solved; rather these notions of heredity were empirical summations (which might, of course, reflect genuine realities) not conceptual tools of research. These summations now seem extraordinary - W. Duncan McKim could unite under the heading of degeneration, "insanity, idiocy, imbecility, eccentricity, hysteria, epilepsy, the alcohol-habit, the morphine habit, neuralgias, 'nervousness', St. Vitus' dance, infantile convulsions, stammering, squint, gout, articular rheumatism, diabetes, t.b., cancer, deafness, blindness, deaf-mutism, color blindness" (63) amongst other things! As chapter six will show the situation was not fundamentally altered by the addition of statistical methods. In the biometric camp traditional notions of heredity took their place within a circuit of statistical devices whose function was precisely the organisation of rigorous observation and questions of heredity were articulated in terms of these devices and the research problems they generated (64).

It is easy to say that these notions "could so readily be brought into line with Darwinism" (65) but the question is how the Darwinian notion of fitness, rooted in a concept of adaptation, is, on a strict interpretation, incompatible with degeneration and similar concepts. The connection is clearly in part an effect of the general confusion in theories of heredity in the late 19th century and early 20th century. The theoretical structure of Darwinism requires only some general notion of heredity - it cannot of itself specify the nature of the appropriate concepts of heredity. In these circumstances medical hereditarianism was a possibility among others. But the link also seems in part an effect of the difficulties attached to the notion of adaptation. Darwinism stressed adaptation as the central issue but, as has been shown, was vague and contradictory about how adaptation was to be recognised in a human context. This created as it were a theoretical vacuum which attracted to itself concepts and arguments which, while apparently similar in that they used biological rhetoric, were ultimately normative and foreign to the structure of the Darwinian theory. It has only been possible to give the most cursory treatment to concepts of degeneration and suggest posible theoretical links between them and Darwinism but in the chapters which follow the attempt will be made to show at greater length the connections between Darwinism and Eugenics.

Chapter II - FOOTNOTES

- (1) The following is by no means an exhaustive list of references (putting various arguments) in addition to those mentioned in the introduction to Part I.T. Cowles - Malthus, Darwin and Bagehot: A Study in the transference of a concept (Isis XXVI (1935) 341-8); C. Zirkle - Natural Selection before the Origin of Species (Proceedings American Philosophical Society LXXXIV (1941) 71-123); R.M. Young - Malthus and the Evolutionists (Past and Present 43 (1969) 109-145); idem - Darwin^{*}s Metaphor: does nature select? (The Monist 55 (1971) 442-503); P.J. Vorzimmer - Darwin, Malthus and the Theory of Natural Selection (Journal of the History of Ideas XXX (1969) 527-542); S. Herbert - Darwin, Malthus and Selection (Journal of the History of Biology 4 (1971) 209-217); V. Gerratana - Marx and Darwin (New Left Review No. 82 (1973) 60-82); L. Eisely - Charles Darwin, Edward Blyth and the Theory of Natural Selection (Proceedings A.M.Phil.Society 103 (1959) 94-114); A. Sandow - Social Factors in the Origin of Darwinism (Quarterly Review of Biology 13 (1938) 319-326); A book by Y. Ternon and S. Helman - Les Medicins Allemands et le National Socialisme (Tournai: Castermann 1973) has the promising subtitle "Les metamorphoses du Darwinisme" but does not seem to get to grips with these "metamorphoses"; C. Limoges - La Selection Naturelle (Paris: P.U.F. 1970).
- (2) P.Q. Hirst Morphology and Pathology: biological analogies and metaphors in Durkheim's The Rules of Sociological Method (Economy and Society 2 (1973) 1-34)
- (3) A.R. Manser The Concept of Evolution (Philosophy 40 (1965) 18-34); A.D. Barker - An approach to the theory of Natural Selection (Philosophy 44 (1969) 271-289); M. Grene - The Understanding of Nature (Dordrecht: D. Reidel Pub. Co. 1974). There is another approach in A.L. Caplan - Darwinism and Deductionist Models of Theory Structure (Stud. Hist. Phil. of Sci. 10 (1979) 341-353); S. Lovtrup - Variation, Selection, Isolation, Environment: An Analysis of Darwin's Theory (Theoria 43 (1977) 65-83)

- (4) M. Ruse Charles Darwin's Theory of Evolution: An Analysis (Jnl. Hist. Biology 8 (1975) 219-241); Karl Popper's Philosphy of Biology (Philosophy of Science 44 (1977) 638-661); Natural Selection in the Origin of Species (Stud. Hist. Phil. Sci. 1 (1971) 311-351)
- (5) Ruse 1971 p.347
- (6) The following is merely a sample and in no sense to be taken as occupying the same position. The writings of M. Foucault already quoted; P. Feyerabend Against Method (New Left Books 1975); D. & J. Willer Systematic Empiricism: Critique of a pseudo-science (Englewood Cliffs N J.: Prentice Hall); B. Hindess Philosophy and Methodology in the Social Sciences (Sussex: Harvester Press 1977); G. Bachelard La Formation de L^{*}esprit Scientifique (Paris: Vrin 1970)
- (7) E. Mayr Population, Species and Evolution (Cambridge, Mass: Harvard University Press 1970) p.107
- (8) op.cit. pp.107-8. See D. Berlinski's Review of M. Ruse The Philosophy of Biology (Philosophy of Science 41 (1974) 418-422)
- (9) Ruse op.cit. p.347 though of course philosophical surgery quickly repairs the damage.
- (10) See e.g. H.B. Kettlewell Selection experiments on Industrial melanism in the Lepidoptera (Heredity 9 (1955) 323-342); Further Selection Experiments (Heredity 10 (1956) 287-301). To cite but two of the most prominent authorities. Firstly Dobzhansky -"perhaps the most striking and longest known example of evolutionary changes" in Evolution, Genetics and Man (Science editions 1963) p.104 cited in Manser op.cit. and secondly Haldane - "I think that Kettlewell's work on biston betularia and my own on the rate of evolution give us a roughly quantitative theory of natural selection" - in P.R. Bell (ed.) Darwin's Biological work (N.Y.: Wiley 1959) p.147

- (11) Origin p.127. I have used the Penguin edition (ed.) J. Burrow
 (1968)
- (12) Origin p.132
- (13) Origin pp.66,114,127,153
- (14) Origin p.132
- (15) Origin p.145 (my emphasis)
- (16) Origin p.128
- (17) Origin p.141
- (18) Origin pp.80,115,132,162
- (19) Origin p.133
- (20) Origin p.127
- (21) S.J. Gould appears to accept something close to these two versions but does not investigate how they came to exist. Ever Since Darwin (Penguin 1980) pp.41-3
- (22) The Descent of Man (John Murray 1906)
- (23) Descent pp.71-2
- (24) Perhaps I may lean on the authority of a contemporary biologist for my general point here. "Analogies between biological phenomena and human affairs can also be of value at the level of groups of individuals, but there is no simple and reliable guide to tell us where to stop. Certainly there are interesting parallels between Man and animal in family organisation, especially between extended multi-generation human families and the colonies of social insects. There may be interesting parallels at even higher levels. A species has a continuity

beyond the lives of its individual members; so has a nation of men. A species maintains itself by the activities of its members despite destructive external influences; so does a nation. But does a species have anything at all akin to a spirit of nationalism? A New Frontier? A Five Year Plan?" G.C. Williams - Adaptation and Natural Selection (N.J.: Princeton U.P.) p.253

- (25) Descent p.219
- (26) Descent p.70
- (27) The concept of adaptation as places in Nature surely involves the acceptance of two types of mortality, selective and non-selective. General mortality as such is of no importance. Modern Darwinians do appear to accept this "anti-selectionists will point out that much of the mortality of young animals is purely accidental rather than selective as in the case of plankton, scooped up indiscriminately by a large fish or a whale. This observation overlooks the fact that among the remaining individuals (and it is immaterial whether they constitute 50% or 0.01% of the population) selective factors largely determine reproductive success". Mayr op.cit. p.108
- (28) Descent p.96
- (29) Descent p.74
- (30) Descent p.90
- (31) This point was not taken from Wallace but he says much the same thing. Contributions to the Theory of Natural Selection (Macmillan 1870) p.349
- (32) Descent p.94
- (33) Descent p.197 and see pp.97,161,196,199

- (34) Descent p.167
- (35) Descent p.185
- (36) Descent p.186
- (37) Descent p.187
- (38) Descent p.200
- (39) Descent pp.203-4
- (40) Descent p.7
- (41) The question of the Greeks prompts thoughts about the Spartans. Did they succeed because "a form of selection was followed" resulting in the "vigorous being preserved, the others left to perish" (Descent pp.42-3) or did they fail because they succumbed to other tribes showing "justice and benevolence, exercised towards members of the same tribe", therefore having a superiority over those (like the Spartans?) "in which the might of the strongest prevailed, and where consequently the weak and the sickly were left to perish", (Wallace op.cit. p.351). And which of these was natural selection?
- (42) Descent p.207
- (43) Quoted in Descent p.213
- (44) An article by John C. Greene Darwin as a Social Evolutionist (Jnl. Hist. of Biology 10 (1977) 1-27) contains some interesting facts about the books Darwin read.
- (45) D.G. Ritchie Darwinism and Politics (Swan Sonnenschein 1895 third edition) p.iii
- (46) op.cit p.3

(47) op.cit. p.106

- (48) "In his copy of The Vestiges he noted: "Never use the words higher and lower" quoted in Burrow's introduction op.cit. p.33
- (49) J.B. Haycraft Darwinism and Race Progress (Swan Sonnenschein 1895) p.117
- (50) C.H. Harvey The Biology of British Politics (Swan Sonnenschein 1904) p.9
- (51) Ritchie op.cit. p.126
- (52) Harvey op.cit. p.31
- (53) Ritchie op.cit. p.22
- (54) Harvey op.cit. p.17
- (55) See C.E. Rosenberg Factors in the development of genetics in the U.S. Some Suggestions (Jounl. Hist. Med. Allied Sciences XXII (1967) 27-46); E. Ackerhnecht's Short History of Psychiatry (N.Y.: Hafner Pub. Co. 1968) Ch.VII and R.D. Walter - What became of the Degenerate? A Brief History of the Concept (Jounl. Hist. Med. Allied Sciences XI (1956) 422-429). Neither of these studies appear to me to be very illuminating. There are some interesting remarks in L. Steward - Freud before Oedipus - Race and Heredity in the Origins of Psycho-Analysis (Jnl. Hist. Biology 9 (1976) 215-228); also in O. Anderson - Studies in the Prehistory of Psychoanalysis (Scandinavian University Books 1962) pp.37-9 and p.217 Cf. also J.M. Dupeu - Freud and Degeneracy: A Turning Point (Diogenes 97 (1977) 43-64). Dupeu neatly characterises the degeneration theory as a pathology of heredity rather than a hereditary pathology.
- (56) M. Nordau The Degeneration of Classes and Peoples (Hibbert Journal 10 (1912) 745-765) p.749. And, "But the slackening or abolition of inhibition, constitutional laziness as a result of

- (57) Haycraft op.cit. p.55
- (58) Haycraft op.cit. pp.59-60
- (59) M. Craig Psychological Medicine (J & A Churchill 1912 second edition), p.26
- (60) J. Shaw The Physiognomy of Mental Diseases and Degeneracy(Bristol: John Wright & Co 1903) pp.66-7
- (61) Eugene S. Talbot Degeneracy (Walter Scott Ltd 1898) p.26
- (62) One commentator says, "In psychiatry there was an astounding lack of British influence due to the backward state of that branch of medicine in England". J.C. Burnham - Psycho-analysis and American Medicine 1894-1918 (Psychological issues Vol V No.4 Monograph 20) p.48
- (63. W. Duncan McKim Heredity and Human Progres (G.P. Putnam & Sons 1900) pp.65-6
 - 64. For some contemporary comment on these themes see W. Leslie Mackenzie - On the Diathesis of Phthisis and of Insanity (Sociological Review 3 (1910) 302-9)
 - 65. Ackerknecht op.cit. p.54

Chapter 111 - THE EUGENIC PROBLEM

"The subject of 'eugenics' is in the air; it is dealt with in the newspapers, and it has found its way into light literature". BMJ (1913)

Having elaborated some of the connections between Darwinism and biologistic social doctrines this chapter and the next examine the structure of Eugenic thought as it appeared in Britain. British eugenic thought was not a rigorous and theoretically coherent doctrine. It borrowed freely, even indiscriminately, from a wide variety of sources with the result that it encompassed a number of inconsistencies and divergent positions. But at the heart of this complex lay the twin concepts of heredity and selection. The attempt will be made to show that the major inconsistencies and difficulties in the eugenic position were rooted in its deployment of these two major concepts.

Like any theoretical doctrine Eugenics can be characterised at various levels of complexity but it is convenient to start with a general sketch of the world view, as it were, in the mind of the average Eugenist in, say, 1914. In this view Man is part of the natural world and exhibits variations which are hereditary. There is a struggle for existence in which certain qualities get selected. Thus those who are more fit, more able, survive diseases and so on, become successful. As a result they reproduce or more than reproduce their replacements and so their fit stocks are carried on in the population. Naturally it is clear that Man has a cultural tradition which includes a moral sense and this may even have an evolutionary basis i.e. moral solidarity of a diffuse kind is a biologically adaptive mechanism. This aspect is related, as Darwin argued, to the operation of natural selection at the group level. Although natural selection operates at the individual level and this is probably the more important, it may also operate on societies and produce moral and other traditions which may, in turn, moderate and divert the effects of natural selection at the individual level. Within limits this moderation is acceptable.

However this moral aspect of humanity also forms the basis of more drastic interference in the operation of natural selection. This interference may effect changes such that the unfit no longer suffer the consequences and the fit no longer enjoy the advantages of their respective conditions. Under these circumstances not only may the beneficent results of natural selection be lost but the situation may actually deteriorate. Yet since there can be no return to the old forms of selection (because they are morally unacceptable - "It is better to spend thirteen millions a year than to relax the cords of human sympathy which bind us all together" (1) the effects of natural selection must be continued in the form of eugenic selection that is, a policy about who, or rather what stocks, are permitted to reproduce.

Thus natural selection may be seen as operating in a sequence of at least two phases. The first phase produces the fit stocks - ".... but equally surely the various forms of ability have been sorted out during the past centuries by the action of natural selection of liketo-like mating, of direct inheritance and exist ready in certain strains in an intensified form" (2). Once established however these qualities are threatened by a subsequent phase because the qualities *Nature^{*} has selected need not be preserved. The heart of the eugenic argument is that in this later phase there is social selection of the previously naturally selected and this social selection must be made eugenic. So for example in Crackanthorpe's three stage sequence of human evolution the stage had been reached where natural selection had done its good work and had to be replaced by something better (3). It was never a question of returning to natural selection - it was rather a question of achieving the same results eugenically. "The primary object of eugenics is, no doubt, to substitute for the slow and cruel methods of nature some more rational, humane and rapid system of selection by which to ensure the continued progress of the race" (4).

This highly condensed version clearly includes a number of basic concepts and arguments which require further analysis. On the face of it this eugenic account carried considerable empirical conviction as well as having some pleasantly acceptable implications. Not only did it root Man in the natural world - Darwin's achievement was to place "Man in his proper position in the animal world, and to show

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that he was subject to the same processes, the same limitations, the same influences as the rest of creation, and no longer required entirely seperate methods of investigation and study" (5) - but in its approach to human history it unified much messy diversity while retaining the essential point of the struggle for existence. Ιt explained or at least provided a place for morality. The harsh work of natural selection had been done - it remained for Man to preserve its results by the most humane and progressive methods. Appealing though this picture might have been in what follows it will be maintained that underneath the surface of this argument there were a number of important conceptual shifts. Taking the concept of natural selection first it will be argued that this played two main roles in eugenic discourse. Firstly it made possible the identification of innate abilities and fitness with social position and social reward and thus provided a picture of the distribution of the fit and the unfit. Secondly it allowed for the inference of fitness from norms rather than reproductive success.

As the eugenists conceived it natural selection necessarily produced a situation in which the naturally immune, the naturally more able and so on must survive; these superior stocks would be aggregated and would take the available social rewards. This was often described in the rhetoric of the favourite social Darwinist cliches - as a harsh struggle for existence, denoting the frequent but exemplary destruction of men by famine, of tribe by tribe, of conquered by conqueror. In short, as many eugenists liked to say, the race is to the swift and the battle to the strong. Thus natural selection, "increases the proportion of the fit by assuring to them the adyantages attendant on innate ability and a consequent better chance of survival to rear a large family" (6). It was generally agreed that people were at the bottom of the social scale either because of bad luck or inborn defects, the latter preponderating the lower down one went. "Is it not certain therefore, that the lower we look in the scale of the classes of the community if measured by the degree of their poverty, the smaller will be the proportion of the merely unluckly, and the larger will the proportion of the natural unfit" (7). Dr. Inge was in no doubt that the working classes were "inferior to the upper class" (8) and Dr. Campbell was inclined to

argue that "the poor are (in my opinion at least) inferior mentally and, to some extent, physically to the well-to-do" (9). On similar grounds it could be argued that the upper classes were the result of a long-term process of selection. This was in part a matter of personal taste. Dean Inge felt that "the well-to-do classes in this country are, on an average, among the finest specimens of humanity which have appeared since the Ancient Greeks" (10) while the Whethams considered the "present upper classes are the result of a thousand years of selection" a time during which "natural selection has worked well" (11).

The parallels with the arguments discussed in chapter two are apparent. Eugenics was an attempt to extend the Darwinian concepts to the human realm - with the social environment largely taking the place of the natural one, human characteristics of all kinds taking the place of organic variations, and the struggle for existence encompassing various forms of human conflict as well as its more traditional designations. Finally the emergence of social groups as embodiments of (un)fitness or specially (un)fit persons was conceived as a process of adaptation to a social environment and therefore success could be defined both biologically (reproductive success) and socially (social success). "But the essence of natural selection consists in the conjunction of success in the struggle for life and its fruits with a preponderating rate of reproduction" (12). Thus natural selection functioned as a link between the aggregation of qualities in stocks and the distribution of groups in the social structure i.e. it made possible the connection between the innate qualities and social criteria of 'ability', 'success', and so on.

To use the terms introduced in the second chapter this is a sociological variant of the mode two form of Darwinism i.e. it amounts to saying little more than those that survive and are successful are those that survive and are successful. The superiority of stocks is inferred from the nature of their success. "Thus a stock which at one period of social evolution produced successful warriors may at another give rise to organisers and administrators" (13). This argument is circular and consequently has a very serious deficiency namely, that it cannot deal with the possibility of a divergence between the two

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indicators of 'success'.

Clearly once the indices of natural selection in operation are moving in different directions there are two logical possibilities. Either one can continue to argue that natural selection is still functioning or that it is no longer functioning. A variant of the second position is that it is still functioning but badly or in the wrong direction. Both variants of the second position can be seen to involve a basic shift in the argument. If natural selection is no longer working it is because the fit no longer reproduce (as much) and the unfit do reproduce (more). But it therefore follows that fitness and unfitness are no longer being judged with reference to reproductive performance. Clearly to abandon the link between fitness and reproductive performance is to abandon the mode two style of argument. But, equally clearly, it is to pose afresh the question of how the fit and the unfit are to be identified.

This problem is dealt with by a shift back into a sociological variant of the mode one form of Darwinism. This, as has been shown does not involve the problem of circularity, but requires a concept of adaptation as an organism/environment relationship. However in the eugenist version there is a crucial substitution. In sharp contrast to a concept of places in Nature (as with Biston for example) fitness is not judged from an organism/environment relationship. There is no serious attempt to apply a concept of environment to human relations, rather fitness and unfitness are simply derived from certain moral and ideological norms. "By fitness or unfitness are here meant the presence or absence of that amount of health, intelligence and aptitude for moral training which goes to make up civic worth and usefulness" (14), or as Mott put it "..... and by well born I mean coming from good stocks of broad chested sires and deep bosomed mothers; endowed with courage, honesty and commonsense, which is the inborn aptitude of profiting by experience to do the right thing at the right moment" (15).

But once this shift has been made, to the identification of fit and unfit in terms of norms (however derived), natural selection of the old kind ceases to be of any importance. The focus shifts to the comparative reproduction of designated types i.e. the stocks as located in different social groups. The crucial point is to "inquire what classes of the community are reproducing themselves fastest" (16). There is no list, nor could there be, of adaptive mechanisms because anything and everything can be examined for its effects on the comparative birth rate of groups whose value has already been assessed on eugenic (ultimately normative) grounds.

These conceptual shifts in the argument must engender difficulties at the practical level and this is confirmed by the disagreements amongst the eugenists themselves on a wide range of proposed diagnoses and cures. The eugenic use of Darwinism concepts made it possible to consider the social structure as both the result of and an obstacle to natural selection. Some eugenists were more concerned with the bad effects of the social structure on the upper classes. The major problem of Schiller's eugenic education programme (17) was the equipping of the youth of the upper classes with an adequate motive to make the best of themselves and not succumb to the temptations of dissipating their substance. Similarly the social structure could be an obstacle if those in the lower ranks of society who were there by accident could not climb out. "With improved surroundings and greater opportunities of self-help, people of this type will readily seperate themselves out from the families who have fallen into the depths by reason of the badness of their inborn qualities. Thus a new classification is obtained which is of real value from the point of view of the race. Fresh recruits are obtained for the effective selection of the communal life, and the residue can be more justly dealt with as a seperate problem of degeneration" (18).

Many eugenists were inclined in practice to relax the rigours of the natural selection argument. While they remained convinced that the higher social classes were of superior stock there was a tendency to stress also comparisons within classes. Rather than the upper classes being good stocks and the lower classes being bad stocks it was frequently argued that there were good and bad stocks in all classes, and that gradually the bad were weeded out of the rich and the good promoted out of the poor. Thus it was possible for the Whethams to say, "There is undoubtedly much fine material among casual

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labourers" (19). Clearly this possibility was most convenient from the propaganda point of view since then and subsequently (20) the eugenists were not unaware of the danger of class prejudice. Darwin, reviewing one of Wheltham's books, accepted that, "the existence of any correlation between ability and social status is certain to be stoutly denied in many quarters" (21). While class prejudice was undoubtedly present (as Saleeby put it, "Thus we Eugenists assume, if we belong to the middle class that the middle class is the backbone of the nation; if we are aristocrats, we tend to think that aristocracy really means what it suggests" (22) it was not simply a matter of such prejudice. The ambiguousness of the eugenists was a genuine reflection of the ambiguity of their concepts. Nevertheless whether the natural selection argument was to be deployed in its full rigour, relaxed or even abandoned altogether the eugenists could not do without the support of another crucial concept, that of heredity. It was essential to have some notion of heredity, however vague, in order to sustain the idea of natural selection and additionally heredity might offer a firmer foundation for eugenic arguments. It is to the functioning of this concept that I now turn.

An essential part of any eugenic discourse is some means of characterising human qualities and their distribution in populations. These qualities are most obviously divisible into two kinds, physical and mental. Physical characteristics can be relatively easily measured and this partly explains Eugenics connections with and continued interest in anthropometry and physical anthropology. However such a demarcation was not always easily maintained and many of the mental categories were problematic (if not many of the physical ones as well (23). A number of different types of classificatory category were available. There were a wide variety of commonsense empirical estimates (24). There were psychiatric or quasi-psychiatric categories, some used officially (e.g. 'insane') to identify certain sections of the population, others in general, though not official, use such as 'feeble-minded' or 'moral defective'. Lastly the Eugenists themselves often referred to more general characteristics like "ability", "eminence", or 'civic worth". Any system of eugenics must of course be concerned with hereditary qualities. But there are two problems here - not to be confused: the problem of qualities and

the problem of their hereditary basis. For the Eugenists these two problems were both fused and solved in the designation, in what they supposed was Darwinian fashion, of fitness and unfitness. It is crucial then to investigate how these terms were delineated and ascribed.

These considerations imply a scale of generality on which individuals could be mapped. The terms fit and unfit would be at the highest level of generality. But at this level there arises a problem of the combination of characteristics. Fitness and unfitness could be defined in such a way that they aggregated 'good' and 'bad' qualities. It was often argued against eugenics that had its practices been enforced in the past many great figures in a wide range of fields would never have appeared. An editorial comment in the British Medical Journal expressed a common view, "Yet the world could more easily spare a regiment of eugenically perfect bumpkins than the neurotic 'degenerate' Algernon Charles Swinburne" (25). Long lists were compiled and fought over of those with tuberculosis, epilepsy and various other illnesses the Eugenists tended to consider hereditary - such lists included Alexander, Julius Caesar, Rousseau, Nietzsche, Maupassant, Chopin, Heine and Mill.

Clearly universally acclaimed individuals possessing some qualities which appeared to be fit and some which appeared to be unfit posed something of a problem for those who wished to see an increase in civic worth, defined by Crackanthorpe as "sound health, a sufficient amount of energy, a well-balanced brain" (26). That such individuals existed could hardly be denied. It was of course possible to deal with this in the rather cavalier way that Sir James Barr did with Robert Louis Stevenson, who, he affirmed, "was a beautiful writer, and many of his epigrams are very fine, but much of his writings will not bear analysis according to the hard rules of facts, and I am convinced that if he had not been phthisical he would have written much better and much more sanely (27). But this was really no solution. If the categories were to be retained and made to work they had to be shifted onto units where such contradictions were impossible. The resolution of this difficulty may be seen in Whetham's comment on a pedigree that, "This pedigree is also

interesting in that it illustrates the fallacy which lies in the common idea that great ability is often associated with unsoundness of body and mind. The truth is that ability and unsoundness usually enter a family from different sources and are transmitted independently of each other. Sometimes they chance to coincide in the same person, but more often they become seperated in different individuals"(28). Thus the argument brought to bear on this problem was that the qualities of an individual are an assemblage; what is important is not this assemblage as such but its sources in the stock - as Schiller put it: "It is clear, therefore, that the unit of heredity is not the individual but the stock: ability comes out in the individual because it lurks in the stock" (29). By definition the hereditary stocks cannot be both fit and unfit. The essential point is that the role of hereditary concepts was to make possible the transition from qualities to stocks at which level the categories 'fit' and 'unfit' could be brought to bear.

But the structure of the argument while requiring concepts of heredity did not necessarily specify which ones. There was at this time something of a plethora of concepts available (indeed in dispute) and the eugenists could hardly ignore these differences. In the words of one popular scientific journal, "At any rate, Biology today teams with mutually incongruous opinions (e.g. those held by Mendelian, Mutationists, Biometricians, Selectionists etc) all of which are conceivably incorrect" (30). The magic talisman by which they overcame all theoretical problems might be called the argument from the average. Possibly the most frequently occurring piece of rhetoric in the eugenic canon was a biblical text about thorns and thistles (31). The eugenists promoted the phrase 'like produces like' to the status of a general axiom illustrated in a variety of ways, the favourites being the successes of animal breeding and the display of pedigree showing a variety of conditions "running in families". As Sir James Barr put it, "If the same case were taken in the selection of human parents as there is in the breeding of the lower animals this country might be purified in less than a century" (32). The argument from the practice of breeding was especially useful as it seemed to deal simultaneously with the accusation made against the eugenists of insufficient knowledge. As Darwin said in his

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address to the first International Eugenics Congress, "If we tell the breeders of cattle that their knowledge of the laws of heredity is so imperfect that it is useless for them either to attempt to avoid breeding from their worst stocks or to try only to breed from their best stocks, why they would simply laugh at us" (33).

The effect of the concept of stock and the use of divers hereditary concepts to sustain it made it possible to talk in terms of the average. "..... Eugenics deals with averages rather than with individual cases. In the average the law of heredity works with practical certainty; and all race questions are questions of average" (34). This use of the term abolished at a stroke the difficulties of particular combinations of qualities among individuals and the difficulties of rival theories of heredity. "A moment's reflection suggests that the capriciousness is a question of the individual, and that, on taking a large number of cases we should expect to find definite laws holding good, as we do in other forms of life" (35).

Thus the Eugenists took up biological science in a somewhat opportunistic manner in that they drew on all concepts which could bolster the notion of stock. Where for example simply Mendelian categories fitted certain conditions (like eye-colour or brachydactyly) they were cited. In the case of more complex qualities there was a tendency to use statistical or commonsense modes of argument. Other pedigrees, those of mental defect for example, were discussed in terms of some notion of degeneration and the different forms this might take. All this was underpinned by the eugenists reading of Weisman's doctrine of the continuity of the germ-plasm. Thus Crackanthorpe, lecturing the Royal Commissioners on Divorce and Matrimonial Causes in elementary eugenics invoked the names of Weisman, J.A.Thomson, R.H.Lock, K.Pearson, Archdall Reid and A.Ploetz (36) with the comment that, "I do not say that all those authorities are agreed. They are not. But there is enough agreement among them to establish this proposition that insanity, feeble-mindedness, syphilis, tuberculosis and many other diseases (including eye defects) are inherited in the same way and to the same extent as are stature, ability and eye colour" (37). This quotation illustrates the points being made here.

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The authorities to whom Crackanthorpe referred worked in the fields of biology, medicine and statistics; what they were supposed to have demonstrated was in relation to clinical entities in very different stages of elaboration; and finally their work is compared with stature (a classic continuous trait worked on by Quetelet and Galton): ability, perhaps the most frequently discussed commonsense hereditary entity; and eye colour, one of the first human characteristics to which the Mendelian rules were found to apply.

Having sketched the use of the concept of heredity within the eugenic doctrine it is now appropriate to examine certain problems that grew up round that use since contradictions between different eugenists were not so much a matter of personal idiosyncracy as of unresolved problems built into the very tissues of the doctrine. The abstractness of the Eugenists' hereditarianism encouraged the attribution of hereditary components to almost any condition. As H.G.Wells drily commented one could have an hereditary components in the susceptibility of skulls to fracture by falling bricks (38). The example was barely a caricature as the Eugenists frequently made similarly vague remarks. Saleeby commented that, "We know by observation amongst ourselves that hardness and tenderness are to be found running through families, are things which are transmisible" (39) while Whetham observed that, "The arts of the demagogue, who possesses the power of influencing the masses, are also highly specialised qualities and will be inherited directly from father to son" (40).

Such an abstract position on heredity implied an equally abstract one on 'environment' which goes some way to explain the variety of models and analogies that the Eugenists employed. Whetham compared heredity and environment to capital and income. Heredity "may be compared to an actual gain of capital as far as the human race is concerned" while "environment involves a constant expenditure of income, perfectly justified as long as the increase in capital is maintained" (41). Saleeby throughout his writings used more 'scientific' terms calling for a multiplicative model of heredity to replace the aditive one (42). But the postulated rigour of the relation was belied by the absence of the terms. What was to be

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multiplied by what? These models and analogies were little more than a cover for, on the one hand, as has been shown, an abstract general notion of inheritance, and on the other hand a completely undifferentiated category of environment.

A second problem resulted from the opportunistic relations with biological science. It has been shown that the Eugenists tried to insist that difference amongst schools of biologists or scientists were generally unimportant. As Schiller put it, "For upon any biological theory it is an established fact that the hereditary constitution of a stock has an enormous bearing on the value of the individuals generated from it. And social institutions plainly ought to take account of this fact" (43). Despite this rhetoric the Eugenists had to deal with the difficult fact that the different practices to which they appealed - genetic, medical, statistical obstinately refused to submerge themselves in the general fact of inheritance. These practices all had their own dynamic: Mendelianism refused to accept that it could not explain continuous traits; medical practitioners insisted that they dealt with individual cases and not averages. Many doctors would have sympathised with Mercier's no doubt exaggerated comment that "neither biometms nor Mendelism is of the slightest value to the practi ing physician" (44). The Eugenists claim to scientific backing drew them into scientific controversies; their participation in such controversies.made their practical policies seem less convincing.

The analysis so far has suggested that the concepts of heredity and natural selection in the readings of the Eugenists were deployed in inconsistent or even contradictory ways and were thus the site of certain discursive problems. It has been suggested that eugenics oscillated in emphasis between these two concepts. The idea of such an oscillation can be extended to other features of British eugenic thought, namely the concern with the status of Eugenics itself and the problem of how much knowledge was required before eugenic intervention became possible.

The conventional definition of Eugenics was Galtons: "The study of agencies under social control that may improve or impair the racial

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qualities of future generations either physically or mentally", which, more prosaically, as Whetham pointed out, meant, "The study of heredity and its bearing on social problems" (45). Whatever else it was then clearly eugenists agreed that their doctrine had a scientific component and was concerned to promote a social practice. Professor Edgar called it "at once a cult and a practical policy" (46) Beyond that basic commitment differences emerged. The differences amounted to two versions of Eugenics, or at the very least two distinct emphases. Such a distinction is not immediately visible in the literature and was certainly never declared or proclaimed but it can be shown to be a defensible interpretation.

In the first version tending to emphasise heredity the unfit are those with a specific, objectively verifiable, characteristic whether it be disease, deafness, mental illness of some kind or whatever. The second step in this version is to establish the hereditary component in the characteristic and this again is done by reference to the appropriate practice, medicine, Mendelism or whatever. The third step is then to argue for the solution of this problem by limiting the reproduction of those affected. This is what might be called the less ambitious version. Something approaching it was taken by C.W. Saleeby who in his 1914 book listed as the foundations of Eugenics, genetics, the medical sciences, obstetrics (Dr. Saleeby was an obstetrician), dietetics, psychology, anthropology, sociology, civics, and statistics. Admittedly Saleeby was rather ecentric and insisted that Eugenics must have its own philosophy which he decided was Bergsonism (the book was dedicated to Bergson). No doubt he also had a certain penchant for the banal - in its new guise eugenics was now, "the practical application to human life, present and to come, of the eternal principles of morality, which have ever sought the ennoblement, enhancement and extension of life" (47). But behind the absurdity was a serious point. Saleeby had become increasingly disillusioned with the more sweeping statements of his fellow eugenists.

Others felt less dependent on specialist disciplines. They took the view, with Crackanthorpe, that eugenics was a branch of biology concerned with, "the investigation of racial qualities and their

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transmissibility from one generation to another" (48). Clearly certain activities of the eugenists like the investigation of pauperism (see chapter five) required the rationale that eugenists could investigate qualities, establish their hereditary basis and make judgements about fitness and unfitness. Nevertheless their position was not far removed from Saleeby's.

In the second, more ambitious, version one begins with the concept of natural selection and then everything else tends to follow. The fit and the unfit are identified by their social performance. This version has the virtue of being less dependent on outside theoretical support but has an intrinsic tendency, as has been shown, to require the use of some (hereditary) norms, if it was not to be entirely circular. It also laid the eugenists open to damaging charges of snobbery which made many eugenists, in Saleeby's words, "somewhat chary of predictions and proposals based upon the relative fertility of different classes of the Community" (49). The existence of these two versions may go some way to explain the emergence of a vigorous eugenics movement at the time when it occured (see appendix). While many of the arguments could have been, and were, derived from Darwinism forty years earlier what gave the idea a considerable boost was the new work in heredity. The various developments in psychology and sociology of the late 19th century and early 20th century (50) made it seem much more feasible than it had been to identify general qualities and to establish their hereditary basis. If it is generally agreed that the weak point in Darwinian theory had been its theory of inheritance then the solution of that weak point would make the overall structure of Darwinism that much more impressive. It was the combination of the axiomatic conviction of Darwinism with more viable notions of heredity which brought the Eugenics movement into the world.

The second question to be considered here is that of the degree of knowledge required to sanction eugenic intervention. There was as much confusion about eugenics as a social practice as there was about eugenics own status both a consequence of the two versions. There were on the one hand constant calls for more knowledge but on the other hand constant assertions that one could not wait until all

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doubts were dispelled; on the one hand insistence on the fact of inheritance, on the other hand limitations placed on the area of eugenic intervention due to lack of knowledge. The eugenists grappled with this in accordance with their particular bias. Those placing the emphasis on the natural selection version were, predictably enough, keen on fairly sweeping measures. Darwin argued that, "In the present state of our scientific knowledge it would be as well to begin by endeavouring to make it impossible for those who are not only characterised by some signal defect but who are also below the average both in bodily and in mental qualities, to reproduce their kind" (51) and Whetham in 1909 agreed that, "as far as legislation is concerned two problems are ready to be attacked: those of the feeble-minded and the able-bodied pauper" (52).

Other writers were rather more cautious. Schuster in 1912 (53) considered that only the care and control of the feeble-minded was acceptable. Other writers seem to have moved in his direction. Whetham by 1912 had drawn back to proposing action only for the feeble-minded and the "habitual offender of clearly criminal type" (54), while Saleeby who in 1909 had advocated dealing with the deaf and dumb the feeble-minded, the insane and the criminal, retreated considerably from that position. But such caution contrasted oddly with the tenor of their more general remarks. To a degree, playing the game of heredity and selection the eugenists could have their cake and eat it. The notion rang from end to end with their cries of biological doom - the catch words were 'deterioration', 'degeneration' and 'multiplication of the unfit' - yet there was no unanimity among them as to the rhythm or result of these processes but hysterical assessments of the present and both the immediate and long-term futures were a constant part of the eugenic scene. Schiller, referring to the heavy burden of taxation on the middle classes throughout the civilised world, assured eugenists that, "It means the degeneration of the European race. It may mean the collapse of civilisation" (55). Such statements informed most of the eugenic accounts of human history. "Although this suppression of the best blood of the country is a new disease in modern Europe, it is an old story in the history of nations, and has been the prelude to the ruin of states and the decline and fall of Empires" (56). In the

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contemporary world there was also the imperial dimension to be considered. "Even if we do no more than study the lunacy returns or compare the gaps and patches in the mouths of our young men and women with the brilliant white teeth of Arabs and Negroes a dread that we are a decadent people must cross our minds" (57). Nor were these solely long-term prognostications. Racial decline was actually going on, indeed gathering speed. "If present tendencies are unchecked the quality of the race must deteriorate with ever-increasing rapidity, till it approaches that of the lowest type among us" (58). The situation was all the more urgent as the quality of the race was the root of all other problems - "There is no wealth but life; and if the inherent quality of the life fails, neither battleships, nor libraries nor symphonies, nor Free Trade, nor Tariff Reform, nor anything else, will save a nation" (59).

- 1. Crackanthorpe (b) p.91
- 2. Whetham (a) p.162
- 3. Crackanthorpe (b)
- 4. Darwin (d) p.26
- 5. Whetham (g) $p_{.5}$
- 6. Whetham (c) p.4
- 7. Darwin (c) pp.6-7
- 8. W.R. Inge Some Moral Aspects of Eugenics (Eugenics Review 1 (1909-10) 26-36) p.30
- 9. The Child (1 (1910)) p.257
- 10. Inge ibid. p.31
- 11. Whetham (b) p.98
- 12. Whetham (a) p.7
- 13. Tredgold (b) p.77
- 14. Crackanthorpe (e) p.696
- 15. Mott Nature and Nurture in Mental Development (1914 John Murray) p.34
- 16. Whetham (a) p.208
- 17. Schiller (a) chapter 4
- 18. Whetham (i) p.65

- 19. Whetham (i) p.65 (Dean Inge thought that "the miners are physically at least, above the average of the whole population". (Edinburgh Review (1917) p.73)
- 20. Many years later Carr Saunders commented ruefully that "To many in those days eugenists seemed to be looking for pseudo-scientific reasons to find justifications for class differences".(Eugenics Review 50 (196) p.14
- 21. Charity Organisation Review XXX1 (1912) p.213
- 22. Saleeby (b) p.237
- 23. See for example the historical references in P.V. Tobias Brain size, Grey Matter and Race - Fact or Fiction? (Americal Journal of Physical Anthropology 32 (1970) 3-26)
- 24. The Pauper Investigation Committee of the Eugenics Society noted, "the prevalence of a type of people with low foreheads and uneasy shifting glances". See Whetham (g) p.41
- 25. British Medical Journal 22/11//1913 p.1401
- 26. Crackanthorpe (c) p.20
- 27. Journal Royal Instituțe of Public Health XIX (1911) p.708
- 28. Whetham (a) p.82
- 29. Schiller (b) p.54
- 30. Bedrock No.2 1912 An anonymous reviewer commented on contemporary biologists that, "their scientific discussions are of that amiable character to which we have been accustomed by temperance reformers holding forth on the subject of whisky and by women suffragists discoursing on men". (Edinburgh Review CCX111 (1911) p.96)

- 31. Ye shall know them by their fruits. Do men gather grapes of thorns or figs of thistles? Mathew 7, 16
- 32. Journal Royal Institute of Public Health X1X (1911) p.714
- 33. L. Darwin First International Eugenics Congress (1912) pub. EES p.5
- 34. Crackanthorpe (c) p.15
- 35. Whetham (a) p.35
- 36% For Ploetz see M. Weber on Race and Society (Social Research 38 (1971) 30-41)
- 37. Crackanthorpe (g) p.85
- 38. H.E.Wells Mankind in the Making (Leipzig: Bernherd Tauschnitz 1903) "If it was a common thing to adorn the parapets of homes in towns with piles of loose bricks, it is certain that a large number of persons not immune to fracture of the skull by falling bricks would be eliminated. A time would no doubt come when those with a specific liability to skull fracture would all be eliminated and the human cranium would have developed a practical immunity to damage from all sorts falling substances.....". (p.83) See also W.J. Hyde - The Socialism of H.G. Wells (Journal of the History of Ideas XVII (1956) 217-234)
- 39. Eugenics Review 1 (1909 1910) p.43
- 40. Whetham (i) p.144
- 41. Whetham (f) p.182
- 42. Saleeby (c) chapter V111
- 43. Schiller (a) p.201
- 44. C. Mercier Heredity and Inheritance as they concern the physician

(Lancet 8 Nov. 1913) p.1300. See also for comments on this issue S. Squire Sprigge - Mating and Medicine (Contemporary Review XCV1 (1909) 578-587

- 45. Whetham (g) $p_{\cdot}1$
- 46. Edgar Eugenics and Patriotism (E.E.S.n.d) p.4
- 47. Saleeby (h) p.41
- 48. Crackanthorpe (a) p.963
- 49. Saleeby (c) p.104
- 50. See for the background E. Sutherland The Magic of Measurement: Mental Testing and English Education 1900-40 (Transactions Royal Historical Society 27 (1977) pp.135-153) and the extremely interesting approach to this in N. Rose - The Psychological Complex: mental measurement and social administration (Ideology and Consciousness No.5 (1979) 5-68)
- 51. Darwin (d) p.33
- 52. Whetham (a) p.212
- 53. Schuster (c) p.251
- 54. Whetham (i) pp.154-5
- 55. Schiller (a) p.19
- 56. Whetham (a) pp.147-8
- 57. L. Darwin (a) p.373

58. Whetham (a) p.126

59. Saleeby (a) p.5

Chapter III - Appendix

Generally speaking the beginnings of the Eugenic movement were in the period 1906-8. Darwin's comment that, "Anyone who endeavours to recall to his mind the state of public opinion with regard to the science of Eugenics, say, ten years ago, must, I think, be struck with the magnitude of the change which has recently taken place in the esteem in which this subject is held" (1) is basically correct and is confirmed by hostile observers (2). There were of course eugenic ideas in Britain before this period - Greg has been mentioned (3) but they did not receive widespread attention until the dates I have suggested. This being the case the approach followed in this chapter was to work on a representative 'core' of eugenic writings. There is of course always an element of arbitrariness which I tried to overcome as much as possible in ways briefly described below.

The authors whose work was analysed fell naturally into three groups.

- A. Those who may be described as having 'posts of responsibility' within the movement i.e. were active in the Eugenic Education Society (EES) and in representations to official and private bodies on its behalf. Here I included M. Crackanthorpe (1832-1913). As second President of the Society he persuaded Galton to give it his blessing (4). His writings, insofar as I have been able to find them (and of course (his qualification applies throughout) were,
 - (a) eugenics as a social force (Nineteenth Century LXIII (1908)962-72)
 - (b) population and progress (Chapman & Hall 1907)
 - (c) the eugenic field (ER I (1909-10) 11-25)
 - (d) presidential address to E.E.S. (E.E.S. second annual report 1909-10)
 - (e) marriage, divorce and eugenics (Nineteenth Century LXVIII (1910) 686-702)
 - (f) the friends and foes of eugenics (Fortnightly Review XCII (1912) 740-748)
 - (g) evidence to the Royal Commission on Divorce and Matrimonial Causes (Parliamentary Papers 1912-3 XX 84-96)

Secondly in this section I included L. Darwin, Charles Darwin's fourth son. He was active in the Society for a long period, becoming President after Crackanthorpe until 1928 (5).

- (a) sociology and evolution (Charity Organisation Review XXVI (1909) 364-378)
- (b) presidential address to E.E.S. (E.E.S. third annual report 1911)
- (c) presidential address to E.E.S. fourth annual report (1909 10)
- (d) first steps towards eugenic reform (ER IV (1912-13) 26-38)
- (e) the eugenic ideal (ER V (1913-14) 2-9)
- (f) heredity and environment (ER V (1913-14) 153-4)
- (g) presidential address to E.E.S. (E.E.S. annual report 1913)
 (eugenics and the national economy)
- (h) presidential address to E.E.S. (E.E.S. annual report 1914)(eugenics during and after the war)
- (i) report of an address on practical eugenics (published 1914)

I had wanted to include in this section Mrs. S. Neville Rolfe (1886-1955) who played an important role in the formation of the Society, partially described in her book (6). She wrote very little however and therefore could not be included (7).

B. My second group includes individuals who are perhaps best described as bringing to eugenics a prestige gained elsewhere. Here I included F.C.S. Schiller (1864-1937), well known as a philosopher associated with pragmatism (8).

(a) eugenics and politics (Constable 1926)

(b) social decay and eugenical reform (Constable 1932) These two books are collections of essays. With one or two exceptions I have used only pre-1914 material from each.

Secondly in this section I included W.C.D. Whetham (1867-1952) initially a chemist and later a widely read historian of science. He left an autobiography (9).

- (a) the family and the nation (Longmans 1909)
- (b)) the extinction of the upper classes (Nineteenth Century LXVI (1909) 97-108)

- (c) eugenics and unemployment a lecture (Bowes & Bowes 1910)
- (d) heredity and parentage (Geo. Allen & Son 1910)
- (e) eminence and heredity (Nineteenth Century LXIX (1911) 818-32)
- (f) decadence and civilisation (Hibbert Journal X (1911-12)
 179-200)
- (g) an introduction to eugenics (Bowes & Bowes 1912)
- (h) eugenics and politics (ER II (1910-11) 242-246)
- (i) heredity and society (Longmans 1912)
- (j) inheritance and sociology (Nineteenth Century LXV (1909)
 74-90)

I had wanted to include in this section W.R. Inge (1860-1954) a well known commentator on religious and other topics, first as Lady Margaret Professor of Divinity at Cambridge then as Dean of St. Paul's (10). A consistent eugenics supporter until towards the end of his life. Again shortage of material precluded this.

- C. My third group contains those who were recognised by various publics as authorities on questions of central concern to eugenics and who were themselves eugenists.
 A.F. Tredgold (1870-1952). An authority in the field of mental deficiency and author of what was for many years the standard textbook in the field (11).
 - (a) eugenics and the future progress of man (ER III (1911-12) 94-117)
 - (b) marriage regulation and national family records (ER IV(1912-13) 74-90)
 - (c) the study of eugenics (Quarterly Review 217 (1912) 43-67)
 - (d) some medical aspects of eugenics (Medical Press (1912)
 110-112, 137-9)
 - (e) heredity and environment in relation to social reform(Quarterly Review 219 (1913) 364-383)

My second figure in this section is C.W. Saleeby (1878-1940). A prominent commentator on medical topics, referred to by Mrs. Neville Rolfe as the "stormy petrel" of the eugenics movement (12). A prolific writer and the author of an early textbook on eugenics. He was never on particularly good terms with the Society.

- (a) biology and history (pub. E.E.S. 1908)
- (b) the obstacles to eugenics (Sociological Review II (1909) 228-40)
- (c) parenthood and race-culture (Cassell 1909)
- (d) the methods of eugenics (Sociological Review III (1910) 277-86)
- (e) the methods of race regeneration (Cassell 1911)
- (f) eugenics and public health (Journal of State Medicine XXI
 (1913) 440-445)
- (g) the first decade of modern eugenics (Sociological Review VII (1914) 126-39)
- (h) the progress of eugenics (Cassell 1914)

The third writer here is E.H.J. Schuster (1879-1969). One of the less flamboyant eugenists and one of the first members of Pearson's Eugenics Laboratory (13).

- (a) the methods and results of the Galton Laboratory for national eugenics (ER III (1911-12) 10-24)
- (b) the scope of the science of eugenics (BMJ (1913) 273-5)
- (c) eugenics (Collins 1912)

I had wanted to include in this section E.J. Lidbetter (1878-1962) a Poor Law relieving officer whose research was consistently backed by the society when it was financially able but he wrote almost exclusively on pauperism (14).

These writings formed the basic material for the purpose of analysing the Eugenic doctrine but of course I used (and quoted) other material where it was appropriate. In order to reduce the arbitrary element a little I would make the following points about the seven individuals I have selected. They all wrote in the first five volumes of the Eugenics Review (i.e. those before the Great War), indeed they dominated it. Four of them gave Galton lectures (Schiller 1925, Tredgold 1927, Darwin 1928, Lidbetter 1932), one of the Society's most important annual events and the dates of these lectures give evidence of their long standing commitment to the cause. All of them were involved in the firt International Eugenics Congress held in London in 1912 and an important point in the movement's growth. Lastly the material covered (the 'core') exhibits a wide range of sophistication and was addressed to the most diverse audiences including government enquiries, upper class and university gatherings medical students and various reform organisations. I end on a lightly less serious but perplexing note. The attentive reader will have noticed the longevity of the figures mentioned. The average age of the ten was 81.3, that of the seven whose writings are listed just under 80. Perhaps eugenics has some benefits after all.

Appendix - FOOTNOTES

- (1) Eugenics and the national economy (pub. E.E.S. 1913)
- (2) See e.g. G.K. Chesterton Eugenics and other evils (Cassell 1922)
- (3) Galton of course but also W.R. Greg Enigmas of Life (1891 Kegan Paul - I have used the eighteenth edition, the book was first published in 1872) pp.89-133. Greg commented on Galton that he had, "followed the same line of thought as myself, though both, till after the publication of our respective publications were unacquainted with the other's writings". op.cit. pp.114-5 for other examples see the lead article in the Lancet (22/12/1860) pp.619-20 and H. Campbell - The Marriage of the Unfit (Lancet 10/9/1898 678-681)
- (4) Obituary ER V (1912-3) 352
- (5) Obituary ER 34 (1942-3) 109. See also M. Keynes-Leonard Darwin 1850-1943 (privately published)
- $\langle . \rangle$
- (6) Social Biology and Welfare (Allen & Unwin 1949)
- (7) Obituary ER 47 (1955-6) 149 and 214
- (8) According to Passmore the "most important" supporter of W. James(A hundred years of philosophy Penguin edition p.112)
- (9) Cambridge and elsewhere (John Murray 1950). See also DNB 1951-60 pp.282-3; Obituary notices of Fellows of the Royal Society vol. 9 pp.55-63
- (10) Diary of a Dean (Hutchinson n.d.)
- (11) A textbook of Mental Deficiency (Balliere, Tindall & Cox 1908)

(12) op.cit. p.18

- (13) See W.D.M. Paton and C.G. Phillips E.H.J. Schuster 1879-1969
 (Notes and Records of the Royal Society 28 (1973) 111-117)
- (14) Obituary ER 54 (1962-3) 191

Chapter IV - THE EUGENIC SOLUTION AND CONTEMPORARY CRITICISM

"The notion of heredity tickles the modern imagination in much the same way as the notion of the devil tickled the imagination of medieval men. There is something fearsome and fascinating about it". F.H. Hayward

What solutions could the Eugenists offer to stave off the impending racial disasters? "we are safe in supposing that we shall tend to improve the average ability and beauty of the race by encouraging the growth of families in which these qualities are manifest, and discouraging those in which they are deficient. Whether our knowledge eventually becomes more exact, or whether we find the complete analysis of the problem for ever too difficult for solution the general fact of inheritance remains".(1). Such answers while heartrendingly obvious in principle proved irritatingly obscure in practice. No doubt science-based pressure groups have special problems to contend with. Their mastery of the relevant fields of knowledge may be deficient, leaving them open to attack by superior, or at least opposed expertise. Scientific work and scientific conclusions are seldom static and are ill-suited to the exigencies of ideological and political debate. Consequently the strategy and tactics of the eugenics movement was at least as complex a business as its theoretical and ideological foundations.

A central distinction here, again following Galton, was that between positive and negative eugenics (2). The designation of qualities, the fact of inheritance and the dynamic factors of selection over time implied the existence of two general groups, the fit and unfit. The available alternatives for action were to use 'positive' measures to increase the number of the fit and 'negative' measures to decrease the number of the unfit, and indeed most measures proposed by the eugenists could be placed in one or other of these categories.

However logical simplicity was balanced by a luxuriant profusion of eugenic remedies all of which at one time or another have had their advocates: Dean Inge, for example, demanded "compulsory national uniform for both sexes" (3) while Dr. Saleeby (in 1914) considered the Boy Scout Movement, "the greatest step towards the progress of Eugenics since 1909" (4). Other measures included registers of defective adults, sex education, eugenic scholarships, health declarations, a variety of changes in the marriage laws, eugenic garden cities, the segregation of certain sections of the population, changes in the tax structure, eugenic colonies, manipulation of the education system and so on. By various forms of reasoning it was possible to link eugenics with rather more bizarre practices likely to disturb the English middle-class mind e.g. polygamy or nudism so much so that the 'official' Eugenics movement felt compelled to warn about the dangers of cranks within its own ranks (5).

The reasons for this proliferation of solutions are not hard to find. All the proposals involved two types of problems. Firstly what might be called the problems of the solution that is all those problems that a particular policy might have other than the practical ones of implementing it. This kind of problem is discussed in subsequent chapters. The second type of problems were those of implementation. The various obstacles invariably had their roots in public opinion, and many eugenic solutions, particularly those of the negative variety, had common features of which undoubtedly the most conspicuous was the question of the role of the state and therefore of compulsion. For convenience the problems of implementation and the question of public opinion may be separated into moral and practical terrains of debate. This term is simply intended to designate the given set of ideas and practices generally felt to be relevant to a particular policy issue or the framework of thought felt to be appropriate.

On the moral terrain the eugenists faced tremendous difficulties not helped, as Darwin plaintively observed, by the fact that, "the more thoughtful classes stand so much aloof and give us so little encouragement" (6). There is no doubt that the Eugenists felt let down by those who should have been their natural supporters. "Why do so many men of the highest intellectual eminence, including not a few of the leaders of science - biological and medical - and of social reform, look upon the cause of eugenics with ironical cynicism, patronising tolerance or at best reluctant and tepid sympathy?" (7).

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To a large extent this was perhaps because Britain before the first world war thought the issues of life, marriage, disease and death within a framework of Christianity. Eugenics could be profoundly subversive of Christianity and could be seen to have connections with doctrines such as that of Nietzsche that would be found obnoxious by respectable opinion (8). Even shorn of Nietzschean themes (which Saleeby once dramatically referred to as "The order of the beast" (9)) it was difficult to disguise the fact that eugenics was aggressively secular in tone. The function of procreation was the production of healthy fit specimens, not in obedi**eve** to some mystical values but according to the dictates of natural laws. Nor did this involve, as a corollary, in any logical way, the institution of marriage - indeed quite the reverse in that partners might later become biologically incompatible which would imply that such marriage ties should be broken (10).

The Eugenists were aware of this. "The Eugenics Education Society claims, by spreading knowledge of the law of life, to be an essentially moral agency and it is not to be deterred from the task before it because its methods are in some quarters denounced as *materialistic *"(11). It was vitally important for them to downgrade these implications of their doctrine and be seen not to commit themselves to anything subversive of morality as that was conventionally understood. Time and again the representatives of eugenic opinion strove to make it clear that they were not a threat to morality. Crackanthorpe argued that eugenists could have nothing to do with "any policy that tends to sunder family ties or to impair family responsibility" (12). Darwin assured numerous audiences that one could not advocate disease as a selective agent (because of the suffering involved) (13), that the sacredness of marriage could overrule eugenic considerations (14) and that eugenic practice must never run counter to religious belief (15).

Aside from Christianity's quite precise views on questions such as marriage the eugenists also faced a more diffuse ideology containing both Christian elements (charity, poverty as a virtue, helping one's fellow man etc.) and secular ones drawn from liberalism and individualism, as the eugenists themselves were well aware. "His

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(Galton[•]s) great work, Hereditary Genius published in 1869, marks an epoch in the evolution of sociology, though the prevailing individualist philosophy prevented it from receiving adequate recognition till recent years" (16). Again, logically speaking, nothing could be more incompatible with the implications of eugenics which were all in the direction of the ruthless elimination of the unfit as a threat to the future well-being of the race. The eugenists did not want to be seen attacking these other aspects of conventional morality. War for example might be extremely dysgenic (and it's surely difficult to see the First World War as anything else) and yet the duties of patriotism and associated values might well have an overriding priority - "Moreover the eugenist must always give due weight to immediate consequences, as, for example, to the moral damage inevitably experienced by a nation when refusing to help a friendly power through fear of the consequences which might result from intervention" (17). Saleeby rebuked Shaw for suggesting drastic changes in the family structure to further eugenic objectives (18) while Schuster pointed out to a medical audience "I take the opportunity of stating most emphatically that eugenists are not antagonistic to medical science even if it does lead to the prolongation of good-for-nothing lives" (19).

On the more practical terrain the eugenists were not unaware that what they had to offer might appear more desirable if it could be used to achieve less esoteric ends of which the favourite was reduced public expenditure and taxation. Frequent attempts were made to estimate the total costs of 'degenerates'. An example of such attempts appeared in a book which made a considerable stir at the time, R.R. Rentoul's Race Culture; or, Race Suicide? published in 1906 (20). The author was a doctor, gave evidence to several Royal Commissions and was known in eugenic circles. Sir James Barr referred to him at the 1907 Royal Institute of Public Health Congress in the following terms: "Although I believe that the degenerates are not so prolific as Dr. Rentoul asserts, and that there is a tendency for such to die out, yet I quite agree with him that they work an enormous amount of mischief before they die out and his methods to prevent them from propagating their kind are important steps in the right direction"(21). Rentoul, trying to estimate a total for

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degenerates gave the following figures: 60,721 - "publicly recognised idiots, imbecile and feeble-minded"; 117,272 - lunatics; 23,244 criminals; 9,822 - deaf and dumb from childhood; 60,000 - prostitutes; 67,187 - epileptics; 88,347 - backward children; 18,247 - habitual vagrants, "all engaged in breeding degenerates" (22).

Many of these kinds of calculations were produced and while the eugenists do not appear to have been particularly concerned with the actual sums involved they imagined that they formed useful propaganda for the eugenic case. As Saleeby put it, "Segregation of defectives is condemned as expensive. They are a hundredfold more expensive, to the present and future as they are. No other reform can be named which should be so grateful at once to those who worship life and those who worship gold" (23). Before upper class audiences Darwin decried the burden of social welfare expenditure and most eugenic commentators felt that the distribution of taxation was dysgenic, "the fiscal system now in force in England is obviously capable of improvement with reference to the aims we have in view" (24).

Complementary to this strategy of hitching Eugenics to other goals was the reverse of hitching other goals to Eugenics. A development that will serve as an example of the second strategy is the beginnings of a more rational attitude to sexuality. Indeed many contemporaries saw close links between this and eugenics (25) (quite rightly, though doubtless there were other factors). The eugenists were ambiguous about this. On the one hand they had natural affinities with a more rational approach to sexuality and reproduction yet on the other they were clearly frightened of its explosive implications. A widely discussed question of the time was sex education or sexhygiene as it was then called. The EES organised a conference on this in 1913 which was addressed by Darwin. In such contexts the eugenists resolved these ambiguities in the direction of conservatism and a narrow "scientific" attitude towards this whole set of issues, of which the following is a typical (if somewhat simpering) example. "It is so easy to interest little people in the mysteries of botany, and with that foundation everything can be kept pretty, poetic and charming, yet true to nature, while the children¹s minds are led along the lines that will finally result in their acceptance of the

great truths of heredity and eugenics" (26). The intention then was clear. The contemporary interest in sex education was to be given a eugenic content and so eventually help to form eugenic habits of mind in future generations.

Finally in order to examine the problems encountered on both terrains and clearly show their interrelationships I want to examine in detail a single text, namely Crackanthorpe's evidence to the Royal Commission on Divorce and Matrimonial Causes (27). Early on in his evidence Crackanthorpe stated the core of the eugenic position. "The eugenic position with regard to all the above defects is, I repeat, that when before marriage any of these defects are known to be present in either of the parties, the marriage ought not to take place, and that if it has taken place and the wife is not past childbearing it ought to be dissoluble at the instance of the untainted, unblemished party. Hence, too, it follows that a husband or wife who is divorced on any of the above grounds should be debarred from marrying again, otherwise the mischief, instead of being extinguished (so far as it can be extinguished by law), might break out afresh in a new quarter" (28). Clearly this assessemnt of a human institution on eugenic grounds necessarily involves a clash, however delicately phrased, with traditional Christian doctrine -"The doctrine that, once it has been solemnised by the Church, marriage is indissoluble, appears to the eugenists to be, even on biblical principles, irreligious, because inimical to the welfare of humanity, since man ^{*}having been made in the image of God^{*}, humanity is of all divine institutions by far the best and the highest" (29). But on the other hand the institution of marriage is accepted as given. The position taken here then is that marriage must be made more eugenic. This does not follow logically from eugenics but it would tend to follow from a recognition of the durability of certain human institutions. The position taken is a not unintelligent compromise between eugenic principles and social facts.

Nevertheless it will be seen that the position as stated has certain problems, particularly insofar as it makes no distinction between procreation and marriage and the implications of this equation of the two came out in the Commissioners' interrogation. A second feature

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of Crackanthorpe's position is that it is nored the whole question of sexuality and this again emerged later in the questioning.

The first of Crackanthorpe's objectives was the prevention of non-eugenic marriages to be effected primarily by means of a system of health certificates. Even given the implementation of this measure (i.e. ignoring what has been called problems of implementation) the Commissioners raised two very obvious objections both of which turn on the failure to distinguish marriage and procreation. The first point to be raised was in the form of a question about illegitimacy.

"The effect of such a certificate might be to throw on the world more illegitimate children, who would have less chance of being well looked after than legitimate ones?" - "That is perfectly true".

"Is not that so? - Yes. There is a great deal to be said on that; it is an argument but not a dominant argument, because I think the other is the stronger. You cannot make any change without some disadvantage" (30).

The point here was quite a simple one. If "unhealthy" people were prevented from marrying they would simply have more children outside marriage, not stop having children - which was the intention of any eugenic measure. Crackanthorpe's answer was to resort to a device he often used in a tight spot. "I am not formulating an Act of Parliament; you would not expect me to do it" (31). Crackanthorpe's solution was not logical because it did not solve his own problem.

The issue arose later in circumstances in which one of the Commissioners voiced the logical extension of the idea of health certificates if they are to have more than propagandistic value.

"In order to carry out your views, would not segregation be the necessary result with the unfit, looking to this, that preventing their marriage does not prevent reproduction by them? - The whole of the class of the unfit could not be dealt with by segregation. The feeble-minded, who are a class of the unfit, could be. It involves that necessarily, as far as practicable? - Certainly, but public opinion will do a great deal without legislative segregation" (32).

The same Commissioner also raised fundamental questions in relation to the practicability of Crackanthorpe^{*}s proposal.

"Has it not been found in every age, race, and country, impracticable? - I do not think so. What was impracticable in one age may be practicable in another. It depends upon the scientific knowledge of the time" (33).

Again Crackanthorpe's answer relies heavily on an abstract appeal to 'public opinion' influenced by modern science.

The second of Crackanthorpe's eugenic objectives and again it is quite logical, was that if marriages are seen to be dysgenic they should be dissoluble on eugenic grounds. This proposal was necessarily linked to Crackanthorpe's third main proposal, namely, that given dissolubility of marriage on eugenic grounds the tainted party should be prevented from remarrying. There were two exchanges on these points between Crackanthorpe and Sir Lewis Dibdin the only one of the Commissioners to really critically probe Crackanthorpe's position.

"I want to ask you a practical question. Supposing that divorce takes place, you have a man in the prime of life with tubercular taint, but perfectly well. How are you going to prevent that man getting another family? How can you prevent his setting up another establishment? - By creating such a sound public opinion that no man would dare to do it. I rely upon public opinion. We are all governed by public opinion, and a man will no more do that than pick a man⁹s pocket at his club" (34)

As well as questioning Crackanthorpe^{*}s failure to distinguish procreation and the institution of marriage Dibdin brings out more clearly the other undiscussed factor, namely sexuality.

"The whole of this inquiry about the enlargement of divorce has at the back of it the natural craving of the human being for sexual relations - put it how you like? - It assumes that" (35).

Once Crackanthorpe agrees Dibdin forces him to concede that the problem is whether "the natural craving of the sex can be dealt with

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without the evil of getting children", forcing Crackanthorpe to concede one of the logical solutions - "One way is sterilisation, asexualisation" (36) but he does not actually recommend it. Because he will not recommend it he tries to revert to his public opinion solution, the exchange ending as follows.

"Are you not attributing to that man a perfectly unusual amount of heroism? In the circumstance I put to you, he has been divorced on account of the taint which has not become active? - With great respect, I think not. I am attributing to him that cowardice which will not face public opinion on a vital question" (37).

Having described the eugenic doctrine in some detail it remains to cast a briefer glance at its contemporary reception. This will focus firstly on contemporary critical comment and secondly take a closer look at a debate amongst eugenists themselves about their problems and difficulties, providing an opportunity for a partial check on my characterisation of eugenics.

Not surprisingly contemporary criticism focussed largely round the difficulties already indicated (though it did not examine so intently the nature of the relationship between Eugenics and Darwinism). Two groups of issues seem to have struck contemporaries as particularly significant. The first concerned what has been called the problem of qualities and the associated notion of breeding for certain qualities. The second group of issues was that of concepts and theories of heredity and the associated questions of what constituted sufficient knowledge to act eugenically. With reference to the question of qualities critics singled out four problematic questions. Firstly, what characteristics were the eugenists trying to create more of? Secondly was it possible to refer to unambiguous characteristics in the conceptual sense? Thirdly was it possible in the practical sense? And fourthly how could these qualities be achieved?

It was an easy point to make against the Eugenists that there were serious problems about what points to go for. Wells among others showed the contrast between the cattle breeder and the eugenist: "We are, as a matter of fact, not a bit clear what points to breed for and what points to breed out" (38). This problem was not resolved, as we have seen the eugenists tried to do, by reference to general

qualities like "health" or "ability". The more astute critics of the time seized on the difficulties here. "Are such "characters" as, for instance, "ability" or "probity", really indications of "stock" qualities? Are they germinal and transmissible or acquired?" (39). Aside from questions of stock the labels themselves were open to question - "By giving a name like "conscientiousness" to a series of subtle and complex phenomena we do not establish the existence of a "unit character" amenable to statistics" (40). Even assuming these theoretical difficulties could be resolved, "we are scarcely more certain that the condition of "perfect health" in one human being is the same as the similarly named condition in another, than we are that the beauty of one type is made of the same essential elements as the beauty of another" (41).

The conceptual difficulties were compounded by a number of practical ones. An anonymous reviewer pointed out that "we must remember that a quality once bred out of existence can never by any possible measure be recovered, and that if some extinguished character were afterwards found to have correlated with it some other unperceived character of great or vital advantage, that character could never again be acquired by humanity" (42). This general problem of the linkage between qualities was frequently seized on - "your energetic person may be moral or immoral, an unqualified egotist or as public spirited as an ant, same or a raving lunatic" (43). And contemporaries were concerned almost to the point of obsession with the problem of genius. Sir Clifford Allbut became almost lyrical - "We cannot tell where genius may come; out of Maiden Lane perchance, or an ostler's yard; it is no appanage of rank or wealth, it comes as it lists; indeed by too much system we may trample it under jog-trot conformity" (44). Not only did it seem that people could possess good and bad qualities as Wells had argued, but it did not seem necessarily to be associated with the higher stocks, taken to mean the higher classes. As F.H. Hayward put it, "there are plenty of "geniuses" travelling in workmen's trams every morning" (45).

With all these difficulties the critics of eugenics were doubtful of

achieving any beneficial results, particularly not by the methods in any way analogous to breeding. As Kenrick put it, "No doubt the eugenist would like to be able to say that the object of Eugenics is to produce a race of physically, mentally and morally perfect men and women. If so, his problem is infinitely more difficult than that of producing the dual purpose cow - a problem as yet unsolved by the cattle breeder" (46). Most of these criticisms of course tended to apply more to projects of positive eugenics rather than negative eugenics. If it was very difficult to say what one wanted to breed for it was much easier to say what one wanted to breed out.

The second group of issues which attracted most critical comment was the question of the sufficiency of knowledge for eugenic action. It has been shown that amongst the eugenists themselves there were doubts on this and again, not surprisingly, their critics seized on this weakness. It was not difficult for the layman to appreciate that there were disputes and controversies amongst the scientific community often of a vehement indeed vitriolic nature. As an anonymous reviewer put it the biologists¹ "scientific discussions are of that amiable character to which we have been accustomed by termperance reformers holding forth on the subject of whisky, and by women suffragists discoursing on men" (47). Though in practice most of the leading representatives of genetic science showed some kind of acceptance of eugenics (48) their theoretical disputes and arguments (49) made it easier for the critics to dismiss specific eugenic measures on the basis of inadequate knowledge. As G.K. Chesterton argued, "I simply cannot conceive any responsible person proposing to legislate on our broken knowledge and bottomless ignorance of heredity" (50).

This last point in particular but all the points so far discussed were raised in a sophisticated way amongst Eugenists themselves in a response to an article by A. Carr-Saunders (51). This article and the replies to it (52) concerned fundamental principles, involved major figures in the eugenics movement and occurred at the peak of eugenic discussion and debate. It therefore provides the opportunity of examining a small amount of material indicating not only how the leading members saw the key issues and difficulties but

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whether the analysis proposed in Chapter III has any validity.

Carr-Saunders divided his assessment of eugenics into three main sections within which he raised a number of issues. Firstly he examined its biological foundations in which he included (a) the mode of inheritance, (b) the question of the relative effects of heredity and environment, and (c) the mode of operation of selection. Secondly he posed the questions as to whether it was possible to estimate what inherited qualities there were in a population and if so whether it was possible to encourage some and discourage others. Thirdly given the possibility of an affirmative answer to the preceding questions he asked whether (a) the successful stocks (in a situation of equal environment) would be the most valuable and (b) whether an increase in the stocks possessing these qualities would be a net gain. It is clear that Carr-Saunders was raising major issues and that his disclaimers notwithstanding (53) they were linked.

As far as the practicability of the eugenic project is concerned the central questions are those under Carr-Saunders[®] second heading. As has been argued above there are serious difficulties with the characterisation of qualities. Carr-Saunders^{*} position threatens the viability of any eugenics. "Of all the qualities here mentioned (referring to a statement by Galton) supposing them for the moment to be inherited, not one, with the possible exception of ability, is sufficiently definite to enable us to define and mark off the stocks which possess it" (54). The problem named in this quotation is the transition from qualities to stocks, which, it has been suggested, was ensured by the various concepts of heredity. In Carr-Saunders[®] position the transition could not be made because limits and conditions are imposed on hereditarian concepts such that they cannot perform their normal function within the eugenic argument, the conditions being that the question of the relative influence of heredity and environment could only be solved if one or other of the factors is suppressed. He questions the validity of biometric correlation coefficients as a technique for assessing the relative influence of heredity and environment. There can be no hereditarian principle in general, or, insofar as there is (55), nothing can be derived from it (56).

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The second major issues raised by Carr-Saunders is "whether, even if we can estimate with sufficient accuracy their (i.e. qualities) nature and quality it is possible to encourage some and discourage others" (57). This clearly demands some position be taken on how the existing distribution is effected given that one wishes to interfere. Here I have suggested that the question of distribution is handled by eugenics' concepts of natural selection. Using the analogy of a race Carr-Saunders argues that the idea that the social structure is the result of open competition and therefore that the competitors final places in it are even indicative of any endowment is untenable. What in fact takes place, he says, is a series of distinct races which, because they are run at the same time, give the illusion of being the same race. At its simplest Carr-Saunders' position amounted to saying that there was intra-class but not inter-class competition.

But even conceding that the competitors begin on a basis of equality Carr-Saunders registers considerable doubt about the eugenic thesis firstly on the grounds of the massive handicaps bearing on a large section of the population (drawing here on the researches of Booth, Rowntree and Bowley) and secondly on the grounds that what information was available (he refers for example to the experience of the WEA) on the intellectual ability of the lower classes indicated that these classes were not in any way intellectually inferior to their social superiors.

What could be expected on the basis of my sketch of the eugenic doctrine as a eugenic reply to these fundamental criticisms? While the question of the definiteness of the qualities could be conceded it would be imperative that the general principle of heredity be renewed. The significance of the problem of particular concepts of heredity would have to be denied and a general consensus reasserted. Secondly the process of selection would have to be ratained both in terms of its explanatory role in the differentiation of stocks and as that from which the necessity of a eugenic programme could be deduced.

Carr-Saunders⁹ criticisms were answered by both Darwin and Schiller

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and their major points seem to fit the requirements. The point which Darwin plays for all it is worth is the question of sufficiency of knowledge. I have argued above that the problem of what constitutes sufficient knowledge for intervention is an effect of the eugenists' utilisation of the concepts of heredity. Rather than confront the gross deficiencies Carr-Saunders pinpoints, Darwin attacks the form of his argument i.e. that it demands perfect knowledge which is never available. The answer has a superficial conviction which evades the question of how much knowledge and what kind. This abstractness is replicated vis-a-vis the heredity/ environment problem. The 'importance' of environment is conceded but since heredity is 'also' important social reform based on the latter still have a raison d'etre - but Carr-Saunders' problem was precisely one of the combination.

Darwin's other main argument seeks to retain the notion of the natural selection as the connecting process between stocks and social groups i.e. he argues that there has been a weeding out of elements of the rich and promotion of elements of the poor. This very promotion is an important part of the eugenic case because if the able stocks among the poor are promoted to higher social status as an effect of which they cut their birth rate then the eugenic argument is reinforced.

On both points Schiller follows Darwin. Again the argument takes the form of general assertions about heredity and natural selection -"there is no biologist who denies the enormous difference between a good and a bad inheritance"; "whether or not we hold natural selection is all powerful, there is no denying that it occurs" (58). Given this the specific biological debates are of no importance. As a corollary at the level of social practice we know enough to experiment and again the perfect knowledge point is played. There are almost bizarre inconsistencies. In this version of eugenics Schiller concludes that "for eugenics to exercise any appreciable influence over the fortunes of humanity will most probably take centuries" (59) - this from the man forecasting elsewhere the impending degeneration of the European race (60). Finally the biological model of social mobility is retained - "a large

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proportion, therefore, of the ability in existence forces its way into the higher ranks" (61). What has been illustrated in this Chapter is the almost painful contrast between the surface plausibility of the eugenic ideal and the almost insuperable perils and obstacles in the way of practical action. The Eugenists, labouring hard to translate their ideal into reality, seem to have had two different feelings towards their reception by public opinion. On the one hand there was a resigned acceptance that the main instrument of change was an educated public opinion - "the most important task before the apostle of eugenics is the dissemination of the eugenic ideal" (62) - on the other hand there were periodic outbursts of rage at the public's failure to move and the positively glacial rate of change that resulted. Nevertheless the Eugenists might expect to get more support if they would bring their doctrine to bear, in a useful way, on some of the great social questions of the day and it is to an examination of this effort that Part II is devoted.

Chapter 1V - FOOTNOTES

- 1. Whetham (a) p.75
- 2. Crackanthorpe proposed a different usage, namely restrictive and constructive eugenics (Crackanthorpe d) Other authors quarrelled with the terminology but it seems to have stuck.
- 3. W.R. Inge Outspoken Essays (Longmans 1927) pp.29-30
- 4. Saleeby (h) p.84
- 5. Darwin (g) p.4
- 6. Darwin (g) p.2 Sir James Barr, speaking of the medical profession, agreed: "Unfortunately the medical profession had been so permeated with Lamarckian ideas and so engrossed with environment that its efforts had been almost entirely devoted to the present generation without proper regard for the future". BMJ (1913) p.230
- 7. J.A. Lindsay The Case For and Against Eugenics (Nineteenth Century 72 (1912) 546-555) p.546
- 8. For the Eugenic interest in Nietzsche see M.A.Mugge Eugenics and the Superman (Eugenics Review 1 (1909-10) 184-93
- 9. Saleeby (c) p.28
- 10. Crackanthorpe (c) p.24
- 11. As Schiller put it, the average objector hearing the word eugenics thought of stud farms (Schiller (a)) p.214
- 12. Crackanthorpe (d) p.11

13. Darwin (b) p.6

- 14. ibid p.15. And he had authoritative support for this. Cf. Inge's remark that, "Christian ethics can make no terms with any scheme of scientific race culture which would destroy the sanctity of marriage". (ER 1 (1909/10) p.35)
- 15. ".... and I am certain that we shall agree that in our conduct we must never run counter to the dictates of our religion". (Darwin (i)) pp.3-4
- 16. Whetham (a) p.75
- 17. Darwin (h) p.5
- 18. Saleeby (c) p.223
- 19. Schuster (b) p.223
- 20. R.R. Rentoul Race Culture, or Race Suicide? (Walter Scott Pub. Co. 1906)
- 21. Sir J. Barr Preventive Medicine, the medicine of the future -Journal Royal Institute of Public Health (XV (1907) 513-534) p.520
- 22. Rentoul op. cit. p.9
- 23. Saleeby (b) p.236
- 24. Darwin (b) p.15

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25. "One redeeming feature of the ventilation which sexual matters have received of late years is a partial blowing away of the mists of ignorance, prejudice and superstition which made anything like a rational philosophy of the reproductive process impossible". E.B. Sherlock - The -Feeble-Minded (Macmillan 1911) p.195

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- 26. A. Tweedie- Eugenics (Fortnightly Review 91 (1912)) p.858 For another example of trying to link other goals to eugenics see the discussion in A.C. Gotto - The Relation of Eugenic Education to Public Health (Journal State Medicine XX1 (1913) 623-631
- 27. Crackanthorpe (g)
- 28. op.cit p.85
- 29. op.cit p.85
- 30. op.cit p.90
- 31. op.cit p.87
- 32. op.cit p.92
- 33. op.cit pp.91-2
- 34. op.cit p.93
- 35. op.cit p.93
- 36. op.cit p.94
- 37. op.cit p.95
- 38. Wells op.cit p.59. G.K. Chesterton called Wells the "Eugenist who destroyed Eugenics" Eugenics and Other Evils (Cassell 1927)p.70
- 39. H.B. Donkin Harveian Oration 1910 p.26
- 40. F.H.Hayward Education and the Heredity Spectre (Watts & Co 1908) p.136

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41. Wells op.cit p.69

42. Edinburgh Review CCXIII (1911) p.123

- 43. Wells op.cit. p.67
- 44. N.C.P.D. (P.S.King 1911) p.58
- 45. Hayward op.cit. p.46
- 46. K.L.Kenrick (The British Review VII (1914) 64-81) pp.69-70.For other sceptical discussions see H.S.Shelton - Eugenics (Contemorary Review 101 (1912):84-95); S.Low - Darwinism and Politics (Fortnightly Review LXXXVI (1909) 519-532); idem - Is our civilisation dying? (Fortnightly Review 93 (1913) 627-39); L.T.Hobhouse - The Value and Limitations of Eugenics (Sociological Review 4 (1911) 281-32); G.Benson - Socialism and Neo-Darwinism (Socialist Review 11 (1913) 228-34). This is by no means an exhaustive list.Critics seem rarely to have questioned the Eugenists statistics. One who did was J.M.McCabe - Is Civilisation in Danger? (Hibbert Journal 10 (1912) 599-614. There was large literature supporting Eugenics of course, much of which is discussed in following chapters.But for example, E.B. Iwan-Muller - The Cult of the Unfit (Fortnightly Review LXXXVI (1909) 207-222); J.Harris - The Degenerates (Westminster Review 177 (1912) 624-6); H.J.Laski - The Scope of Eugenics (Westminster Review 174 (1910) 24-34); W.J.H.Sinclair - The Unfit (Glasgow Medical Journal 75 (1911) 1-15); A.White - The views of Vanoc (Kegan Paul 1911).For a different angle see L.J.Henkin - Darwinism in the English Novel 1860-1910 (N.Y.: Russell and Russell 1963).
- 47. Edinburgh Review CCXIII (1911) p.96
- 48. Among the geneticists proper for example see L.Doncaster Heredity in the light of Recent Research (Cambridge University Press 1910) p.50,p.110,p.114; RH.Lock - Recent Progress in the study of Variation, Heredity and Evolution (John Murray 1920) p.286 and p.290; R.C.Punnett - Mendelism (Cambridge: Bowes and Bowes 1910) pp.79-81; various observations in B.Bateson - W.Bateson:Naturalist (Cambridge University Press 1928).

- 49. Described in all the standard texts in the history of biology and genetics.
- 50. Chesterton op.cit p.69
- 51. A.M. Carr-Saunders A Criticism of Eugenics (Eugenics Review V (1913-14) 214-233)
- 52. by Darwin (pp.316-235) and Schiller (325-333)
- 53. Carr-Saunders op.cit p.221
- 54. op.cit p.229
- 55. "it must be allowed that the very large amount of work that has been done in late years all points to the importance of heredity". op.cit p.215
- 56. "although we are in possession of one fact of the highest importance, we can make but little use of it in the present state of our knowledge". op.cit p.221
- 57. op.cit p.222
- 58. Schiller p.328
- 59. Schiller p.328
- 60. See Chapter 111
- 61. Schiller p.331
- 62. Schuster (c) p.955

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Part II - INTRODUCTION

Following the description of the theoretical foundations and the general structure of eugenic thinking the second part of this research extends the analysis by means of a series of case studies of particular issues. The issues considered almost selected themselves as they were some of the most discussed and debated at the time. What is not self-explanatory is the particular focus in each case and the kinds of problems which had to be confronted.

The first objective in these case-studies was to enlarge and make more accurate the picture of Eugenic thought. A certain amount of repetition was unavoidable as they involve the description of specific applications of the general concepts already considered. This applied both to the analytical concepts and to the proposed solutions for eugenic problems. Thus in each chapter the heredity/ natural selection contrast tends to appear as does the difficulty of "reading off" eugenic solutions from eugenic explanations.

In pursuit of this objective it was obviously necessary to go beyond the central 'core' of material used in chapters three and four. This necessitated looking at a wider range of eugenic writings, including other figures closely associated with the eugenic idea, for example, Pearson's school (discussed in chapters five and six) and Archdall Reid (discussed in chapter six). A second and subsidiary objective of these studies was the analysis of the impact of Eugenic ideas on public opinion and on legislation. This enlargement of the first objective posed familiar problems of boundaries and selection. In surveying public opinion and law making one is immediately faced with the problem of how much to say about other modes of thought or about institutional practices. The dilemma is clear: to say too much is to become diverted from the main task; to say too little is to risk ignorance and superficiality.

There were no simple solutions to this dilemma but fortunately the material itself suggested particular avenues of approach. With the issue of alcoholism for example what was particularly striking was

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the divergent eugenic positions - as a result almost no attention was given to other views and attitudes. In the case of mental deficiency on the other hand it became necessary to try and distinguish eugenic positions from the general medical consensus.

Nevertheless, as the last example illustrates, even where such approaches suggested themselves, there were limits to the extent to which they could be pursued given the virtually total absence of secondary literature in some areas. In such circumstances it was necessary to place the emphasis in such a way as to bring out the significance of the material in the context of the analysis of Eugenic thought offered in chapters three and four.

Chapter V - BROKEN MAINSPRINGS: EUGENICS, POVERTY AND PAUPERISM

The most conspicuous fact about eugenic statements on poverty and pauperism and contributions to the discussion of the time was their relative paucity. Despite the Eugenics Society's impressive-sounding Pauper Investigation Committee these were phenomena the eugenists found it difficult to grasp and which, in the end, they tended to avoid.(1). However circumstances required the Society to participate in the national debate and specifically, to formulate some eugenic response to the publication of the Report of the Royal Commission on the Poor Laws (2).

To propose some sort of general eugenic orientation towards the issue was not difficult. Indeed in their initial approach the eugenists did not differ from any other commentators on social problems. Who was the pauper? The pauper was a being with certain behavioural characteristics - he was "without manly independence", he was a "typical dependent", he was "inefficient"; in short "his mainspring came into the world broken" (3). However the matter went deeper than that for efficiency was at bottom a matter of hereditary quality since "an individual is one of a family or stock before he is one of a community" (4). As J.W. Slaughter wrote in a review of C.S. Loch's Charity and Social Life, "No place is found in the book to discuss the relation of charting to eugenics, as Dr. Loch's methods of thinking do not associate the two very closely. His great desire to see the dependent restored to independence and to save the independent from decadence, has kept his attention from the operation of biological forces with which the modern student of herdity has become familiar. But the eugenist is easily able to supplement the interpretation which Dr. Loch gives to his array of facts. He sees that degenerative influences not only consist in the demolition of character through relief from the strain of life, but also that some degenerate more easily than others, and that these are through charitable practices given equal opportunity for survival, not only individually, which is unimportant, but with respect to multiplication of numbers through descent" (5). The Eugenist could also argue that non-Eugenists had failed to consider "the possibility that an hereditary caste of morally and physically deteriorated

persons ... is being created" (6).

Going beyond the characteristics of the pauper it was necessary to investigate "that element in pauperism which represents and transmits the original defect" (7). Paupers formed a special section of the unemployed, who themselves represented relatively weaker stocks since they were unable to work at the standard required by industry. Nevertheless the unemployed remained more or less effective stocks in that with "judicious administrative assistance" (8) they could be brought back into the arena of the struggle for existence. The pauper however was of such feeble stock that any rescue operation was out of the question. The paupers were those who "are not touched by social forces and purposes, and whose conduct demands coercion" (9). Not only were they a threat in themselves but their close contact with poor quality but fundamentally sound stocks posed a threat to the latter (10).

Within this general orientation the task of detailed response to the Poor Law Commission was undertaken by the Pauper Investigation Committee (11). What the Commission had signally failed to do was "to analyse or define the personality of the pauper, his character, antecedents and capacities" (12) and this omission the Society proposed to rectify. The immediate object of the PIC was "to ascertain the full nature of the pedigree of some individual paupers" (13) and its report was a mixture of further evidence about the characteristics of the paupers and inferences from family histories.

There was clearly a question of general qualities here, as the paupers, when examined, displayed an extraordinary range of characteristics. "... the experience of the committee is quite clear that the paupers whom they have seen and examined individually, are characterised by some obvious vice or defect such as drunkeness, theft, persistent laziness, a tubercular diathesis, mental deficiency, deliberate moral obliquity, or general weakness of character, manifested by want of initiative, or energy, or stamina and an inclination to attribute their misfortune to their own too great generosity, or too great goodness, and generally to bad luck. Inquiry into the nature of bad luck or too great generosity usually resolved the matter into one of stupidity or folly upon the part of the complaining victim" (14). But there was a way through this difficulty to be found in the development of two of the Committee's conclusions. The Committee had found firstly that one "pauper family has a tendency to marry into other pauper families" (15) and secondly, "when we find it possible to trace four generations of paupers there can be little doubt as to the hereditary transmission of the defects" (16).

Thus it was possible to draw the conclusion that the real problem was one of a degenerate stock which produced "paupers, feeble-minded, alcoholics and certain types of criminals ... a few thousand family stocks probably provide this burden which the community has to bear" (17). By such methods the Eugenists arrived at an explanation of the pauperism that so perplexed contemporary opinion - "There exists this hereditary race of persons, capable of work, but refusing to do it, either continuously or at intervals, and when they work, spend the money earned in drink or debauchery" (18).

Similar investigations were being pursued by one of the Society's leading experts on the matter, E.C. Lidbetter. His objective was also to establish, by the same means of pauper pedigrees, a class of habitual clients of the Poor Law who suffered from chronic disorders. In his articles and lectures he presented a variety of pedigrees under the headingsof sick and able-bodied. These charts resembled those produced by the American studies (19) in that when followed up the families concerned revealed a ghastly tale of disease, lunacy, crime etc as in the following extract: "At the tail end of the story comes a most striking addition. No. 53 the child of one of the last family, was admitted to the Infirmary as an imbecile. Its paternal grandfather's brother (No. 11) was a lunatic, but further enquiry was made. The mother was questioned and stated that her father was an insane epileptic, her mother consumptive, and her maternal grandmother probably a consumptive and certainly a She herself was illegitimate and had fits" (20). pauper.

But the degenerate stocks were not limited to the obviously physically sick and here the difference between a properly eugenic

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account and the more traditional fears and stereotypes may be more clearly seen (21). For Lidbetter was quite unconcerned about the work-shy layabout beloved of the commentators. In his view there were few genuine unemployed. "There is no more misleading or persistent error than that which regards the [•]able-bodied[•] pauper as, on the one hand the healthy, virtuous, and efficient unemployed workman, or, on the other hand, as the capable but scheming [•]work-shy[•] n[•]er-do-well. Both these points of view are very far from the truth. None of the former are to be found personally chargeable, and of the latter there are very few - the number is greatly exaggerated " (22). The various types of degeneracy were rather a function of a general incapacity.

The need to establish some kind of general quality in this area shows itself in the sheer number of terms the eugenists used - fit, civic worth, social value, efficiency, dependence, competence and so on.these were all terms designed to log individuals on a scale of general behavioural competence which could then be related to an hereditary basis and the struggle for existence. "What is suggested is that, on the whole, the casual worker or unemployed person is of a lower mental type than those in regular employment and that those classes include many persons (many more than is generally admitted) whose mental condition is so weak as not merely to make them unemployable, but also to prevent their supporting themselves except by the aid of the rates" (23). Lidbetter's specifications of this quality included such phrases as "rational without being intelligent" and "failure to grasp the essential facts of life" (24).

Given this type of designation there was almost a necessity to place the emphasis on feeble-mindedness. It is not surprising then to find Lidbetter presenting a paper on pauperism at the National Conference on the Prevention of Destitution in the mental deficiency section. (25). The postulation of feeble-mindedness as the crucial component of pauperism put everything on much firmer ground and at a stroke brought order to a great deal of messy diversity. In his summarising paper Saleeby said of the feeble-minded, "Both directly as economically inefficient and indirectly ... they contribute to the number of the destitute, constituting the majority of the naturally

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as distinguished from the nurturally unemployable" (26). To make the question of destitution and pauperism one of feeble-mindedness or low mental capacity was to go from traditionally accepted but vague categories of character and 'grit' to the apparently firm ground of the clinical designation of forms of mental defect.

Having established the true nature of the problem some explanation had to be offered in order to derive a solution. 'Nature' was charged with two roles - the elimination of the unfit and the preservation and increase of the fit. Yet here was a clear case where natural selection was not producing the eugenic goods. Some assessment was required of the agencies determining the reproduction of racial stocks and the effects of their operation. Firstly the principles of the 1834 Poor Law had been and were being continually weakened as more relief was given away on a less rigorous basis (poor law infirmaries etc) and there were other forms of relief completely outside the framework of the poor law (school meals etc). Secondly due to Workmen*s Compensation Acts employers were much more careful as to who they selected from the labour market (the eugenists called it a "segregation of efficiency") and it had thus become overburdened with casual labour. Thirdly, all these increasingly better preserved weak strains were reproducing and their progeny in turn increasingly being preserved. As Lidbetter put it "under pampering legislation and administration it (the low mental type) had a survival value not to be found among the higher and more sensitive types" (27).

On the other side of the balance sheet the eugenists, aware of the declining fertility of the upper and middle classes, argued that it correlated with the introduction of education and various other social reforms the cost of which, needless to say, rested on the thrifty and careful elements of the population. It was the combination of these two processes, pampering legislation and burdens of taxation, that produced the differential decline in fertility and more specifically with reference to pauperism an increasingly large degenerate stock.

Whetham's papers on this question illustrate both the inferential

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nature of much of the eugenic explanations and the shifts of position within them (28). In these articles Whetham sought to deal with the problem of why the social segregation of ability was not more marked than the evidence indicated - "why the process has not gone further, why the upper classes do not show preponderant ability more markedly than they do, is worthy of consideration" (29). This problem could only arise for a model of selection which was really a model of social mobility, regarded as a process producing in the long-term a biologically appropriate division of labour. The explanation as to why this did not work to the limit clearly illuminates the eugenic incapacity to grasp specifically social phenomena and thus its tendency to see the social structure as both result of and obstacle to natural selection. Thus, "while selection is keen enough while a family is rising in the social scale, it becomes relaxed when an assured position has been reached (30).

Constructed as it was Whetham's argument could shift from one ground to another. Natural selection, being a process of eliminating the unfit and promoting the fit, must produce a certain result. If it failed to do so there must be interfering causes - natural selection has been relaxed. However supposing the identification of the upper classes with general abilities is rejected? The second line of defence was the 'facts' i.e. the actual incidence of the falling birth rate, given the hereditarian interpretation. "The prediction that the differential birth rate will lead to average race deterioration, and to a loss of the net efficiency of the nation, is seen not necessarily to depend on the proof of complete segregation of ability, but to have behind it the whole of the overwhelming and almost undisputed evidence for the inheritance of physical and mental traits from ancestors to descendants" (31). Finally there was a third line of defence - the assertion that a substantial number of those administering the poor law were convinced that the problem lay in the paupers themselves - "but everyone who has to administer the poor law knows that a certain number of paupers become destitute from congenital defects of mind and body" (32). It may be noted that the proportions were left suitably vague.

What evidence was there that degenerate stocks were increasing (as

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opposed to the Local Government Board's general figure for pauperism)? A frequently cited work in this connection was the first monograph in the series Studies in National Deterioration (33). Heron's work (34), as would be expected, did indeed use all the available data, censuses, Registrar General's reports, Medical Officer's reports and so on. Its main object was to answer the question - "if it be possible to show marked relationships between size of the family and social conditions can it be shown that these relationships have changed, and if so changed for the better or worse during the last fifty years?". Heron proceeded by constructing various indices of wealth and education, poverty and lack of culture; but these indices assumed the nature of pauperism. Thus for example one of the indicators of poverty was the number of pawnbrokers per thousand males on the grounds that the presence of pawnbrokers "indicates a high degree of improvidence" (35). Having shown in various ways that there were class or social status differences in the birth rate similarly unfounded assertions were made which shared the aura of statistical exactitude - "I doubt if there is any better measure of the undesirability of a class and its unsuitability for reproducing its kind, than the extent of infantile mortality within it" (36). Infant mortality did indeed correlate with birth rate (0.5±097) which proved that "where the mothers and fathers have the maximum of undesirability there is produced a maximum of children" (37). The final claim that "I have brought forward evidence enough to show that the birth rate of the abler and more capable stocks is decreasing relatively to the mentally and physically feebler stocks (38), like all the others, only followed if these categories could be identified with those of high and low social status respectively.

The third aspect in the eugenic position was the solution to the problem. Of course in one sense this followed axiomatically i.e. fit must breed more and unfit must breed less. The problem of pauperism (and its growth) and the possible contamination effects therefore necessarily led to some consideration of the mechanics of reproduction. Even in the refinement of Edwardian England the fact had to be faced that human reproduction was not entirely a matter of economics and charity handouts - and it is clear that the eugenists thought the prolific classes were prolific because they lacked

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self-control (39). The general point here is that the eugenic solutions could not be directly "read off" the eugenic explanations. Clearly, logically speaking, given the unambiguous identification of the unfit stocks, there were several options which would effect a reduction in their numbers; physical extermination, direct or indirect (40), sterilisation, isolation, birth control or abortion these are all, as it were, biologically equivalent. Thus in making a choice among these other criteria become relevant; economic ones (e.g. cost) and political/ideological ones (e.g. liberty of the subject). In this sense there was (or is) no logical eugenic solution, only a general consensus which was hammered out in an attempt to make eugenics practical politics and feasible administrative practice.

The solutions offered to the problem of pauperism were punitive, involving some form of segregation or detention and this was not, of course, original to the eugenists.(41). The difference lay in the fact that they were uninterested in the potentially reforming effects if any of such colonies. Their function lay solely in the separation of the sexes and thus the rapid termination of the reproduction of the unfit. The alternative of sterilisation was not regarded as feasible in the light of probable public reaction to it (though there were other factors e.g. the legal position of doctors performing such operations was not entirely clear), though Saleeby did argue that, "it has its place in the eugenic armoury - and even, as Indiana illustrates, in the records of Eugenic legislation" (42).

Segregation was arrived at as a compromise between two sets of factors that had to be reconciled. On the one hand biological necessities, obviously the cessation of procreation and on the other hand the state of the law and public opinion, shot through as they were with humanitarianism, notions of liberty of the subject and other rights (indeed the eugenists themselves differed on these questions). Though the eugenists did feel the necessity to mount an ideological attack on the assertion of certain rights (43) they tended toward the compromise of 'kind' (and this was always stressed) segregation. No attempts were made to put forward eugenic measures against pauperism in the form of specific legislative proposals.

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In this area at least the eugenists either avoided the question or insisted on the all-encompassing validity of their own position without submitting themselves to the discipline of translating their explanation into policy and social action.

Eugenics' relative lack of interest in pauperism was mirrored by the disinterest of other positions in it. The Poor Law report of 1909 had the effect of crystallising opinion and none of the major positions (44), with the exception of the Webbs, devoted much attention to eugenic questions. This does not mean of course that individuals within these currents of opinion were averse to using the eugenic rhetoric, "there is some cause for fear, lest in their anxiety to protect the weak and the unfortunate, they should retard the advance of the race or even bring about its debasement" (45). Probably the Eugenics Education Society contained members from all tendencies as well as those who, like G.P. Mudge, subscribed to what Saleeby called the "better-dead" school.

The Webbs made two major statements on eugenics in relation to the reform of the poor law (44a). In both papers they showed considerable sympathy for certain eugenic positions, some deliberate misunderstanding, but quite an acute grasp of the fact that the Minority Report could be presented as the nearest thing to eugenic legislation possible. At the level of formal statement the Webbs might almost be described as eugenists themselves. They accepted the implications of the differential birth rate (46) and the role of the poor law in this process. Beyond this they had a four-fold quasi-eugenic indictment of the operation of the poor law, on the following grounds: the laxity of its provision for feeble-minded maternity; the opportunities for 'undesirable acquaintanceship' afforded by the general mixed workhouse; its inability to sort out defectives and wastrels who did not apply for relief; its failure to provide any practical alternative to the outdoor relief afforded to tens of thousands of feeble-minded or physically defective parents. There was almost nothing a eugenist could disagree with here (though there would be differences of emphasis). In order to make their own solution convincing the Webbs had to present the insoluble problems that would stem from any other solution conceivably derivable from

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eugenics. This they did by portraying the eugenic position, as they put it, as "just now the most fashionable kind of laissez-faire" (47) i.e. a return to a state of nature with the consequences that might be expected of that.

Their first point was that such ideological realities as the influence of Christianity, humanitarianism and sympathy for the deprived had to be recognised. In the event of the removal of the social machinery dealing with poverty these currents would merge into a flood of private charity, something that all social reformers condemned. То drive home the point the Webbs posited a situation where force was used to prohibit private charity (48). They denied any advantage accruing from the subsequent high death rates - "There is, in truth, absolutely no evidence that the unchecked ravages of disease ... ever result (any more than a war or a famine) in an improvement in the human stock" (49). They made two further points in support of this assertion. Nature did not use eugenic ('highest type') criteria and therefore was really irrelevant. The second point concerned resistance to disease and they argued that such resistance was more than likely the result of a constitutional peculiarity that need not correlate with any other valuable quality or qualities (50). Though the argument was rather overdone many eugenists would have accepted it.

The alternative the Webbs offered was a mixed bag consisting of their own version of positive eugenics plus that aspect of negative eugenics that the Royal Commission on the feeble-minded had favoured, namely legislation for the detention of the mentally deficient. The first of these was covered by proper and adequate provision for all mothers, infants and children in need on an honourable basis, i.e. removing the stigma of pauperism. Though this might have the additional effect of subsidising the inefficient its general effects would be beneficial because the capable would have access to material aid of a non-stigmatised kind. In their own phrase the important thing was to make the well-born child an economic asset or at least less of a burden. The second aspect was covered by much firmer measures being taken against the feeble-minded, including the question of procreation. Only in this area, the Webbs

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implied, could Parliament and public opinion be expected to tolerate extremely coercive legislation aimed at a particular group.

In contrast, C.S. Loch (the leading spokesman for the Majority report) could offer very little to eugenists. For him eugenics only became a serious issue in relation to the feeble-minded and for the rest he emphasised even more strongly the limits to which public opinion would go. Elsewhere the partisans of the Charity Organisation Society exhibited considerable scepticism toward both eugenic explanations and proposals. An editorial commented sharply that, "it is more than doubtful how far pauperism can be attributed to any inherited qualities" (51). A more formal statement of the COS position appeared in a lecture by Bosanquet (52). Bosanquet had no trouble in pinpointing the main problems and the disagreements in the eugenic ranks. "When we further ask whether the conceptions of the unfit and the fit can safely be applied in the comparison of social strata with a view to the discouragement of certain strata as inferior apart from defects specially diagnosed, and of the encouragement of others as superior, there seems to be a fundamental division of opinion" (53). Elsewhere Bosanquet politely but bluntly expressed the view of many social reformers that, "I do not think we can be sure that our rough classification of types of labour corresponds with any sets of inborn qualities, desirable or undesirable" (54).

Such critics could draw both on the experience of many social reformers and professional experts for the means to reject the eugenic arguments. It was widely agreed amongst social reformers that, in Beveridge's words, "infant mortality is neither a symptom nor a result of social degeneration ... the vast bulk of all children are born physically sound - the national stock is not tainted, it is the environment before and after birth that counts" (55). Many members of the medical profession accepted that, "it is a matter which can easily be verified that children of even the poorest and weakest of mothers are themselves as likely to be strong in as many cases as if the parent came from the healthiest environment" (56) and statistically competent authorities in public health, notably Arthur Newsholme, were tireless critics of the eugenic studies and provided endless examples of the damaging effect of poor environment - "The fact that the poorest are lowest in the social scale cannot be used as a completely satisfactory argument that - as proved by selection - they are the poorest stock. The results so far as they are concerned, may have been biased by conditions that have thwarted natural competence" (57).

It is clear then that the eugenists made little headway in the area of pauperism meeting either complete scepticism or finding their proposals and rhetoric taken up and inserted into a different project with the essential point left unclear (58). The stumbling blocks in both cases were the same; firstly, the inadequacy of their arguments for an hereditary component in pauperism; secondly, the fact of public hostility to any coercive measures compounded in this case by the indefiniteness of the group they were intended for, took the whole idea out of the realm of practical politics. The paupers had their revenge; it was the eugenic theories of pauperism that were beyond repair (59).

Chapter V - FOOTNOTES

- This is clear from the pre-war annual reports of the Society which give details of eugenics lectures both in the capital and to a certain extent in the provinces. Only two lecturers, E.J. Lidbetter and J.W. Slaughter, dealt with the theme of pauperism regularly.
- 2. Royal Commission on the Poor Laws P.P. (1909) XXXVII-XLV; Eugenics Review II (1910-11) pp.1-2
- 3. Eugenics Review II (1910-11) p.173
- 4. ibid. p.170
- 5. ibid. p.249
- 6. Sir E. Brabrook Eugenics and Pauperism (Eugenics Review I (1909-10) 229-241) p.233
- 7. ibid. p.173
- 8. ibid. p.174
- 9. ibid. p.177
- 10. "Next to the segregation of the feeble-minded, the prevention of that exchange is the most urgent problem in practical eugenics, because its prevention will check, and ultimately bring an end, to that exchange between strength and defect which at once perpetuates the defective stocks, and vitiates the good stocks by the marriage interchange which is constantly going on". E.J. Lidbetter - Nature and Nurture: a study in conditions (Eugenics Review IV (1912-13) 54-73) p.69
- 11. The dominant member of the committee seems to have been one G.P. Mudge. He also edited a short-lived magazine called the Mendel Journal of which three issues appeared (Oct. 1909, Feb. 1911,

Sep. 1912). In the course of an article on 'Some sociological considerations bearing on infantile mortality' he wrote, "During the best part of the year 1910 and the latter part of 1909, I was in charge of a small committee of workers organised by the Eugenics Education Society, and were occupied in hunting through workhouse records and in interviewing paupers and their relatives". (Mendel Journal No. 3) p.194

- 12. Eugenics Review Poor Law issue vol.2 no. 3 (1910-11) p.161
- 13. Eugenics Review II (1910-11) p.186
- 14. ibid. p.187-8
- 15. Eugenics Review II (1910-11) p.186
- 16. ibid. p.190
- 17. ibid. p.177
- 18. ibid. p.194
- 19. For details see M.H. Haller Eugenics: Hereditarian attitudes in American thought (New Jersey: Rutgers University Press 1963); D.K. Pickens - Eugenics and the Progressives (Nashville: Vanderbilt University Press 1968); A. Fink - Causes of Crime (Philadelphia; university of Pennsylvania Press 1938)
- 20. Eugenics Review II (1910-11) p.217
- 21. See G. Stedman Jones Outcast London (Oxford University Press 1971)
- 22. Lidbetter Some Examples of Poor Law Eugenics (ER II (1910-11) 204-228) p.219
- 23. ibid. p.223
- 24. ibid. p.223

- 25. "It is the view of the society that destitution, so far as it is represented by pauperism (and there is no other standard) is to a large extend confined to a special or degenerate class". (Eugenics Review III (1910-11)) p.170
- 26. National Committee for the Prevention of Destitution (1911 session Mental Deficiency Section) p.72 (NCPD)
- 27. Eugenics Review III (1911-12) p.172
- 28. W.C.D. Whetham Eugenics and Unemployment (Cambridge: Bowes & Bowes 1910) Heredity and Destitution (Nature 86 (1911) 484-6) Heredity and Destitution (Eugenics Review III (1911-12) 131-42)

29. Nature p.485

- 30. Eugenics Review III (1911-12) p.135
- 31. ibid. p.140. This alsomade it possible to avoid some of the more elitist corollories of the natural selection position and make comparisons within classes. "With few exceptions, the best stocks of every class, the best families in each rank of life, are being supplanted by the progeny of the residuum". ibid.
- 32. ibid. p.141. Or again "it is undeniable that the ranks of the paupers contain a certain proportion of those who, mentally or physically, are hereditarily unsound". p.486
- 33. Issued by the Department of Applied Mathematics, University College, London, at that time run by Karl Pearson. There was no doubt as to the purpose of the series. In the prefatory note to monograph number seven (E.C. Snow - The intensity of Natural Selection in Man) Pearson wrote, "The chief problem which impresses itself upon all social enquirers of the present-day centres in the question of whether the enormous growth of charitable institutions and the municipal provision made for the poor and destitute, unaccompanied as they are by any effective limitation on reproduction, are not tending towards the

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degeneration of the race by handicapping the fitter for the sake of the less fit members of society".

- 34. D. Heron On the relation of fertility in man to social status, and on the changes in this relation that have taken place during the last fifty years (Dulau & Co. 1906) p.3
- 35. ibid. p.5
- 36. ibid. p.13
- 37. ibid. p.13. There was considerable debate, not discussed here, of the selective effects, if any, of infant mortality. For the social ' welfare side see the comments by H.M. Blagg in The Commonwealth XVI (1911) 43-6 and for the statistical technicalities see J. Brownlees - The Relation of Infantile Mortality to Mortality in Subsequent Life (Journal of the Royal Statistical Society 80 (1917) 222-42)

38. ibid. p.12

39. a. "There is some reason to believe that illegitimacy may tend to run in families, and is due in some cases to inherent desires so strong that they resolve themselves into deliberate or unrestrained intent, in others to mental defect, and in yet other cases to general weakness of character". (Eugenics Review II (1910-11) p.188

b. "Among the actually defective, as well as among the lower types, there is a diminished power of resistance to moral as well as to physical disorder, and less power of control". (Eugenics Review IV (1912-13) p.54

40. G.P. Mudge for example took the position that there should be no "interference" with infant mortality. A similar argument went as follows, "But improved sanitation of the co-operative and compulsory type does more than save the weak. It saves the innately dirty people from the consequences of their habits". (Mendel Journal No. 3) p.129

- 41. See J. Brown Charles Booth and Labour Colonies 1889-1905 (Ec. Hist. Rev. 21 (1968) 349-70)
- 42. NCPD op.cit. pp.75-6. For another brief discussion see H. Ellis -The sterilisation of the unfit (Eugenics Review I (1909-10) 203-6)
- 43. The Pauper Investigation Committee argued that, "The right of the subject may be anything but the right to curse the future". (Eugenics Review II (1910-11) p.171
- 44. I have taken the main currents of at least reform opinion from A.M. McBriar Fabian Socialism and English Politics 1884-1918 (Cambridge University Press 1962), as follows
 - a. i) S. Webb Eugenics and the poor law the minority report
 (Eugenics Review II 1910-11 233-41
 - ii) B. and S. Webb The prevention of destitution (pub.1911)ch. 3 Destitution and Eugenics
 - b. i) C.S. Loch Eugenics and the poor law the majority report (Eugenics Review II (1910-11) .229-41)
 - ii) Charity Organisation Review various articles, reviews and editorial comments
 - c. i) British Constitution Association leaflets No. 1 Aims and Objects (nd. but ca. 1905)
 - ii) B.C.A. Poor Law Papers No. 1 Poor Law reform not revolution: a statement by the national committee of the BAC (2nd. ed. 1909)
 - iii) B.C.A. Poor Law Papers No. 2 W.A. Bailward The reports of the poor law commissioners of 1834 and 1909 (1909)
 - iv) W.A. Bailward Socialism and the Poor Law (Antisocialists union pamphlet No. 70 n.d.) Cf. Also Constitution Papers vols. 1-4. I can find almost no reference to heredity in the voluminous evidence given to the Poor Law Commission.
- 45. Sir Arthur Clay the principles of poor law reform (British Constitution Association Lecture 1910 pp.10-11. The BCA also included on its council or committee such figures as W. Chance and T. Mackay, both regular contributors to the Charity

Organisation Review, taking what for convenience may be called the right-wing position within it. Cf. for example T. Mackay -The poor law commission - what is it all about? (C.O.R. vol.XXIX (1911) 136-146)

- 46. "There is considerable evidence that as a nation we are breeding largely from our inferior stocks. The action of the present poor law in subsidising the reproduction of mental, moral and physical defectives and in discouraging the thrifty from undertaking the responsibilities of parentage, is one of the most important factors in this process, and one of the most easily dealt with". (Eugenic Review II (1910-11) p.240
- 47. The Prevention of Destitution p.47
- 48. So far as I know no eugenist ever suggested this in public but it is possible some may have thought it.
- 49. Prevention of Destitution p.47
- 50. The eugenists were not unaware of these points Cf. J.A. Lindsay -Immunity from disease considered in relation to eugenics (Eugenic Review IV (1912-13) 117-135). Eugenists in fact tended towards Webb's position on this point, see e.g. the Whetham articles cited in footnote 27. Webb's point was not a fanciful one - for a modern and of course more serious version see P.B. Medawar -Do advances in medicine lead to genetic deterioration? in C.J. Bajema (ed.) - Natural Selection in Human Populations (John Wiley & Sons Inc 1971) where innate resistance to epidemic diseases is characterised as a "cheap genetic trick" (p.302)
- 51. Charity Organisation Review 28 (1910) p.365
- 52. B. Bosanquet The problem of selection in human society (Charity Organisation Review 28 (1910) 369-86)

53. ibid. p.379

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54. ibid. p.377

- 55. Quoted in J. Harris Beveridge (Oxford University Press 1977) p.103
- 56. Eichholz The Alleged Deterioration of Physique (Brit. Jnl. of Nursing 33 (1904)) p.410
- 57. A. Newsholme The Declining Birth Rate (Cassell 1911) See pp.46 for criticisms of Heron's book referred to above. And see critical comment on eugenics in The Crusade (Dec. 1910)
- 58. Cf. Royal Commission vol.III Minority report pp.674-5 where detention colonies are proposed but it is unclear what the relations of the inmates to their families, if any, would be.
- 59. It may be of interest to note here that after the First World War pauperism disappeared as a concept and was replaced in Eugenic circles by the notion of the social problem group. Sir Bernard Mallet designated the investigation of this group as the Society's next great task in 1932 (Eugenics Review XXIII p.203). It formed the centre piece of the Galton Lecture that year by E.J. Lidbetter entitled the Social Problem Group - as illustrated by a series of East London Pedigrees (Eugenics Review XXIV (1932) 1-12). A year later E.J. Lidbetter's great work was published or at least its first volume, financed partly by the Society and partly by the L.S.E. called Heredity and the Social Problem Group vol.I (Edward Arnold 1933). Leonard Darwin in his introduction remarked that "students of sociology will consult it for many years to come" (p.6). This does not appear to have been the case, indeed no further volumes saw the light of day. The discussion did not end there though. A later volume edited by C.P. Blacker called a Social Problem Group? (Oxford University Press 1937) whose interrogative title alone indicated accumulating doubts, an impression confirmed by the writings of many of the contributors. Later in the 30s and 40s discussion in the Society of these matters seems to have been strongly influenced by F. Lafitte and R. Titmus neither of whom appeared to have much sympathy with the social problem group concept. For a review of later debates see

A.Phelp and N.Timms - The Problem of Problem Families

Chapter VI - DEGENERATE PARENTHOOD: EUGENICS AND ALCOHOLISM

"On February 14, 1908, the first General Meeting of the Society was held at Denison House, the Hon. Sir John Cockburn in the chair ... Dr. Saleeby drew attention to the then recent action of the London County Council in closing the Homes for chronic inebriate women in the Metropolitan area, the following resolution was unanimously passed. That the Eugenics Education Society enters a protest against the recent administration of the Inebriates Acts (of 1898) whereby, through the closing of the Inebriates Homes, some hundreds of chronic inebriate women will be set adrift in London, with an inevitably detrimental result to the race". Eugenics Review 1909.

The Eugenics Education Society more or less began on an alcoholic note (1) and the issue is of interest primarily for the virulent controversy generated within the ranks of eugenists themselves. There were three distinct positions within the broad eugenics movement on the question of alcoholism (2). Perhaps the most publicised was the 'racial poison' school whose chief architect and spokesman was C. Saleeby (3). Within the Society he was closely supported by Crackanthorpe and in a more qualified manner by Tredgold (4) while outside it he had the backing of eugenically inclined doctors and temperance reformers (5). As the opening quotation indicates he early established his dominance over the Society's policy (6), but, his crusading manner notwithstanding, he faced opposition within the eugenics movement. A major opponent inside the Society, (elected a vice-president in 1910) (7), was Dr. G. Archdall Reid whose controversial position was of long standing and well known in the medical world. Outside the Society the figure most closely associated with eugenics was Karl Pearson, whose Eugenics Laboratory produced six major statements on the alcoholism question over the period 1910-1912.

These three positions are most conveniently approached by looking at two rather separate disputes namely, that between Pearson and Saleeby (and their respective 'schools') and that between Archdall Reid and his critics. Their debates focussed largely in the first case on the question of heredity and in the second on the question of selection.

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It must be made clear at the outset that in principle there was much that Pearson and Saleeby could agree on. Pearson's general position was broadly acceptable to all eugenists. He argued that alcoholism was a somatic mark of a germ-plasm defect. Necessarily then there were defects at the somatic level and at the germ-plasm level and some form of correspondence between the two. So e.g. a child might be defective "not because the parent is alcoholic, but because it is the product like the parent of a defective germ-plasm. The child may be physically and mentally fit, and yet when adult may exhibit alcoholic tendencies" (8). Here there was a form of direct correspondence alcoholism could be a specific germ-plasm defect with a definite chronology of appearance at the somatic level (9). For Pearson there was a second form of heredity which he called cross-heredity requiring a second type of correspondence, between a generalised form of defect at the germ-plasm level and a variety of forms at the somatic level, one of which might be alcoholism. The implications were clear - "If, as we think, the danger of alcoholic parentage lies chiefly in the direct and cross-hereditary factors of which it is the outward or somatic mark, the problem of those who are fighting alcoholism is one with the fundamental problems of eugenics" (10) that is, of course, problems of defective stocks.

While there was much that Saleeby could accept - "the Eugenics Education Society has from the first recognised and fought for the principle that alcoholism is often a symptom of natural nervous defect such as should most certainly disqualify for parenthood" (11) -Pearson's formulations made no mention of any idea of alcoholic poisoning of the germ plasm - indeed one of the major arguments of his various studies was that such poisoning did not occur. Controversy then centred on the possibility of a third form of heredity - a direct toxic effect on the parental germ-plasm caused by 'racial poisons' and requiring (in Saleeby's view) as a corollary of its acceptance a third form of eugenics (after positive and negative), a preventive eugenics (12).

The essential ingredients of the notion of racial poison were firstly that it involved a poisoning of the germ material and was thus to be clearly distinguished from ante-natal poisoning. It could affect the germ cells of either parent. Secondly, the damaging of the germ plasm could take place without damaging the individual himself - i.e. he could simply 'carry' the potential bad effects. Thirdly the racial poisons could damage certain entities, without fundamentally altering them. Thus for example damaged versions of nerve cells remained nerve cells, they did not become liver cells or whatever. This was Saleeby's explanation of the fact that blastophthoria (a term coined by Forel, a Zurich psychiatrist, to describe the process) was not a case of heredity in the proper sense (not a mutation) and therefore not subject to the Mendelian rules (though Saleeby was not always consistent on this). Finally there seems also to have been a somewhat ill-defined notion that even having sustained damage the germ-plasm could regenerate itself (13).

Thus these two different positions, both claiming to be eugenic and both attributing a great deal of importance to heredity, approached the question of alcoholism in quite different ways. How was such discordance and disagreement possible? One obvious answer was that the whole controversy was ultimately trivial because animated on one side by Temperance fanaticism, intolerant of any evidence that denied the more extreme views of the Temperance cause. In this view (14) the problem lay in the genuineness or otherwise of the protagonists in the debate rather than the arguments themselves. Indeed as a Lancet editorial rather tartly put it, "To minds with a bent for fantastic speculation it might be suggested as a subject of curious consideration why controversy on the question of alcohol is so apt to produce in the controversialists many mental phenomena which have a singular resemblance to the effects which alcohol itself produces on the judgement and temper of those who take too much of it" (15). This explanation was prompted by undoubted inconsistencies in the criticisms levelled against Pearson. For example, as he showed, the research that was often cited against him frequently failed to observe some of the very criteria he was himself accused of failing to observe and on the basis of which his research was rejected as fundamentally misconceived. Of course this element was present (16) as well as a dislike of Pearson himself but possibly there was a little more to it than that. There is at least the question why should Temperance fanaticism find its expression in an hereditarion argument? The

answer can only come from a deeper analysis of the two positions.

There was some disagreement about characterisation of qualities which proved in this area to be a great problem. Both Saleeby and Sullivan made the criticism that the classification within the samples used in Pearson's study was carried out by non-medical personnel which seriously reduced the value of the survey. According to Saleeby, "many ... cases notably amongst women ..., which to the outsider, or even for very long periods to the relatives, are reckoned sober, are really cases of steady decent tippling of the very kind which we should expect to have most marked effects upon the germ-plasm or upon the foetus" (17). The point here is that, on the one hand, doctors had made a rough distinction between alcoholism and drunkeness (18), but on the other hand the same problem applied to many studies which supported the Temperance cause and were used against Pearson. For example Laitinen, in his survey (19), asked his sample to 'diagnose' themselves. Thus it seems that medical men who were committed to the Temperance view, faced with a study which used certain methods rigorously and produced unacceptable conclusions, searched immediately for any possible criticisms and therefore obviously for what they knew best, namely the principles of their own practice.

Disagreement extended also to the question of heredity. It has been pointed out that both positions (the racial poison school and Pearson) accepted a form of alcoholism which was symptomatic of hereditary nervous defect or degeneration. Both wanted to make a distinction between this and other forms. Thus much depended on how the notion of nervous defect was used. Sullivan distinguished between intoxication in those with normal and abnormal constitutions on the basis of different observed behaviour during drunkeness. In those of the former type "emotional instability is expressed in fatuous gaiety, in sentimental drivel, or in motiveless whimpering" (20) whereas those of the abnormal type showed wild maniacal excitement or prolonged dream consciousness. He also tried to deal with the statistical aspects of the question. Others besides Pearson were aware of the fact that "statistics which show nothing but the co-existence of the two conditions, or which attribute a causal influence to alcoholism on no better grounds than a history of

drunkeness prior to the recognition of lunacy, are of small value" (21) and in his examination of the insanity statistics Sullivan cast doubt on the attribution of insanity to antecedent alcoholism. The relation of parental alcoholism to the state of the progeny is, statistically at least, identical to the insanity question and Sullivan looked at this too. As with insanity alcoholism was "one of the most easily traced antecedents, and is pretty sure, therefore, to figure disproportionately amongst the assigned causes of defect" (22).

Yet despite this drawback Sullivan outlined and defended this data on the grounds that it had "the value that must attach to opinions based on wide experience and trained judgements" (23). As to the perennial difficulty of whether alcoholism was a cause or a symptom of nervous degeneration Sullivan argued on the basis of "the direct knowledge which we have of the possible effects of parental intoxications" (24) by which he meant experimental knowledge gained from animals; and he referred to the researches of Grassman, who found that in the family histories of the insane, while insanity was found in the grandparents and the collateral line alcoholism was met with chiefly in the father or mother. He concluded from this that "Obviously such a contrast would not appear if parental alcoholism were, like parental insanity a mere manifestation of a degenerate trait and not as it really is its direct and efficient cause" (25).

These kinds of arguements were often repeated by others. When Miss M. Dendy (26) suggested that alcoholism was most often a result rather than a cause of feeble-mindedness the rights of doctors were swiftly reasserted in the British Journal of Inebriety: "Miss Dendy, of course, writes as a lay woman, without special knowledge of the medical aspects of this difficult problem ... many careful observers in the best position to form unprejudiced opinion based on an actual clinical experience contend that there is a very close aetiological relationship between alcoholism and mental defectiveness" (27). There were numerous similar expressions of medical opinion (28) almost always containing two elements, namely a very great deal of trust in clinical experience and a preference for "direct", which usually meant experimental "proof". In a discussion recorded in the British Journal of Inebriety Sims Woodhead stressed the difficulty of gathering reliable statistics, Clouston was cautiousbut emphasised his clinical experience; Mott also expressed caution but offered the opinion "that the combination of a drunken father and a feeble-minded mother is a fertile source of feeble-mindedness in the offspring" (29). P. Jones, an asylum physician found it impossible "to conceive that the germ-plasm (bathed as it is in the plasm of the blood) should be unaffected by its environment when we know that alcohol is taken up directly into the blood for it is exhaled by the lungs and excreted by the kidneys, and we have further proof of its direct effects upon living cells by experiment in vitro" (30). Some of these authors offered their version of a crucial experiment e.g. Jones in the form of a reductio ad absurdum - "two identical persons of identical tendencies from identical parents married to identical wives, and having identical families, with an identical environment, except that one (or both) was placed under the direct effect of alcohol - a condition which only a very trivial imagination could conjure - and then observation and records, which is plainly impossible" (31).

Similarly Horsley and Sturge, in what must have been the medical best seller of the day (32) offered a critique of Pearson, telling him what should be done, "The fact is, the only way in which this comparison can be properly made is by obtaining data from some source which can provide instances of genuinely abstaining families for three of four generations. These should then be compared with people in similar circumstances of life amongst whom it can be proved that drinking habits have prevailed for the same period. A careful investigation into the health and total life history (say up to thirty years) of persons born with these two types of ancestry would be of great value" (33); and they added their voices to the chorus of faith in clinical judgement - "It is, of course, impossible for a mere onlooker to connect a special state of health in a girl or boy with what is observable by the outward eye in the physique of the parents, but the skilled physician finds it comparatively easy to understand the causes which account for the condition of body and mind in the children under his care, when the family history is known to him for two or three generations" (34).

What was it that Pearson had said that had caused such a fuss? The

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Pearson school argued firstly, that extreme alcoholism was due to mental defect and this could be proved statistically (the two extreme alcoholism monographs) and secondly, that alcoholism not due to hereditary degeneration did not produce degeneration and that this also could br proved statistically (the substance of the two parental alcoholism monographs which started all the controversy). On the second of these questions the fundamental charge Pearson levelled against the medical school was their failure to control for the factors of hereditary stock in their samples. He set up the problem as follows - alcoholism (which tended to mean drinking in the Pearson studies) could have three possible modes of effect hereditary, 'toxic influence' (either on the germ-plasm or the foetus) or environmental. However before these distinctions could be broached the quantitative measure of alcoholic influences on the physical and mental characters of the offspring had to be found. In doing this there was a trap that had to be avoided i.e. the now familiar problem of the spurious correlation, as in Pearson's own example below:

Virile people good offspring

This was the course pursued and the technique argued for in the first Eugenics Laboratory monograph. However it is necessary to probe a little deeper into this obvious methodology.

There seems to have been an implicit assumption at both "ends" of the causal chain that the correlation of physical/mental states in

parents and offspring irrespective of environmental variables amounted to the description of an hereditary relation. In fact in Pearson's usage the term hereditary stock was extremely problematic, argued inferentially from other "real" correlations. This can be seen in the central raison d^{*}etre of the study. It will be recalled that the technique of getting round spurious correlations was to hold constant the physical and mental state of the parents while alcohol consumption varied. A secondary difficulty presented itself here. How could the researcher decide that the two populations drinkers and non-drinkers were in fact of more or less identical stock? It was decided to resolve this question by reference to wages on the grounds that "we think it may be safely affirmed that if the alcoholic parent were markedly inferior in physique or intelligence his average wages would be markedly less than those of the sober parent" (35). Wages were the best index "of the general status as to physique and intelligence of the parent" (36).

Now irrespective of the viability of this index (which is what the debate with Keynes and Marshall was about) the method here was crucial. If the study meant anything the results must be interpreted as having controlled for heredity. As the results turned out, in a number of areas the offspring of the drinkers emerged rather better than the offspring of the non-drinkers. In intelligence for example Pearson found a small correlation between intemperance and intelligence i.e. the intemperate had slightly less mentally defective children. The logic of the study would indicate that the qualities of the offspring, whether good or bad, were due to alcohol yet, "here again we must repeat that we do not suppose temperance to be a cause of mental defect any more than we supposed it to be a cause of phthisis or epilepsy" (37). The question must be asked, bizarre as it may seem, why not? The logic of the data, however small the coefficients, was that intemperance caused less disease and less mental defect.

When it came to explaining apparent anomalies Pearson resorted to two rather odd arguments. The first depended on variability in the very factor which should be controlled i.e. hereditary stock. Indeed his results were, on these supplementary arguments precisely what the

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monograph on its own terms was supposed to avoid (38). Thus with reference to general health (taking phthisis and epilepsy as indicators) Pearson argued "The fact, as shown in these figures, that the children of the intemperate are healthier than the children of the sober is probably due to the more virile and physically fit members of the community being liable to alcoholic temptation, and is as such an indirect effect of heredity and not a result of alcohol" (39). The natural obverse of this was used to explain odd results in connection with intelligence - "The small association, if it be significant, is probably a secondary effect of an herditary influence, the mentally defective children coming from a feebler stock, which has not the desire or possibly the capacity for alcohol of a stock of a more vigorous physique" (40). This second argument, in itself rather vague and dubious appears to have been in at least partial contradiction with one of the fundamental axioms supposedly proved by the monograph and extreme alcoholism that "the bulk of the mentally defective became criminal or alcoholic" (41).

Thus in the Pearson studies the two crucial elements were quantification and differentiation, but the first two pages of the monograph were taken up with what may be called the modes of effect of alcohol and these were not drawn from statistics but from the existing state of medical and hereditarian discourse. The Pearsonian elements functioned in relation to these discourses. The first element was the quantitative measure which supplied the criterion of the necessity to differentiate (i.e. did alcohol have effects on the offspring?) the modes of effect. The second element was the capacity to handle such differentiation should it occur in terms of distinguishing the modes of effect. As the examples that have been cited show when such differentiation did occur (in some cases in favour of intemperance) the modes of effect could only be brought to bear on the results by speculation and by sabotaging the crucial principles of the study. This is not to say that the methods could not produce results of greater accuracy as for example in the first set of correlations between parental drinking and the height and weight of offspring. From the fact that the mother/daughter correlations were higher than the mother/son ones Pearson concluded that he was dealing with an environmental relationship rather than a

direct toxic one because the latter would affect boys as much as girls. Nevertheless the fact remains that the correlations were not incompatible with a toxic effect i.e. the methods employed did not make possible the distinction of the modes of effect.

Thus we have here a conflict not between men of reason and men of passion, not even between partisans of incompatible methods. For all their savage denunciations of each other the two schools had much in common but their shared commitment to eugenics could not resolve their differences. Both these differences and the common features were rooted in the confused melange of theories that constituted hereditarianism at the time (42).

For both Pearson and the racial poison school the central issue was heredity yet there were others for whom a quite different concept was of critical importance, namely, selection. Foremost among these was Dr. G. Archdall Reid (43). In some ways Reid saw himself as fighting on two fronts. Like Pearson he objected to the racial poison school not so much on statistical grounds but rather on the basis of his ruthlessly Weismannist position on the germ-plasm i.e. it was immune to any outside effects. Unlike both Pearson and the racial poison school he posited susceptibility to alcohol as an hereditary characteristic not necessarily a function of any general germ-plasm defect. The racial poison school for their part were prepared to concede some minimal selective effect to alcohol but for them alcohol produced more degenerates than it removed.

For Reid the most fundamental questions of the continuity of the germ-plasm and the explanatory value of natural selection were at stake. The arguments were at one level relatively straightforward so much so that Reid delighted in impressing on his opponents the supposedly axiomatic structure of his theory which could be reduced to five propositions. Firstly, individuals differed in their susceptibility to alcohol and this was grounded in the hereditary material. "A drunkard drinks because he is so constituted that experience of alcohol awakens in him a craving for alcohol. Whether he drinks or not he tends to transmit this inborn constitution of mind to his child" (44). Since the susceptibility trait was hereditary it could exist without being fulfilled - "The facts remain, however, that though many people who are very susceptible to the charm of alcohol do not fall victims to it, yet, whether it be indulged or not, the susceptibility exists, is greater in some people than in others, tends to be inherited in its various degrees .." (45).

Secondly men consumed alcohol in proportion to their desire for it. This was argued as a general axiom - "... generally speaking, men indulge in sugar, salt, or tobacco, or anything else in proportion to their desires" (46). The combined effect of these first two points was to considerably downgrade the question of self-control and Reid backed this up with an ingenious appeal to introspection that must have been appreciated by a public somewhat disenchanted with decades of Temperance propaganda. Reid enquired of his reader whether he had "observed in his wife or mother, for instance, a tendency to intemperance, checked only by a sense of duty? Are his father, his brother and his **su**ter victims of this miserable craving, as they are "victims" if I may use the word, of the cravings for food and water?" (47). Here Reid was simply drawing on the obvious fact, that most people did not experience personal dramas of resisting the "temptations" of alcohol, while producing an apparently satisfactory explanation of the fact that alcoholics, though endlessly exhorted to control themselves, generally failed to do so. Reid's third proposition, which would have found few opponents, was simply that alcohol in excess was a poison causing death and that alcohol and alcohol related conditions were important causes of mortality (48).

It was Reid's last two propositions and their legislative implications that made him a controversial figure. He insisted that alcohol in parents did not have a degenerative effect on offspring on the usual grounds: that there was no generally accepted case of the inheritance of acquired characteristics; that the degeneracy school consistently confused post hoc and propter hoc (49) and that if alcohol did cause degeneration then races which had used it for millenia should have degenerated, which was clearly not the case (50). This topic disposed of Reid was able to proceed to his final point that alcoholic mortality was exercised on the hereditarily susceptible and to conclude therefore that this mortality had a selective effect.

These arguments were derived from Reid's version of orthodox Darwinism, which is best approached in terms of three aspects: firstly, the main structural features; secondly, the prominence given to the facts of human disease in his model of Darwinism; thirdly, the appropriateness of this disease model to alcoholism. Reid's version of Darwinism put into play three features, namely definitions of 'fit' and 'unfit' and the facts of what he called 'injurious agencies' (with the proviso that only inborn characters were being dealt with).

Darwinian evolution "infers that, as a rule, the individuals who survive and have offspring, are those which are better fitted to the environment in which they are placed than those which perish" (51). Thus two major problems were set up: firstly, innate variations (how are they known?), secondly, death rates (what are their effects?). In Reid's Darwinism selection appears to oscillate between two roles. It is on some occasions credited with producing a certain structure, on other occasions as a means of inferring that structure. Take the following "It follows, if an injurious agency is so little injurious as not to influence the death (or birth) rate, or so very injurious as not to discriminate between the fit and the unfit that it cannot be a cause of evolution. In the one case the unfit are not eliminated, in the other the fit do not survive. Haphazard deaths again are not causes of evolution. Thus fire and water may destroy many lives in this country but they do not select for survival any particular type of individual" (52). This passage makes a firm distinction between the identification of the fit/unfit and the effects of death rates and indeed this point was crucial to Reid's argument that human data were much more suited to Darwinism than plant or animal data precisely because in the latter case, "we cannot declare, with certainty that this or that type, as a rule, perishes" (53).

The strategy here then is quite clear. In order to proceed it would be necessary to be able to identify 'types' and then investigate how death rates affected the reproduction of these types. How then in

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the case of human disease were these types to be identified? - "It is a matter of common knowledge that men differ in their powers of resisting this or that disease. Some men take a disease and perish; others take it and recover, yet others do not take the disease at all, they are totally immune. It is also a matter of common knowledge that every prevalent disease tends to afflict certain families more than it does others; in other words, parents weak or strong against any given disease, tend to transmit their peculiarities to children" (54). The reasoning here is rather different - the distinction between the fit and unfit types in the matter of human disease is made by inference from who survives and who perishes. They are not identified independently from death rates but as an effect of death rates. This is then argued as an example of the general case according to Darwinism "evolution results from the selective elimination of inferior individuals, and then only when the selective elimination is considerable in volume ... We have, therefore, only to note the principal causes of the death rate to discover the actual lines of evolution" (55). In this mode of argument the category of haphazard deaths (i.e. deaths having no systematic effect on an identifiable type) - could not exist - so there is now nothing to prevent the postulation of innate susceptibilities to death by e.g. fire and water (56); fire and water tend to destroy those who are less alert, less quick in their reactions etc; it is "common knowledge" that men vary in their alertness, their reaction times etc.

Thus Reid's Darwinism, while axiomatic, was entirely circular. His answer to the question how can one prove that alcoholic causes of death are selective, required the examination of the destruction of the unfit types. But the unfit types could only be recognised by virtue of their destruction. Nevertheless in Reid's view it followed "that every deadly and prevalent zymotic disease plays the part of a breeder. It eliminates the unfittest, leaving the fittest to continue the race" (57). This Darwinism had some paradoxical characteristics. Its central feature was a list of obvious empirical facts (58) - the extensive documentation of human disease that Reid pointed to, causes of death, number of causes of death and so on was a question of classification and tabulation which contained of itself no evidence one way or the other about innate susceptibilities - and while being impossible to apply to animal or plant life it was easily applied to Man (59).

It was this model Reid used to explain alcoholism since "the analogy between narcotics and disease is so close that it is more convenient to deal with them at once especially as narcotics usually kill by producing disease" (60). Applied to alcoholism Reid argues that the disease model required an additional postulate, a psychological one referred to as point two above (61) which reveals another aspect of the open-endedness of the innate susceptibility argument. In the context of alcohol the fit and the unfit were obviously those who did not desire enormous amounts of drink and those who did - hence the irrelevance of self-control. But this was superfluous since the theory already contained all the resources it needed to deal with the problem. Just as men varied in all kinds of characteristics so they varied in their degree of self-control with regard to liquor. Clearly if you attempted to meet Reid[®]s

The main terrain on which alcoholic selection was argued was historical and ethnographic. Reid concluded that races were immune to diseases (and by extension, narcotics) in proportion to their experience of them (63). This clearly followed - the longer natural selection had to work the more its results would be in evidence. All the conditions for the transferrability of the disease model were present - "since alcohol weeds out enormous numbers of people of a particular type, it is a stringent agent of selection - an agent of selection more stringent than any one disease" (64).

Reid did not shrink from drawing the practical implications of his doctrine. At the psychology section of the 1899 BMA conference he was quoted as saying - "The Temperance Reformer's plan of abolishing drink was not the true method of reform. Were such a procedure to come into force for a time the result would be that the race now removed from alcoholic selection would revert to the ancestral type in which the tendency to excessive drink was greater, and directly the opportunity recurred drink almost to extinction, like savage man unacquainted in the past with alcohol" (65). The difference between Nature's method and Temperance Reform was clear - "She (Nature) has eliminated drunkards; temperance reformers propose to eliminate drink" (66). This was the basic point besides which all the detail about the failure of Temperance legislation in the U.S. and the British Dominions paled into insignificance (67). Clearly the only way out was a eugenic one. Reid's suggestions were forthright and uncomplicated showing a robust disregard for practicality that no Temperance Reformer, however fanatical, could have hoped to rival. "If drunkards were taken before magistrates, sitting in open or secret session, as the accused preferred, and, on conviction, were warned that the procreation of children would subject them to this or that penalty, say a month's imprisonment, the birth-rate of drunkards would certainly fall immensely" (68).

Perhaps surprisingly in view of its initial enthusiasm the Eugenics Education Society seemed to lose interest in the matter (69). It seems reasonable to conclude that this was in part an effect of Saleeby's waning influence and the intractable differences among eugenists on the question. In 1915 Darwin then President of the Society was invited by the Society for the Study of Inebriety to lecture on alcoholism and eugenics (70), and he attempted to steer a judicious middle course. He would not concede that there was such a phenomenon as alcoholic damaging of the germ-plasm more or less on the grounds of the Archdall Reid position but against the latter he refused to accept that the banishment of intemperance would lead to reversion. In his speech there was no raison d^eetre for any <u>specific</u> eugenic interest in alcoholism and Darwin^{*}s position was the popular eugenic one (in this sense closest to Pearson) that "the natural qualities which lead to crime are, in fact, those which we have seen lead to intemperance, and here the eugenist finds a reason why crime and alcoholism are closely correlated" (71), the ground for both these being, of course, feeble-mindedness. Leading figures in the debates - Reid, Sullivan, Saleeby - gave their views on the paper and little change is observable (72).

Almost as Darwin spoke, however, many aspects of these theories were about to be put to the cruel tests of real life. In D^{*}Abernon^{*}s words, as a result of the Liquor Traffic Control Board^{*}s activities

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(of which he was Chairman) "... within eighteen months drunkeness had diminished by one half, within three years ... by more than eighty per cent on the pre-war convictions ... Inefficiency ... bad time-keeping, cases of Delirium Tremens and illness proceeding from drunkeness, all diminished rapidly" (73). And the benefits remained, reversion failed to put in an appearance while convictions for drunkenness and deaths from alcohol fell precipitately. Where was natural selection, where were the feeble-minded? In 1939 Mapother, a leading British psychiatrist, writing on the physical basis of alcohol mental disorders briefly mentioned previous debates as if they had taken place on another world - "I doubt whether even a dictator would propose to improve his race by alcoholic massacres of the innocents upon such evidence as exists" (74); the theory of selection was "no longer tenable. The poverty-stricken peasantry of rural Italy and Spain were and are sober, but the populations of the industrial towns of these countries are not more so than in the north" (75).

Chapter VI - FOOTNOTES

- There was a considerable correspondence between Eugenists and the LCC on this matter which can be followed in The Times 19/2/08; 27/2/08; 18/4/08; 21/4/08 and the Pall Mall Gazette 4/3/08.
- 2. The general background I have taken from J.F.C. Harrison (Drink and the Victorians, Faber & Faber 1971), ("the temperance movement from 1872 to first world war badly needs a historian" (p.20)); R. M. MacLeod - The edge of hope: social policy and chronic alcoholism 1870-1900 (Jnl. Hist. Med. Allied Sciences 22 (1967) 215-245; G. Basil Price - Legislation and the care and control of the inebriate (British Journal of Inebriety X (1912) 25-34); anon - The scientific study of alcohol and alcoholism (British Journal of Inebriety VII (1909) 24-34); G.B. Wilson - Alcohol and the nation (Nicholson & Watson 1940). A.E. Wilkerson - A history of the concept of alcoholism as a disease (University of Pennsylvania Dissertation in social work 1966) has some interesting material but is almost exclusively devoted to the United States. Unfortunately E. Gordon - The anti-alcohol movement in Europe (N.Y.: Fleming H. Revell Co. 1913) deals only with continental Europe.
- 3. His major statements were, Alcoholism and Eugenics (British Journal of Inebriety VII (1909) 7-20): Racial Poisons II. Alcohol (ER II (1910-11) 30-52); also a great deal of polemical material which will be referred to where relevant. For Saleeby's influence in the United States see Bartlett C. Jones Prohibition and Eugenics 1920-33 (Jnl. Hist. Med. Allied Sciences, 18 (1963) 158-72).
- 4. Cf. A.F. Tredgold Some medical aspects of eugenics (The Medical Press (7/8/1912) 110-112; 137-9)
- 5. And indeed other writers Cf. G. Chatterton-Hill Heredity and Selection in Sociology (A. & C. Black 1907) p.279
- 6. He claimed and his claim seems justified, to have written the Society's memorandum to a government enquiry into the subject of alcoholism. See Appendix $I\bar{\Psi}$.

- 7. See EES annual report 1910
- 8. Pearson A First Study of the influence of parental alcoholism on the physique and ability of the offspring (Dulau & Co. 1910) p.1
- 9. op.cit. p.2

10. op.cit. p.32

- 11. Eugenics Review II (1910-11) p.33
- 12. In Eugenics and Public Health (Journal State Medicine XXI (1913) 440-445) Saleeby argued that opposition to the racial poison conception of alcohol was based on the biometric memoir and a misplaced Darwinism. In what follows, because of the somewhat fragmentary nature of Saleeby's statements on the question I have sometimes relied on W.C. Sullivan's Alcoholism - a chapter in social pathology (Nisbet 1906) which was written from a not dissimilar position. This seems justified also by the fact that both Crackanthorpe and Saleeby constantly cited it in their writings.
- 13. This seems to have remained a live issue for some time. The author of the revamped version of the Horsley and Sturge book, (see footnote 33), expounding the notion of blastophthoria, said that "the condition induced does not necessarily become hereditary and thus transmissible to successive generations" but also argued that, "alcohol in excess is a definite racial poison inducing charges in the germ-plasm, which are transmissible to succeeding generations". C.C. Weeks Alcohol and Human Life (H_{*}K. Lewis 1929) p.III
- 14. Taken, understandably, by Pearson. See e.g. the pamphlet replying to Horsley and Sturge. (Bibliographical Appendix II ref. 51 pp.36-7)
- 15. Lancet 21/1/1911 p.177
- 16. As comments at the time make clear. e.g. "... the profession is indebted to him (Pearson) for his usefulness as a corrective factor

in - to mention only one instance - the absurd overrepresentation of the case against alcohol" (The Hospital LIV (1913) p.629)

- 17. C.W. Saleeby Professor Karl Pearson on alcoholism and offspring (British Journal of Inebriety VIII (1910) 53-66) p.61
- 18. Sullivan op.cit. ch.IV
- 19. Laitinen's paper, 'A contribution to the study of the influence of alcohol on the degeneration of human offspring' is in J.T. Rae (ed.) - The proceedings of the 12th international congress of alcoholism pp.263-270 (National Temperance League 1910)
- 20. Sullivan op.cit. p.38
- 21. op.cit. p.172
- 22. op.cit. p.186
- 23. ibid.
- 24. op.cit. p.189
- 25. ibid.
- 26. A leading mental deficiency campaigner who supplied half the data for the first Pearson study.
- 27. British Journal of Inebriety VIII (1910) p.50
- 28. e.g. in the editorials in the Lancet 9 Feb. 1901 and 23 March 1901 and National Temperance Quarterly symposium on the Pearson monograph.
- 29. British Journal of Inebriety discussion of T. B. Hyslop's paper 'The influence of parental alcoholism on the physique and ability of offspring'. VIII (1911) 175-215. Mott p.190

30. op.cit. p.192

31. op.cit. pp.192-3

- 32. The book was reported to have sold 60,000 copies in National Temperance Quarterly (March 1911) p.9. There are brief comments on Horsley's role in the controversy in S. Paget - Sir Victor Horsley (Constable 1919) and J.B. Lyons - The Citizen Surgeon -A biography of Sir Victor Horsley (Peter Dawnay 1966)
- 33. Horsley and Sturge Alcohol and the Human Body (1911 MacMillan 4th ed) p.247
- 34. op.cit. p.244
- 35. Pearson op.cit. p.4
- 36. ibid.
- 37. op.cit. p.14
- 38. "It is possible that the more virile members of the community habitually take more alcohol than the feebler members and we might thus be led to a spurious correlation between alcoholism and good physique in the offspring". ibid. p.3

39. op.cit. p.11

40. op.cit. p.14

- 41. Bibliographical Appendix II ref. 36 p.44
- 42. It would be quite wrong to suggest that the whole of the medical profession were Temperance fanatics and I am not in a position to establish how typical of the profession medical temperance was. There are a number of points here that could be followed up. My impression is that complete confusion prevailed about definitions
 of alcoholism, drunkard, chronic alcoholic and so on. See for

example T. N. Kelynack - The Alcohol Problem in its biological aspect (Richard J. James 1906) in which the known medical facts are liberally flavoured with bluster and common sense. For another example see the reports of the Medico-Psychological Association (Lancet 28/5/1904 pp.1503-4), and Sullivan's paper -A Statistical Note on the Social Causes of Alcoholism (Journal of Mental Science 1904). It would also be interesting to pursue the questions which sections of the medical profession asked which questions. Again my impression is that there was rather a difference between the amateur Darwinist wing and those who actually had to look after "inebriates". On attitudes to therapies Cf. J.W. Astley-Cooper - The Treatment of alcohol inebriety by psycho-therapy (British Journal of Inebriety VIII (1911) 135-42 - "Till recently in this country at all events the psychic treatment of inebriety has received scant attention". (p.137) and H. Crichton-Miller - Psychotherapy and the Inebriate (British Journal of Inebriety X (1913) 175-187) - "yet I venture to say that a generation hence our successors will smile at the almost complete absence of psychological diagnosis and analysis which at present characterises our treatment of the inebriate". (p.186). Crichton-Miller^{*}s later contributions to British psychiatry are, of course, well-known. And the eugenists had their sworn enemies. "Please do not say or think that my patient was degenerate. I think we doctors may leave the term to the amateur biologists who revel in eugenics and such nonsense". (M.D. Eder - A case of Obsession and Hysteria treated by the Freud psycho-analytic method (BMJ 30/9/1911) pp.750-752. Eder of course was not typical of the medical profession. See the references to him in volume two of E. Jones biography of Freud (Hogarth Press 1967).

43. His writings, the discussion of which was very considerable (my bibliography is by no means complete) seem to be one of the lost chapters of British Darwinism. For my purposes the central texts are Alcoholism: A study in Heredity (T. Fisher Unwin 1901) and Human Evolution with special reference to alcohol (BMJ 31 Oct. 1903 818-20) but where necessary or useful I have used other material.

- 44. Alcoholism p.89. Elsewhere in this book (pp.86-7) Reid uses the term *alcohol diathesis*.
- 45. Reid The Laws of Heredity (Methuen 1910) p.294
- 46. Alcoholism p.78

47. op.cit. p.81

- 48. op.cit. ch.VI The death rate from alcohol
- 49. Cf. Reid Alcoholism in its relation to insanity (Lancet 12 August 1899) pp.451-2
- 50. Cf. "Dr. Drummond thinks that alcohol circulating in the parents" blood may so damage the germ-cells as to render the offspring which arise from them more liable to drunkenness than they otherwise would have been. In that case, races which have longest used drink should be the most drunken, whereas the contrary is the fact". Reid - Alcoholism in relation to heredity (BMJ 6 January 1900 pp.46-7) p.46
- 51. Reid The Principles of Heredity (Chapman & Hall 1905) p.16
- 52. Alcoholism p.16
- 53. op.cit. p.25
- 54. op.cit. pp.30-31
- 55. op.cit. pp.17-18
- 56. Cf. H.G. Wells^{*} susceptibility to skull fracture by falling bricks (in Mankind in the Making) mentioned in chapter IV above. Funnily enough Reid actually comments on this passage himself (Principles pp.344-5) and seems to have completely missed the point.

- 58. "It has long been recognised that most infectious diseases tend in course to "wear themselves out.". W.A. Brend-Heath and the State (Constable 1917) p.32
- 59. One of the subtitles of chapter 3 of Alcoholism is "the impossibility of proving natural selection by a study of wild nature".
- 60. Principles p.189
- 61. "... the study of the effects produced by narcotics should be deferred till we have considered the phenomena of mind". Principles p.189
- 62. "The fact remains that some men are so constituted that they succumb much more quickly and completely to the charm of alcohol than others. They acquire the habit and the craving for intoxication with much greater ease. Even if, ignoring obvious facts, we attribute differences in drinking habits solely to differences in powers of self-control, and insist that all men are equal as regards their susceptibility, that central fact would still remain". Principles p.194
- 63. "Given equal accessibility of alcohol, in every case the most temperate races are those which have been most exposed and the least temperate are those which have been least exposed". Reid -Recent Researches in Alcoholism(Bedrock No.1) p.41
- 64. Alcoholism p.86
- 65. Cf. Reid Alcoholism in its relation to insanity (Lancet 12 August 1899) pp.451-2
- 66. Principles p.339
- 67. Alcoholism ch.XIII The Temperance Failure and Principles pp.340-44

- expressed, as we would now see it, more moderate and practical views e.g. Laws p.465 but what is at issue here is the <u>logic</u> of his position.
- 69. There is almost no mention of the topic in the Eugenics Review for example and no account of the various Parliamentary efforts to pass a new Inebriates Act whereas the Review always reported the legislative battles over mental deficiency.
- 70. L. Darwin Alcoholism and Eugenics (British Journal of Inebriety XIII (1915) 55-66)
- 71. op.cit. p.64
- 72. As footnote 70 reactions printed in the same issue of the journal. In general, with a few exceptions, the medical profession seems to have been unimpressed by Reid[®]s case. The following is not untypical "Certainly, many careful observers will be inclined to agree with Dr. Robertson that at the present time one of the most potent causes of genetic variation depends upon the action of alcohol, and probably the majority will, whatever theoretical support they may be inclined to give to Dr. Reid[®]s theories, agree with Dr. Robertson[®]s practical advice that it is the duty of the State to remove from the environment of its people every inimical condition to which there is imperfect adaptation". (Medical Press and Circular 20/1/1904 p.67)
- 73. Lord D[®]Abernon quoted in M.M. Glatt The English Drink Problem; its rise and decline through the ages (British Journal of Addiction 55 (1958) 51-67) p.58. And see M.E. Rose - The Success of Social Reform? The Central Control Board (Liquor Traffic) 1915-21 in M.R.D. Foot (ed.) War and Society: Historical Essays in Honour and Memory of J.R. Western 1928-71 (Elek 1973)
- 74. British Journal of Inebriety XXXVI (1939) p.104

75. ibid. p.110

Chapter VI - BIBLIOGRAPHICAL APPENDICES

These bibliographical appendices are loosely based on "A bibliography of the controversy between Professor Karl Pearson and his critics, with brief comments by Walter N. Edwards F.C.S." which appeared in the National Temperance Quarterly of March 1911 (pp.233-240). I have however made substantial alterations as follows. I have split it into two halves the first half covering the debate between Pearson and Keynes/Marshall and the second covering the debate between Pearson and his medical critics. In addition I have corrected a number of errors, deleted a number of unimportant or marginal items and inserted a number of other references of eugenic interest.

<u>Appendix I</u>

- 1. Marshall Times 7/7/10
- 2. Pearson Times 12/7/10 (reply to 1)
- 3. Keynes Journal Royal Statistical Society (73 (1910) 769-73
- 4. Marshall Times 2/8/10 (reply to 2)
- 5. Pearson Times 10/8/10 (reply to 4)
- 6. Marshall Times 19/8/10 (reply to 5)
- 7. Pearson Supplement to the memoir entitled: The influence of parental alcoholism on the physique and ability of the offspring a reply to the Cambridge economists (this appeared in a series called Questions of the Day and of the Fray in which Pearson and his colleagues published polemical pamphlets, usually verging on the openly insulting). This was the first of the series and appeared in October 1910 (Dulau & Co.)
- 8. Keynes Journal Royal Statistical Society (74 (1910) 114-21) (reply to 7)

- 9. Pearson Journal Royal Statistical Society (74 (1911) 221-9) (reply to 8)
- 10. Keynes Journal Royal Statistical Society (74 (1911) 339-45)
 (reply to 9)

Appendix II

- 1. Ethel M. Elderton with the assistance of Karl Pearson A first study of the influence of parental alcoholism on the physique and ability of the offspring (Eugenics Laboratory Memoirs X Dulau & Co.)
- 2. Times 21/5/10 editorial comment (favourable) and detailed summary of the memoir
- 3. Times 31/5/10 letter from H.B. Donkin (approving memoir)
- 4. Times 2/6/10 letter from M. Crackanthorpe President of the Eugenics Education Society (attacking the memoir on the basis of the limits of biometry)
- 5. Times 3/6/10 letter from F. Galton (defending biometry)
- 6. Times 7/6/10 letter from Crackanthorpe (explication of 4)
- 7. Times 10/6/10 letter from Pearson
- 8. Times 21/6/10 letter from Crackanthorpe
- 9. Times 24/6/10 letter from Pearson
- 10. National Temperance Quarterly 2 (June 1910) 64-71 review of the memoir by W.N. Edwards - The memoir on alcoholism and offspring
- 11. BMJ 2/7/10 letter from W.A. Potts
- 12. BMJ 9/7/10 letter from Pearson (briefly reply to 11 on questions of samples)

- 13. BMJ 23/7/10 letter from Potts (reply to 12)
- 14. BMJ 6/8/10 letter from M. Dendy (who collected some of the data Pearson used defending its accuracy)
- 15. Lancet 2/7/10 letter from Sullivan (criticism of the memoir)
- 16. ER vol II Sullivan¹'s review of memoir pp.150-1
- 17. BMJ 3/9/10 letter from R.J. Ryle (a doctor defending Pearson)
- 18. National Temperance Quarterly (September 1910) article by R.J. Ryle (as 17). A large section of the September 1910 issue was devoted to discussion of the Pearson study - R.J. Ryle pp.167-9; G.W. Saleeby pp.170-2; and others on subsequent pages.
- 19. T.H. Bickerton and C.T. Williams Alcohol and Parentage (U.K. Band of Hope Union) - criticism of memoir
- 20. BJI (October 1910) C.W. Saleeby Professor Karl Pearson on alcoholism and offspring VIII (1910) 53-66
- 21. Daily Chronicle 28/10/10 review of memoir by Sir Thomas P. Whittaker
- 22. Daily Chronicle 29/10/10 Part II of review by Sir T.P. Whittaker
- 23. Daily Chronicle 1/11/10 reply to Pearson (to 21 & 22)
- 24. Daily Chronicle 2/11/10 letter from Saleeby
- 25. Daily Chronicle 5/11/10 letter from T.P. Whittaker

26. Daily Chronicle 9/11/10 - letter from Pearson

- 27. BMJ 12/11/10 qualified editorial support for Pearson
- 28. Daily Chronicle 14/11/10 letter from T.P. Whittaker

- 29. BMJ 19/11/10 letter from Sir Victor Horsley and Dr. Mary Sturge (first contribution from the leading critics of the Pearson memoir)
- 30. BMJ 26/11/10 letter from Pearson. Editorial writer defends himself.
- 31. BMJ 3/12/10 letter from Horsley and Sturge
- 32. BMJ 10/12/10 letter from Pearson
- 33. National Temperance Quarterly 2 (December 1910) R.J. Ryle -Does parental inebriety affect the offspring? This article appeared on pp.149-154 though in fact these numbers are misprinted.
- 34. Karl Pearson and Ethel M. Elderton A second study of the influence of parental alcoholism on the physique and ability of the offspring - being a reply to certain medical critics and an examination of the rebutting evidence cited by them (Eugenics Laboratory Memoirs XIII Dulau & Co.)
- 35. BMJ 17/12/10 letter from Horsley and Sturge
- 36. BMJ 24/12/10 letter from Pearson
- 37. BMJ 31/12/10 letter from Horsley and Sturge
- 38. Amy Barrington and Karl Pearson A Preliminary study of extreme alcoholism in adults (Eugenics Laboratory Memoirs XIV Dulau & Co) The controversy over the first monograph seemed to have the effect of completely obscuring their other research but this and a later second study by Heron are the Pearsonian answer to the other main problem i.e. the cause of alcoholism - it attempts to prove that mental deficiency is the main source of the problem.-D. Heron - A Second Study of Extreme Alcoholism in Adults (Eugenics Laboratory Memoirs XVII Cambridge University Press 1912)
- 39. BMJ 7/1/11 editorial notice of and quotation from 38 letter from Pearson

40. Times 14/1/11 - letters from both Pearson and Horsley/Sturge

- 41. BMJ 14/1/11 Sturge and Horsley On some of the biological and statistical errors in the work on parental alcoholism by Miss Elderton and Professor Karl Pearson
- 42. Times 16/1/11 letter from Horsley and Sturge
- 43. Times 16/1/11 letter from Pearson
- 44. Times 19/1/11 letter from Horsley and Sturge
- 45. Lancet 21/1/11 fairly judicious editorial summary of the debate.
- 46. Times 23/1/11 letter from Pearson
- 47. Times 28/1/11 letter from Horsley and Sturge
- 48. Westminster Gazette 2/2/11 A.C. Pigou Alcoholism and Heredity
- 49. BMJ 4/2/11 letter from Pearson
- 50. BMJ 11/2/11 letters from Horsley and Sturge and Saleeby
- 51. Nature 9/2/11 E.H.J. Schuster Alcoholism and Eugenics (an account of the debate defending Pearson) pp.479-480
- 52. Karl Pearson An attempt to correct some of the mis-statements made by Sir Victor Horsley, F.R.S., F.R.C.S., and Mary D. Sturge, M.D., in their criticisms of the Galton Laboratory Memoir: ¹A first study of the influence of parental alcoholism, & co." (Questions of the Day and of the Fray No. III Cambridge University Press)
- 53. BMJ 18/2/11 letter from Horsley and Sturge (having seen the original Dendy material, attacking it)
- 54. Economic Review (XXII (1912) 35-41) A.M. Carr-Saunders The

problem of alcoholism (an account of the debate defending Pearson; "such were the results which aroused so violent a controversy; it extended so far and found its way into so many newspapers that there can be few people failed to catch any echo of it". p.38)

Appendix III

This appendix is intended simply to list some of the main items in Reid^{*}s writings on alcoholism and the widespread discussion both of his thesis on alcoholism and his position on the wider questions of heredity and natural selection.

- 1. Reid Alcoholism in its relation to insanity (Lancet 12/8/99
 pp.451-2)
- 2. Reid Alcoholism in relation to heredity (BMJ 6/1/1900 pp.46-7)
- 3. Reid Alcoholism, a study in heredity (F. Fisher Unwin 1901)
- 4. Reid Human evolution with special reference to alcohol (BMJ 1903 818-820)
- 5. Reid Human evolution and alcohol (British Journal of Inebriety
- 6. H. Laing Gordon Alcohol and heredity (British Journal of Inebriety I 3 (Jan 1904) 202-208)
- 7. W. Ford Robertson The pathology of chronic alcoholism (British Journal I, 4 (April 1904) 226-256)
- 8. F.C. Coley Some points in the etiology of inebriety (British Journal of Inebriety II, 1 (July 1904) 22-33)

7.&8. attacks on Reid

9. H. Campbell - reply to Ford Robertson (British Journal of Inebriety II, 2 (Oct. 1904) 54-63)

- 10. W. Ford Robertson reply to Campbell (British Journal of Inebriety II, 3 (Jan 1905) 104-11)
- 11. G.A. Reid reaction to the debate between Campbell and Ford Robertson (British Journal of Inebriety III, 1 (July 1905) 16-30)
- 12. W.C. Sullivan Alcoholism and a priori biology (British Journal of Inebriety VIII (Oct 1910) 96-8)
- 13. G.A. Reid Recent researches in alcoholism (Bedrock I (April 1912) 21-47)
- 14. A.M. Gossage Human evidence of evolution (Bedrock I (April 1912) 123-30)
- 15. G.A. Reid Inheritance and reproduction (Bedrock I (July 1912)
 240-68)
- 16. A.M. Gossage Human evidence of evolution (Bedrock I (Oct1912) 383-6)
- 17. G.A. Reid Dr. Gossage's controversial methods (Bedrock I (Oct 1912) 386-398)
- 18. A.M. Gossage Crucial tests of evolution (Bedrock I (Jan 1913) 510-14)
- 19. G.A. Reid Immunity and natural selection (Bedrock II (April 1913) 83-101)

There were also extensive debates (there are too many individual items to be usefully listed here) in the Lancet on the following occasions.

20. 9 February 1901-21 September 1901. Started in this case by an editorial entitled Legislation against National Intemperance. The debaters included Reid, Laing Gordon and T.S. Clouston as well as other less well-known figures. 21. 4 June 1903-10 October 1903. Started by a long letter from Archdall Reid attacking medical doctrines of heredity. The debaters included Reid, Wiglesworth, Mercier, Laing Gordon.

Appendix IV

This appendix simply records some of the legislative background to alcoholism, more as a gesture towards further research than a statement of any conclusions. The legal context was laid down by the Habitual Drunkards Act of 1879 and the Inebriates Act of 1898. There was further discussion of the matter by a Departmental Committee which reported in 1908 (P.P. XII) to which Saleeby gave evidence. These developments are fairly thoroughly reviewed in an article in the British Medical Journal 30/3/1912 pp.737-40.

In parliamentary sessions 1912,1913 and 1914 the government made efforts to bring in a new act which would have made compulsory detention of Inebriates easier. In the 1912 and 1914 sessions the bills went to Standing Committee but were not in fact amended. These bills ran into the same kind of opposition as the Mental Deficiency Bill (considered in Chapter VIII), especially on the grounds of liberty of the subject. Of course it was possible to see them as yet another example of the eugenic mood of the times, as Wedgewood did - "It is only one of a trio of bills - the others being the Mental Deficiency Bill and the Criminal Justice Administration Bill, all being directed to take in the unfits and the misfits - those who do not fit into our civilisation - and put them into institutions in order to turn out more useful citizens to the possessing classes". (Commons LXV col.1520)

While one may be sceptical of some of the implications of this comment the eugenists undoubtedly saw a link between the two. Yet as I have said after their initial representations they seem to have lost enthusiasm for the matter, and their efforts were not successful, (at least so far as I can tell - Glatt op.cit. following H. Levy - Drink (Routledge Kegan Paul)1951) p.156 says there was an Inebriates Act in 1918 which operated till 1921, but I can find no record of it. Sir Norwood East's comments on the problem (in Society

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and the Criminal HMSO 1949) give no indication that there was a 1918 act).

Chapter VII - EUGENICS AND FEEBLEMINDEDNESS PART I

"The tendency seems to be at the present moment, in England at any rate, to concentrate attention far too exclusively on heredity as the cause of feeble-mindedness, and to look to segregation too hopefully as the one sure means for its prevention. There is almost a scare on the subject". Sir James Crichton-Browne (1912)

The previous chapters have indicated the tendency for eugenists to focus on mental deficiency as the core social problem and it was undoubtedly the central feature of their pre-war campaigns. The centrality of mental deficiency in their thinking was no accident. The contemporary indictment of the feeble-minded (1) was thorough and wide-ranging. In this perspective the feeble-minded were reproductively prolific; their progeny, often illegitimate, were also mentally defective, neuropathic or dysgenic; they had strong criminal propensities; they were a prime source of sexual irregularities and thus a major factor in the propagation of the venereal diseases; they were characterised by occupational incompetence, destitution, pauperism and vagrancy and for this, if no other reason, were incapable of sustaining family life; finally there was a close relation between mental deficiency and alcoholism with respect to genesis and consequences. This and the following chapter attempt to elucidate the specifically eugenic features of this indictment and show their links with bio-medical doctrines on the one hand and legislative change on the other (2).

For the eugenists feeble-mindedness was a social problem with a biological cause. The question of causation was their own special concern since many other social commentators were convinced (or became so) on <code>Non-eugenic</code> grounds that the feeble-minded were both a social problem and the root cause of many other social problems. The model deployed by the eugenists had two main features. The first of these was a set of correspondences between the hereditary level and states of mind such that states of mind were rooted in certain general determinants of mental development. These two levels were integrated in the theory of degeneration. "In short, we may say that mental deficiency is the final expression of a progressive

neuropathic diathesis, which, beginning as hysteria, neurasthenia, and epilepsy, passes onthrough insanity to culminate in actual structural defect" (3). But this germinal impairment was variable in terms of its expression or manifestation. The eugenists made much of the fact that they did not say that mental disorders were inherited but rather, as it were, a specific developmental energy at the level of the hereditary material - "it is quite clear that in many of these cases what is transmitted is not the actual quality, but a tendency to the development of that quality" (4). In the process of degeneration itself, the two phenomena at each level ran parallel as the germ-plasm was progressively devitalised so the mental condition became more severe.

These two levels also provided the space for the second main feature of the model, namely predisposition and stress factors. Mental conditions were such that certain potential states might be triggered by some environmental factor. This helped to explain a number of irritating and anomalous facts that for example idiots appeared in otherwise normal families or the different degrees of intensity of mental condition. As Tredgold informed the Royal Commissioners, investigating the feeble-minded "in cases in which morbid heredity is present but only very slight, I believe that these external factors have an extremely important contributory influence, and that they make all the difference between a development of the nervous system compatible with the needs of everyday life, and actual mental deficiency" (5). A favourite example of these stress factors was alcohol (6). These triggering factors were to be distinguished from what Tredgold called ^{*}extrinsic causes^{*} which invariably produced mental defect by way of an actual disease of the brain i.e. the kind of damage that could occur without the predisposition.

Within this broad outline a number of other features of their doctrine stand out. Certainly their classification schemas seem to have been rather vague and their usages inconsistent. A distinction was frequently made between psychoses (disordered functions of mind), dementia (loss of mind), and amentia (absence of mind) (7). But elsewhere (8) imbecility was described as a form of insanity or the term neurosis was stretched to cover epilepsy, migraine, even

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diabetes! (9). On other occasions Mott talked about 'temperaments'. The 'morbid neurotic temperament' for example he defined in the following terms the "signs of degeneracy which may be exhibited are self-centred narrow-mindedness in religious beliefs, fanaticism, mysticism and an unwholesome contempt for traditional customs, social usages and morality, often combined with a selfish, selfseeking, vain spirit of spurious culture, or by a false sentimental altruism, or by eccentricities of all kinds" (10).

Despite this somewhat confused terminology the bedrock of their position was the distinction between minds that were potentially unbalanced and minds that were not, as it were, completely equipped for full development (11). The second of these conditions (generally termed amentia) was firmly rooted in organic physical defect - it was a "manifestation of a imperfect or arrested development of certain cells of the brain" (12) and the feeble-minded belonged to a "totally distinct and pathological group" (13). Considerable emphasis was placed on the continuity between feeble-mindedness and the other more extreme forms of mental deficiency, because "feeble-mindedness however mild, and idiocy, however gross, belong to the same order; although different in degree they are of the same nature; they are the result of similar causes..." (14).

Curiously enough this strong emphasis on organic causes and clear cut pathologies did not preclude the frequent resort to sociological definitions of mental deficiency, as e.g. "The term "mental defect", in my opinion should be restricted to those persons who are so lacking in general mental capacity, in common sense, that they are incapable of subsisting by their own unaided efforts" (15). There was no contradiction however. In the first of three lectures delivered in 1913 Mott gave most elaborate organic definitions of feeble-mindedness - "the degree of amentia or congenital absence of mind is proportional to the failure or superficial extent of the grey matter of the cortex - the anatomical basis of mind" (16) but went on to state that no physical causes were discoverable in the "higher grade imbecile" (i.e. feeble-minded), the epileptic or the insane adolescent, attributed this to the fact that the right methods had not yet been invented and concluded with the necessity of falling

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back on the estimation of the kind of stock the individual came from. Thus this question of what consituted a neuropathic stock and its effects on breeding clearly lead to the final plank in the eugenic argument.

Just as the nature of the germ-plasm defect provided the place for the environmental triggering factors so it emphasised the place and effect of inter-breeding. The reader will recall from the chapter on pauperism the problem of the contamination of fit stocks. At the most general level, "the insane predisposition may disappear by marriage into perfectly healthy stocks but of course there is a danger of infecting a good stock with a bad" (17). Bad stocks if they inter-married, tended to die out on the principle of the 'law of anticipation^{*} as Mott termed it. But situations did arise which were much more difficult to assess - "What we want to know is, did the patient come from good stocks or bad stocks? In a large family one child may be feeble-minded and all the rest sound, perhaps some may possess brilliant mental characters. We may not be able to ascertain any reason for this child being defective. By the laws of heredity, especially Galton's law of ancestral inheritance, a feeble-minded or insane individual coming from sound stocks of civic worth is much more likely to breed mentally sound children than a feeble-minded or insane individual of a bad stock in which are found a large number of members exhibiting various forms of degeneracy" (18).

Mott seems to have been more optimistic than Tredgold that a stock with a not very high level of morbid heredity, if it married into a healthy stock, would throw off the hereditary curse. How then were these morbid stocks to be identified? In practice the only method was by reference to family pedigrees. This is most easily illustrated by an early paper of Tredgold's which discussed the influence of morbid heredity on the child (19). Tredgold arranged the parents of the children studied in five groups depending on the degree of morbid heredity. So for example the first group contained those with insanity in the child's mother only, with antecedents and collaterals healthy, the third group included those with insanity in the mother and present in one previous generation of either the mother's maternal or paternal ancestors (20) whereas the fifth group included all degrees of insanity on the mother's side plus insanity, alcoholism or phthisis on the father's side. Tredgold claimed to have shown that the death-rates of the infants correlated with the severity of the morbid inheritance. "It is plainly evident that when a strong morbid heredity exists the vitality of the child is so much impaired that its chances of surviving more than a few months are small and I am convinced that this morbid heredity influence plays a very important part in the degeneration of the offspring and finally culminates in either idiocy or extermination" (21).

In general the Mott/Tredgold view seems to have been widely shared by that part of the medical profession concerned with mental illness. What might be called the organic emphasis appears to have been wellnigh universal. Clouston's book (a standard text) opened with the theme of Temperament and Diathesis and certainly confirms the universality of the notion of the insane diathesis - "The great difficulty about its description is that we find few cases of this condition alike, and its special manifestations in different cases are as multiform as the human faculties and as complex as different combinations of unusual developments of those facilities can make it" (22). As has been argued there were two crucial aspects, - one, the reduction of states of mind and behaviour to organic levels (and at least by implication the 'hereditary stuff') and as a corollary of this the necessity to place the diverse forms of mental malfunctioning on a plane of equivalence.

There could be endless behavioural diversity (which the innumerable classification schemas tried to capture) but there must be (in the last analysis) organic unity. Discussions tended to concentrate round certain key points - identifiable disease states and (in the case of mental deficiency) cranial abnormalities (23); there was great interest in the apparent capacity of parents with one kind of mental disorder to produce offspring with another kind; interspersed with these discussions there were often the most breathtaking abstract speculations e.g. - "It is not impossible that there is a kind of moral centre in the brain, and so these cases or some of them have been compared with cases of agraphia or aphasia. We have indeed, seen moral weakness develop after a head injury" (24). What seems to have occurred is a complete disjunction between characterising behaviour and the endless invocation of "unstable nervous systems" and so forth. This vacuum was filled with theoretical debris like diathesis, degeneration and so on (25).

In addition to this general organic emphasis the major elements of the Mott/Tredgold position seem to have been widely accepted in the psychiatric literature of the time. These elements included the major distinction between insanity for which the predisposition/stress model was invoked and mental deficiency, characterised as incompleted cerebral development (26). The predisposition/stress model clearly had the characteristic of apparently endless extension (27) -"Neurasthenia and insanity are very closely related diseases. In each of them, as exciting factors, we find such conditions as the stress and strain of modern life, (Cf. footnote 27) shock, grief, infections and intoxications like influenza and alcohol ... There is, in fact, no cause capable of determining the one which may not act as the excitant of the other. The predisposing cause is identical. In each disease there is diminished physiological margin - a weakness - of the central nervous system. In some instances this weakness may be acquired, but in most cases, both of neurasthenia and insanity, as we are now beginning to recognise, it is inherited. In short, we may say that sufferers from both these conditions are born under the same unlucky star" (28).

As already indicated on the mental deficiency side proper 'incomplete cerebral development' seems to have satisfied everyone though many of those professionally concerned in the area must have been aware that, "comparatively few feeble-minded children belong to the distinct types ... It is also true that physiologists have noticed certain peculiarities in the structure of the brain and cortical nerve cells or mentally defectives (sic); but this, again, cannot help us for our purpose, for we cannot open the living child's brain to see what is the matter with it, and even if we could, I doubt whether it could help us very much" (29).

Nevertheless while the evidence indicates considerable support for the Mott/Tredgold view there was no shortage of sceptics. It was

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possible to question the data of the eugenic enthusiasts. Sir James Crichton-Browne reported asking a specialist doctor to keep records of mental defect among his affluent patients and out of 12 cases, "In only four of these cases was there any trace of hereditary taint, and in no case was that in the direct line of descent" (30). Indeed this is not an isolated case. In the context of prisons for example the most divergent estimates prevailed. One writer, in contrast to the rather wilder estimates of the eugenists, reported that "The percentage of defectives in prison has been very variously estimated. Dr. Quinton, late of Holloway Prison a man of great experience makes it as low as 4% The modest estimates invariably come from those whose duties bring them into daily contact with prisoners" (31).

Aside from the data the eugenists modes of reasoning could also be questioned - "As far as feeble-mindedness is in question, unless the relationship to it, in heredity of insanity, epilepsy, hysteria, neurosthenia, and even gross cerebral lesions were admitted, the case for inheritance would be a weak one" (32). As we have seen the equation of different forms of mental malfunctioning and the assumption of hereditary factors were complementary parts of a single theoretical structure. Both parts could be questioned. The analysis of 'marked heredity' was fraught with difficulties as some observers were well aware - "Others considered all cases of mental defect as 'hereditary' when there was any history of insanity as 'nervous disorder' of almost any kind among the more or less immediate ancestors" (33).

Having examined the views of those eugenists professionally concerned with the problem of feeble-mindedness in the context of medical opinion generally it now remains to examine the content of the more popular eugenic literature of the time to provide a more balanced picture of the eugenic case. The most characteristic image of this literature was the "stream of degeneracy" and these images portrayed in a frightening but effective way the notion of social problems with virtually unstoppable, because biological, causes - "Nothing is more wasteful than this army of degenerates who, when they are not living at the cost of the tax payer in work-homes or prisons, are wandering at large, idling, pilfering, injuring property and polluting the stream of national health by throwing into it human rubbish in the shape of lunatics, idiots and criminals" (34). That mental defect was hereditary almost went without saying and the most widely used means of demonstration were the pedigree (35) and references to general medical experience - "where both parents are known to be feeble-minded, there is no record of their having given birth to a normal child" (36).

Of course this was not unreasonable given, as Saleeby pointed out, "that the whole trend of modern research has been to accentuate the importance, if not indeed the indispensableness, of the inherent or inherited factor in the production of insanity" (37). The notion of the interchangeability of mental states was, of course, drawn from existing research but the implications were often stretched to the limit. Thus the Whethams, in the context of Lombroso's theories of crime, could write, "Almost all forms of chronic constitutional disease, especially those of a nervous character, may give rise to criminality in the descendants" (38). Eugenic writers treated insanity, feeble-mindedness and epilepsy in the same chapter of their books since they were seen more or less of the same order. Schuster's chapter (39) illustrates almost all the main features of the eugenic discussion. Insanity was a case of a general weakness of mental stability which gave certain people a predisposition to it during or as an effect of disturbing periods of life. A particularly difficult problem for eugenists here was recurrent insanity during certain periods of which, of course, the person appeared normal. The hereditary taint was there-- "There is one case on record in which such a man has begotten six more of the same kind" (40) - but given the periods of normality it was hard to justify any eugenic action (41). Mental deficiency, on the other hand, being a case of incomplete cerebral development, was open to more rigorous action.

The stream of degeneracy was not simply alarming in itself but because if the eugenic explanation were correct it would continuously increase. The eugenists often presented their arguments as inferences from natural selection. The model of natural selection was more or less an aggregation of empirical factors that had, or could be assumed to have, lowered death rates among the feeble-minded. On this principle there rested a network of arguments which explained the effects of humanitarianism and medicine while also drawing on both official and unofficial statistics. For the eugenist-in-the-street large numbers of feeble-minded persons existed because of the "relaxation" of natural selection. These persons, it was generally agreed, were both incapable of exercising restraint in their sexual functions and liable to be exploited in such a direction by the unscrupulous and evil-minded. The offspring of such pernicious unions in turn benefited from the relaxation of natural selection which, concretely, meant that they could turn for aid to a variety of public and private charitable institutions. Mrs. Hawkes voiced this theory with her usual forthrightness - "Then came our charitable institutions and 'our modern human sympathy' aiding and abetting the feeble-minded and criminals by finding them homes (the workhouse, 'homes', colonies, asylums, gaols etc), instead of, as at one time passively ridding the country of degenerates by allowing them to die because they could not fight the competitive battle of life, and actively ridding it of criminals by extensive capital punishments" (42).

As was often the case the chronology and adminstrative facts were somewhat vague. The primary factor in this relaxation of natural selection was clearly humanitarianism. Reference was sometimes made to earlier historical practices in this area or the practices of primitive races and these were always assumed rather drastic - "In primitive states of society it appears to have been an almost universal practice to kill all children who were delicate or deformed" (43). Even without this model of natural selection the fact that the feeble-minded were reproductively prolific was also barely open to doubt (44). Everyone had their favourite story of the feeble-minded woman who had been to a workhouse infirmary n times to give birth (45). Clearly the villain of the piece here was modern medicine and its increasing availability. But like humanitarianism medicine could not be condemned; rather its effects had to be compensated for (46). Thus it was the extent of feeble-mindedness and its reproductive excess, which made the situation so urgent.

There is one other aspect of the eugenic indictment, that, though it was a corollary of the preceding, deserves special mention. The

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eugenists clearly believed (rightly) that feeble-mindedness was a good campaign issue for them and this explains certain features of their arguments. There was an emphasis on the enormous benefits that would accrue from disposing of feeble-mindedness - obviously since feeble-mindedness was, if not the main, at least a major cause of most of the problems. There were three stages in this argument firstly a general conviction that since it was an hereditary phenomenon, once the feeble-minded ceased to reproduce the actual problem would rapidly disappear. "It is confidently asserted that feeble-mindedness could be practically stamped out in two generations if the State rigorously determined to check the perennial flow of the unfit into our national life" (47) or, as Saleeby put it, "The problem (of feeble-mindedness) would be at once reduced to negligible proportions if all cases of feeble-mindedness were dealt with as they should be" (48).

As a result of this many other problems would disappear or be substantially reduced. We would be "able to abolish the majority of our asylums, gaols and workhouses, to reduce considerably the number of our judges and the paraphernalia of justice, and to reduce and simplify our charities" (49). It all seemed most likely to catch the eye of the careful calculating bourgeois and though cost was sometimes thought to be rather profane in this context it was a major selling point - "In such a supremely important question cost should, perhaps, not be considered, but even the costs would be covered in the next generation by the less provision required for workhouses, hospitals, asylums and prisons ... " (50). As Major Darwin put it to the members of the Junior Constitutional Club, "every one of us in this room is constantly, year in and year out, paying the debts of the wastrel" (51). Thus the eugenic case should be argued as both convincing and as offering an urgent and practical reform - indeed the only immediately practicable eugenic policy that could be legislated for (52). All eugenists almost without exception agreed that it was a fully justifiable step.

Clearly it would be reasonable to conclude that this eugenic agitation and propaganda had an impact on the rising tide of demands for action to deal with the feeble-minded in the period up to the First World War. How far was this the case? It is clear that prominent representatives of the mainstream agitation had considerable sympathy for the eugenic position (53). A glance at their writings shows that they inclined to place in the forefront of their arguments the hereditary nature of mental defect, the explanatory role of natural selection and the necessity for powers of compulsory detention of the feeble-minded. Indeed the distinction between these writers and those placed under the heading of the popular eugenists may seem a very fine, even indistinguishable, one.

Yet it is important to be aware of the context of this agitation. Concern about the feeble-minded seems to have come in the wake of national education which brought to light this group and thus attracted the interest of the social reform organisations of the day (54). The mainstream agitation thus had a longer history and a broader basis than the eugenic denunciation of the feeble-minded. This longer history included some scepticism as to the question of heredity. As the COS report put it, "... though feeble-mindedness is largely due to heredity, in a great number of cases it makes its appearance independently of known hereditary taint ... We may conclude then that the extent of the mischief due to this cause has been somewhat exxagerated" (55). Differences of opinion can be clearly seen in the evidence offered to the Royal Commission on the Feeble-Minded by the various reform organisations. The representatives of Dr. Barnado's Homes, the Salvation Army and the Metropolitan Association for Befriending Young Servants all evinced considerable caution on the question of heredity and the notion of natural selection seems hardly to have arisen.

While the use of eugenic themes undoubtedly increases in the years up to the Great War it might be suggested here that this use was in part, indeed in large part, rhetorical (56). For the Dendys and the Pinsents eugenics provided a convenient set of phrases to articulate already established objectives. The conclusion of this chapter is that the Eugenists made a greater impact in the area of feeblemindedness than in other areas of social policy not as great, perhaps, as some have imagined but certainly there was sufficient interest and agreement to act as a launching pad for a legislative campaign. The

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issue of feeble-mindedness fitted the eugenic concepts better, it aroused no hostile interests, it promised to save expenditure and reduce immorality. It had all the characteristics of being a great opening battle for the young Eugenics Movement which if successful, would lead on to greater things.

Chapter VII - FOOTNOTES

- This is taken from J.E.W. Wallin The Education of Mentally Handicapped Children as quoted in L. Kanner - A History of the Care and Study of the Mentally Retarded (Springfield 1963: Charles C. Thomas) supplemented by C.W. Saleeby - The eugenic summary and demand, a paper given at the mental deficiency section of the 1911 National conference on the prevention of destitution (1911: P.S. King)
- 2. An examination of the first six volumes of the Eugenics Review shows F.W. Mott and A.F. Tredgold to have been the accepted eugenic experts on the field. Their medical eminence is not in doubt. (For Mott see A. Neger-Frederick Mott (British Journal of Psychiatry 122 (1973), 497-516). Tredgold was the author of what was for decades the standard British text-book on mental deficiency. In terms of publications, careers, professional recognition, and length of association with the problem they are clearly representative of medical expertise. In addition as eugenists (for Tredgold see Appendix Chapter III) they consistently put the eugenic line in frequent publications, to government committees and commissions and in popular lectures. To at least partially correct any confusion between Mott/Tredgold as eugenists and as medical men I have sampled other medical sources and experts and cited them where appropriate. Thus I take Mott and Tredgold to be representative of what may be called the expert eugenic position. I have made a distinction between this and the more popular eugenic propaganda, taken from the fifty or so references detailed in Chapter III Appendix I and other references quoted where relevant.
- 3. Tredgold The mentally deficient child (The Child 1 (1911) 313-320) p.315
- 4. Tredgold Heredity as a Factor in mental defect (NCPD 1911) p.29
- 5. Tredgold evidence to the Royal Commission on the care and control of the feeble-minded (P.P. 1908 XXXV-XXXIX) vol.1 p.397

- 6. Mott reported that, "repeatedly have I observed that a quantity of alcohol which may be consumed daily by a man of inherited sound mind without apparent harm is sufficient to make a potential lunatic anti-social and certifiable" (NCPD 1911) p.26 and F.W. Mott - The Temperance Movement and its relation to public health (National Temperance Quarterly vol.3 (1912-13) 880-4)
- 7. See Mott Is insanity on the increase? (Sociological Review 6 (1913) 1-29) p.17
- 8. In Lancet 13/5/11 pp.1251-1259
- 9. There is some useful discussion of the use of the terms neurosis and psychosis in the preface to the MacAlpine and Hunter edition of D.P. Schreber - Memoirs of my nervous illness (Dawsons 1955)
- 10. Mott The inborn factors of nervous and mental disease (Brain 34 (1911) 73-101) p.81
- 11. "... nearly all of these patients who become insane will be found to have previously shown evidence of abnormal mental action as well as of deficiency - they have in fact an unstable as well as a defective mind" Tredgold - The varieties of the feeble-mind (Charity Organisation Review XIX (1906) 12-20) p.17
- 12. Tredgold The problem of the feeble-minded (a paper read at the Guildhall Conference October 1904) p.2
- 13. Tredgold The feeble-minded (Contemporary Review 97 (1910) 717-27) p.718
- 14. As footnote 3. p.314
- 15. A.F. Tredgold Dull and Backward Children (British Journal of Children's Diseases (Oct 1911))p.5
- 16. Mott Nature and Nurture in mental development (Science Progress
 9 (1913) 291-307) p.229

- 17. F.W. Mott Heredity and Insanity (Eugenics Review II (1910) 257-281) p.276
- 18. As footnote 7. p.18
- 19. Tredgold Remarks on the subsequent history of children born while the mother was insane (Lancet 17/5/02 1380-5)
- 20. This heavy emphasis on the female side seems possibly related to the notion that women were more susceptible to mental illness than men. Perhaps also it is related to a much wider set of notions current at this time about the special vulnerability of the female organism, which some eugenists, particularly Saleeby and Whetham, shared. Cf. Joan N. Burstyn - Education and Sex: The medical case against education for women in England 1870-1900 (Proceedings of, the American Philosophical Society 117 (1973) 79-89)
- 21. Tredgold Remarks p.1385
- 22. T.S. Clouston Clinical Lectures on Mental Diseases (1904 A Churchill 6thedition) p.375
- 23. This being e.g. one of Shuttleworth's four diagnostic criteria, the others being formative and developmental defects, abnormality of nervous action and defects in nutrition, Cf. G.E. Shuttleworth and W.A. Potts - Mentally Deficient Children: Their Treatment and Training (1910 H.K. Lewis 3rd edition) Ch.VI

24. op.cit. p.119

25. On this point Cf. the following - "Thus there is a mass of general, indefinite and therefore still comparatively valueless opinion on the subject of individual susceptibility to disease - to influenza, to erysipelas, to quinsy and to other diseases". J. Mitchell Bruce - The G.P. and the Medical Society (Presidential Address to the Medical Society of London) (Practitioner 87 (1911) 741-8) p.742

- 26. "The most simple and in many ways the most scientific form of classification of mental disorder would be one consisting of three divisions: (1) failure of evolution (2) derangement of normal functions (3) dissolution or dementia" Craig p.43 M. Craig - Psychological Medicine (J. & A. Churchill 1912) But on the latter point Cf. Clouston, "Dementia I would restrict to incurable conditions of enfeeblement commonly secondary to other mental states" p.9
- 27. And seems to have been bound up with a widespread medical (biological?) ideology about the uniquely stressful nature of modern life. Cf. "Perhaps after all, the causation of much mental disorder is not so intricate and complicated as has been supposed; and it may be that while we have been groping in the dark with metaphysicians, the key to the problem has been lying under our very hands ... may it not be that much of the growing increase of mental disorder is to a certain extent fue to our mode of living: no time for proper meals, no time for necessary exercise, no time for attending to health; the race for life is too keen, until finally we perish in the product of our own metabolism?" Craig op.cit. p.28
- 28. A.F. Tredgold Neurasthenia and Insanity (Practitioner 86 (1911) 84-95) p.84
- 29. A.R. Abelson Mental Tests for Defective Children (NCPD) p.130 my emphasis
- 30. Journal State Medicine XX (1912) p.585
- 31. J.P. Sturrock The Mentally Defective Criminal (Journal of Mental Science LIX (1913) 314-325) p.317
- 32. E.B. Sherlock The Feeble-minded (1911 Macmillan) p.157
- 33. H.B. Donkin The Harveian Oration 1910 Inheritance of Mental Characters p.22

- 34. C.T. Ewart Parenthood (Empire Review XIX (1910) 314-320) p.314 The imagery of stream, torrent and flow is frequently found in eugenic writing of the time. Tredgold often used it e.g. in Eugenics and the future progress of Man (Eugenics Review III (1911-12) 94-117) p.112 Another writer, G. Clarke Nuttall -Eugenics and Genetics (Fortnightly Review 89 (1911) 453-460) talks of the "poison flow" (p.457)
- 35. e.g. the Whethams The Family and the Nation (Longmans 1909) Ch.IV
- 36. Whetham An Introduction to Eugenics (Bowes & Bowes 1912) p.26
- 37. Saleeby Parenthood and Race Culture (Cassell 1909) p.175 Cf. The familiar saving clause - "All of these (i.e. schools of heredity) agree, for instance, as to the fact that the insane tendency is transmissible and is transmitted by heredity". op.cit. p.15
- 38. the Whethams Heredity and Society (Longmans 1912) p.26
- 39. Schuster Eugenics (Collins 1912) Ch.VIII
- 40. op.cit. p.167 But Mrs. R.J.J. Hawkes in her pamphlet What is Eugenics? A plea for racial improvement insisted on the compulsory segregation lunatics, temporary or permanent.
- 41. "With regard to recurrent insanity he did not think any legislation could be expected until they could place their facts upon such a sound basis that it must come home to everybody. He could not say that those peopleadmitted into asylums with recurrent insanity should be kept there indefinitely but there was great danger in allowing these people to be discharged". report of F.W. Mott's remarks at NCPD mental deficiency section pp.38-9
- 42. Hawkes op.cit. p.3

43. Tredgold ibid. p.98

- 44. In Arnold White's colourful analogy "This country has billeted on it a tyrannical troop of deteriorated humanity, which is not troubled by a recruiting problem". p.288 of his book The Views of Vanoc: An Englishman's outlook (Kegan Paul Trench & Trubner 1911)
- 45. Cf. M. Crackanthorpe's evidence to the 1904 Royal Commission on the Feeble-minded. "Every woman guardian and matron will bear me out when I say that the number of feeble-minded girls who enter the workhouse time after time with illegitimate children is on the increase". Cf. Vanoc in the Referee 12/1/08
- 46. Eugenists were always careful to insist that they in no sense implied that the doctor should ignore his primary duty to cure the sick - yet this insistence sometimes had a plaintive ring to it. Cf. "Medical men must, no doubt, strive to keep the unfit alive; but are they not therefore doubly bound to join us in our effects to diminish the multiplication of all the unquestionably degenerate types?" (L. Darwin - Presidential Address to the EES June 1913) p.7

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- 47. Clarke Nuttall ibid. p.457
- 48. Saleeby op.cit. p.174
- 49. Mrs. Hawkes op.cit. p.10
- 50. Whetham Inheritance and Sociology (Nineteenth Century LXV (1909) p.83)
- 51. Report of an address on practical eugenics p.13
- 52. e.g. L. Darwin (EES third annual report)
- 53. I have taken as typical figures here M. Dendy, E. Pinsent and A.H.P. Kirby. M. Dendy The Feeble-minded and Crime (Lancet

24/5/02); The Feeble-minded (Economic Review XIII (1903) 257-279; evidence to the RCFM vol.1 39-64; Feeble-mindedness, Destitution and Crime (NCPD 1911 48-53); E. Pinsent - On the permanent care of the feeble-minded (Lancet 21/12/03); The importance of the Formation of After-care Committees wherever special schools exist (COR XXI (1907) 24-30); Social Responsibility and Heredity (National Review Nov 1910) A.W. Kirby - A plea for the Mentally Defective (COR XXI (1907) 120-31); The Feebleminded and Voluntary Effort Eugenics Review I (1909/10); a speech at a Penal Reform League reported Penal Reform League Monthly Record (IV (1912) 3-4)

54. Cf. The Feeble-minded Child and Adult (Swan Sonnenschein & Co. 1895) (a report of the Charity Organisation Society)

55. op.cit. p.136

56. and see further discussion of this point in Chapter VIII

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Chapter VIII - EUGENICS AND FEEBLE-MINDEDNESS PART II

The last chapter has shown that there was considerable support for some kind of legislation to deal with the feeble-minded and that much of this support had been couched in at least eugenic sounding terms. Doubtless this inclined the Society to take the possibility of eugenic legislation in this area much more seriously than in the cases so far examined and to make considerable efforts to achieve such legislation. The nature and the result of those efforts are discussed in this chapter. But to approach this one detour is necessary. The eugenists had established to their own and many other people's satisfaction that the problem of feeble-mindedness should be dealt with eugenically. The question of the appropriate <u>eugenic</u> solution to the problem is an interesting example of the difficulties the eugenists faced. This question has already arisen generally and in specific contexts but here it requires a more extended treatment.

Two clarifications are necessary: firstly, in the types who were to be dealt with and secondly the methods which might be used. The eugenic theories of feeble-mindedness could produce a number of groups since while in principle behaviours were to be reduced to the hereditary level, in practice this was not always possible - not <u>all</u> criminals or prostitutes were feeble-minded for example. Thus there might be hereditary variation and behavioural variation producing the following situation:-

			Behavioural Defects
		Present	Absent
<u>Germ-plasm defects</u>	Present	1	2
	Absent	3	NORMALS

Such criteria would certainly produce a 'favourite' group of defectives, characterised by behavioural abnormalities which could be assumed to be rooted in hereditary abnormalities. The case of the other two groups was slightly more complicated. Group 2 had morbid

heredities but were behaviourally normal. Group 3 would be those showing behavioural defects but with no apparent hereditary abnormalities. No problems attached to Group 1 but Group 2 had both a eugenic and a legislative difficulty. Stocks with bad heredities were likely, as we have seen, to drag down good stocks. On such grounds some eugenists would like to have forbidden procreation. A.R. Douglas for example argued that they were the real problem and that "where imbeciles have appeared in sibship, marriage to be refused to all other members of that sibship" (1). Other eugenists were less rigid. The legislative problem with this group would be that they could not be recognised through a social problem grid. Even those with hereditary defects (as opposed to morbid heredity) would be very difficult to deal with on eugenic grounds alone, in the absence of any legally definable abnormalities. Lastly there is no direct reason why a eugenic argument should be interested in Group 3 at all since their behavioural abnormalities, however regrettable, had no hereditary basis and therefore no eugenic significance.

The second necessary clarification lies in the appropriate methods and here a comparison of the logic with the reality may prove helpful. In any eugenic case there are clearly four methods of controlling the unfit, namely, removal of the organism; removal of the organism's reproductive capacity; prevention of the functioning of the organism's reproductive capacity by (a) social means (b) individual means: removal of the organism's offspring. Clearly again logically in relation to the groups I have separated out above some of these methods might be more appropriate than others on eugenic grounds. So for example a person likely to produce abnormal offspring but otherwise capable of sustaining a normal existence would not usefully be segregated whereas a person incapable of operating a method of individual birth control might well be usefully sterilised.

In practice of course the debates of the time bear very little resemblance to the network of logical choices I have outlined. Such debates did not take place in logic but in a definite universe of moral and legal discourse solidly anchored in a stable society. The

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logic therefore had to give way at points to other elements. The eugenists were aware that they were located on extremely sensitive ideological terrain. The removal of the organism was clearly inconceivable on ideological grounds including notions of the sanctity of life and freedom of the citizen (2). Usually either of these can be invaded only on grounds of criminal behaviour with a built-in category of intent. <u>Having</u> bad hereditary qualities could not be brought within this set of categories.

More practically however the other logical possibilities all involved some consideration of reproduction and therefore sexuality and this alone made the eugenists vulnerable. Whatever their personal predilections the logic of their positions forced them to probe areas of behaviour which for years if not centuries, had been under the ban of repressive ideologies. Sir James Barr argued quite rightly that one of the obstacles facing eugenists was that "perhaps the majority of people were apt to taboo sexual matters" (3). And yet while the eugenists were in some ways in the vanguard such incidents as the following do not seem untypical of the times - "Galton agreed to help, but then withdrew his offer upon receiving a complaint from Miss Elderton who had attended a meeting chaired by Dr. Slaughter in which sexual problems were discussed. Matters became worse in March 1908 when Slaughter was convicted of indecent assoult, a conviction that was however, quashed on appeal" (4).

Certainly this atmosphere seems to have provided a total obstacle to any discussion of birth control as a means of securing eugenic ends (5). Undoubtedly many of the eugenists shared the coyness and reserve of their times (6) which brought attacks from their more radical critics. Stella Browne, for example, complained that the Eugenics Society had, "persistently refused to give any help towards extending the knowledge of contraceptives to the exploited classes" (7). I am not happy with this as an explanation (8) but I can only report the fact that there is almost no discussion of birth control as a eugenic measure before the first world war.

Given these various ideological constraints the options were reduced to two, in the jargon of the time, sterilisation or segregation.

Even this debate seems to have been a muted one carried on primarily in medical circles to which I now refer. There is no doubt that sterilisation proposals did arise both in medical and wider debate from time to time, perhaps their most notorious proponent being Dr. Rentoul, already referred to in chapter four. Although there was some discussion as to possible side-effects of the sterilisation operation the overwhelming objections as perceived by both doctors and laymen were moral and political. There were no doubts about its feasibility in practice (9). The proposals do not appear to have been taken seriously at any time by legislators though there is one reference in the literature to a debate at an LCC meeging on reception of its Asylums Committee report which appeared to have a consensus in favour of sterilisation (10). I think it is reasonable to conclude that the almost universal assumption behind such discussion is summarised by Flinders Petrie's comment, "Much more drastic treatment of the unfit has been advocated, as by Dr. Rentoul. In a future period of civilisation a logical course of treatment might have a chance of adoption, but in our age any serious change of the habits of thought and action will not be tolerated, unless brought about very gradually under small influences" (11). This certainly remained the position until after the first World War. In the period before the war this effectively left segregation as the only practicable option.

The immediate background to the legislative battles of the period 1910-1912 was of course the Royal Commission on the Care and Control of the Feeble-minded (12). The Commission laboured long and hard and its voluminous report and findings finally appeared in July 1908. Itself a summary of the state of the debate on the subject the Commission stimulated further argument which intensified in the period following the government's decision to take legislative action. The Commission's deliberations may be separated into three parts, namely, an analysis of the existing state of affairs and a report recommending various changes, an exhaustive survey of the state of opinion amongst those interested in the field of mental illness, and an attempt to arrive at reliable figures for the numbers of the mentally deficient in the country. Although these questions had been discussed for many years the Commission's report appears to have given a considerable boost to demands for state action. According to K. Jones (13) by the end of 1912 the Home Office had received 800 resolutions to that effect from public bodies. The government may also have felt pressured by the two private members bills introduced into the Commons in the 1912 session. An analysis of the legislative campaign will give some idea of the degree to which the eugenics movement was constrained to make ideological concessions and the degree to which it exercised some influence on the legislation that finally appeared on the statute book.

Over the period 1910-1912 the House of Commons dealt with three quite different bills on the general subject of feeble-mindedness (14). Only one of these was directly inspired by the Eugenics Education Society. An examination of this bill will provide a preliminary indication of the eugenists[†] legislative ambitions in relation to the feeble-minded. On the fifth of December 1911 Mr. W. Rea M.P. arranged a meeting for MPs with a joint delegation from the Eugenics Education Society and the National Association for the Welfare of the Feeble-minded, the major representatives for the eugenists being Tredgold and Langdon-Down. The meeting led shortly afterwards to the presentation in the Commons of a private member's bill by Mr. G. Stewart. What then did this measure, directly inspired by the eugenists, contain?

In fact the bill had few, if any, dramatic proposals. Clause 8 specified that a feeble-minded person could be placed in a registered home by order of a J.P. or a stipendiary magistrate provided (a) the feeble-minded person was in need of protection, (b) was a source of injury to himself and others, and (c) two medical practitioners would give such a diagnosis. This clause also allowed that relieving officers might apply for an order for persons "found wandering in that parish". Clause 10 laid down that detention of a feeble-minded person could not continue beyond eighteen months without the written consent of the Commissioners in Lunacy. Clause 13 made it possible for those in charge of any feeble-minded institution to discharge any feeble-minded person providing the

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Commissioners were notified. Clause 15 required regular annual inspection by the Commissioners or their agents of every detained feeble-minded person. Clause 18 guaranteed that representatives of the feeble-minded might retain supervision of them if they could convince the Commissioners they could provide adequate care, protection and control.

It must be pointed out of course that while the bill contained no dramatic proposals it was regarded as a minimalist measure, "to secure control over those persons whose condition or surroundings are such that their liberty is a source of injury and misery to themselves or a menace to the welfare of the community" (15). At the meeting with the MPs "it was freely admitted that the bill was only the minimum demand and in no way pretended to deal with the problem completely, but sought to confer the necessary powers on existing authorities pending the adoption of the largermeasure" (16). And it is also the case that in his introductory speech Stewart frequently indulged in eugenic rhetoric of the cruder kind e.g. "In fact to put it briefly, the object of this bill is to regularise the lives, and, if possible, to prevent the increasing propagation of half-witted people" (17). Other supporters of the bill spoke in similar terms.

Nevertheless it is worth emphasising that the bill restricted itself to an entirely social problem grid, that it was hedged about with the usual qualifications and that it allowed approved institutions to discharge their feeble-minded inmates. Indeed after the bill had gone through committee its somewhat limited provisions were even further restricted e.g. in Clause 10 the period of detention was reduced from eighteen months to one year and further instalments of detention were of one year only requiring the written consent of the Commissioners.

If the Stewart bill was tactical then it had the desired effect insofar as just before its second reading the government introduced its own bill. This measure aroused a tremendous volume of discussion in which a central issue was the degree of influence of eugenics theories. As a preliminary it is necessary to single out those clauses in the government bill with a specifically eugenic interest for it is these that aroused the greatest controversy. There were two clauses in the bill which by any standards, legal, historical or administrative, were quite startling (18). These particular clauses do not appear to have had anything other than a purely eugenic intention and they are certainly the clearest formulation of real eugenics practices to find expression in an English bill. The rest of the bill could be, and was, justified by reference to the statement that the defectives had to be behaviourally abnormal as well as being mentally abnormal. No such qualification was made in Clause 17 (1e). And the intention of Clause 50 was plainly to prevent intermarriage and therefore legitimate procreation solely on the grounds of the defective nature of one of the partners. It is clear then that the government's bill had considerably more eugenic content than the eugenists themselves had asked for in their own bill (19).

This did not prevent, then as now (20), the eugenists being credited with an enormous amount of influence in the controversy surrounding the bill. The controversy may be grouped under four headings. Firstly, questions of administration and finance; secondly questions of the liberty of the subject; thirdly the question of the appropriateness and adequacy of the categories proposed; and fourthly the degree to which the legislation embodied unproven theories; I will deal only with the last three of these. Critics of the bill regarded at least the last three groups of these issues as inextricably interconnected though in their public statements they tended to lead the criticism from the angle of the liberty of the subject. The government's case was not helped here by some sloppy drafting and the quite extraordinary Clause 17 (1f) giving the Home Secretary very wide-ranging powers. This was a godsend to the opponents of the bill. As Wedgewood put it, "The Secretary of State may at any moment by a stroke of the pen invent a new crime which will deprive the individual of all his rights of citizenship and send him to prison for life" (21).

There were many other civil liberties issues in the bill but two perhaps are worth highlighting. Clause 12 of the bill required local authorities among other things to "keep registers of defectives".

This was condemned by Wedgewood as a ^{*}black list^{*} giving excessive powers to the authorities. "The process of handing over to a county committee all these enormous powers of black-listing people is really the power of selecting from amongst those black-listed people the victims who are to be locked up ..." (22). A second issue which many found disturbing was the potential class bias built into the bill. This argument tended to be a little hysterical at times (23) but there was a serious point to it. As Wedgewood put it, "All these bills are meant for the very poor. Clause 19 is the saving clause of the rich. The rich are always omitted from measures of this sort. Defectives liable to be dealt with under this Act may be "placed under guardianship . Where there is sufficient money guardianship is alright. It is only the people who have no relations to find the money that are to be sent to prison" (24). In fact as other commentators pointed out it was rather Clause 21 that was the saving grace of the rich i.e. "A petition under this act shall, if application is made for the purpose before the hearing of the petition by or on behalf of the person to whom the petition relates, in manner provided by rules of the Supreme Court, be removed to the High Court and heard and determined by that court in accordance with such rules". The class bias then lay in the day-to-day workings of the legal system since "to make use of a safeguard of that description is beyond the financial resources of the ordinary working-man" (25).

It was a point that the more radical critics of the bill constantly made and it clearly worried the bill's supporters who seem to have read it as an accusation that they argued that only the poor produced defective children. Miss Dendy for example replied to a series of articles by M.D. Eder (26) with a vigorous assertion that feeble-mindedness was equally distributed amongst rich and poor. But this was not really the point. A more sophisticated counter attack would have been along the lines that Clause 20 of the bill (which covered all the appropriate procedures) broadly speaking followed the procedures laid down in the Lunacy Act of 1890.which had not been accused of class bias or at least making the accusation of class bias look less convincing. Nevertheless the contexts were somewhat different. Both the medical and lay public were much more

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clear about whay they meant by lunacy than what they meant by feeble-mindedness.

The issue of class bias drifted imperceptibly over onto a second set of issues namely, the definitions to be used and the power they gave to the relevant experts. It was widely argued that, in the words of one informed commentator, "It is a matter for the serious consideration of the public whether the government bill does not contain too much of the expert and too much of the bureaucratic to be acceptable" (27). The general point was well-expressed, if somewhat provocatively, by Wedgewood, "If a specialist, a doctor or a eugenist said that soand-so is a danger to society and ought to be imprisoned, it is not possible for the ordinary layman to criticise the grounds on which he has based his dictum of imprisonment" (28). Another outspoken critic of the bill, M.D. Eder, put the same point in historical perspective; "Today the experts would send a poor man to prison for a lifetime because they don[®]t like his family, just as, when Gall was in fashion, they would have done so (had they had the power) because they didn[‡]t like his bumps, or, when Lombroso. was the fashion, because they didn't like the shape of his face" (29). This power of the experts derived of course from the kinds of definitions of feeble-mindedness that were proposed. The critics regarded the excessive power of doctors and other relevant functionaries as an effect of excessively wide definitions. As Wedgewood put it, "If there is anyone who ought to be precluded under this act it ought to be the doctors, particularly those who have their own theories and fancies as to many of these matters" (30).

Finally the attitudes of doctors linked up with the third element of the critics indictment of the bill, namely the argument that it was based on unfounded theories. The most determined opponents of the bill saw in its vagueness, its arbitrariness, and its excessive bureaucratic power the hand of eugenics, if not a eugenic conspiracy. Wedgewood's more dramatic pronouncements in the House - "I submit our object in a democratic country is not first and foremost to breed the working classes asthough they were cattle" (31) - found support from the Manchester Guardian which commented that, "very unfortunately the bill has become associated in people's minds with

the theories of the eugenics society, which however interesting, are as yet quite unworthy to be regarded as science. Human liberty is too precious a thing to be made a subject of experimental legislation on half-baked scientific theories" (32). And indeed it was a widely repeated criticism that the purpose of the bill was "to enable the eugenics society to make experiment in some of its pet theories" (33).

It therefore seems reasonable to conclude that in its first bill the government had been under a clear and unequivocal eugenic influence. The most obvious objective index of this were that two clauses of the bill were quite without legal precedent and these two had the clearest pure eugenic intentions. However this bill never became law. The reactions of the bill's supporters, the changes that were made in committee and the contents of the second bill which was introduced in 1913, when assessed, provide a truer measure of the real extent of eugenic influence.

It was clear from the beginning that those who were generally sympathetic to the bill, both inside and outside the House, had serious reservations about its precise form. This was especially the case with the definitions provided in Clause 17 of the bill, phrases that were so vague and open to such a wide degree of interpretation that even the friends of the bill could scarcely restrain their contempt and derision. As Mr. Hume Williams put it, "The idea that you are to be treated as a defective because you are incapable of competing on equal terms with your normal fellows is purely comic" (34). Mr. A. Lyttelton (in general sympathetic to the bill), agreed that, "Anyone who looks at Clause 17, which is one of the central features of the bill, will see there an attempt to define what feeble-mindedness is, and everyone ... must think it is contrary to the most ordinary common sense" (35). Such supporters of the bill made it very clear that they would seek major alterations in committee. The standing committee only managed to deal with seven clauses of the bill (36) but they were some of the most crucial. With reference to the Home Secretary's powers these were circumscribed by the requirement on him to lay regulations before acting. In Clause 12 the government on its own initiative

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deleted the register of defectives sub-clause and while this might seem unimportant given the other requirements on local authorities to "ascertain what persons within their area are defectives" it seems reasonable to suppose that this reduced the potential for black-lists that was contained in the first draft of the bill.

In the all-important Clause 17 which took up the largest part of the committee's time the directly eugenic Clause 17 (e) disappeared completely though part of the idea was retained in a new clause i.e. a new group that were now subject to be dealt with were those "who are defectives and who are in receipt of poor relief at the time of giving birth to an illegitimate child or wh(Apregnant of such child". There were changes in the definition of feeble-mindedness to make it look less ridiculous. In the amended version it now read, "persons in whose case there exists from birth or from an early age mental defectiveness not amounting to imbecility, yet so pronounced that they require care, supervision and control for their own protection or for the protection of others; or, in the case of children, are incapable of receiving proper benefit from the instruction in ordinary schools".

These concessions found their way into the draft of the second government bill introduced to Parliament in March 1913. Both front and back bench spokesmen for the bill were eager to absolve it from any association with eugenics and in large measure they were right. The Home Secretary referred to the issue in his opening speech. "We have also omitted any reference to what might be regarded as the eugenic idea which my honourable friend behind me believes underlies the whole promotion of this bill. I can assure him that as the measure now stands, it exists for the protection of individual sufferers" (37). McKenna was followed by others making the same point. Mr. Leslie Scott, a prominent supporter of the bill argued that, "The bill in its present form does not represent any experiment in eugenics. It contains no single proposition which is, in any sense, an experiment in the new discoveries of eugenic scientists" (38).

On the civil liberties issues the opponents of the bill made some further gains. All attempts to give the Home Secretary residual

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powers (either by order or by regulations) were dropped. As McKenna explained, "No power was given either to the existing holder of the Home Office or any future holder of the office to extend the operations of the bill except by introducing a new Act of Parliament" (39). In addition no attempt was made to reintroduce in any direct form the register of defectives idea or what Wedgewood called the black-list. Wedgewood continued to argue that the definition proposed in the bill gave unreasonable power to doctors and were ultimately based on eugenic inspiration. He made strenuous efforts, without success, to remove the clause that allowed the inclusion of women in receipt of poor relief who had or were going to give birth to an illegitimate child.

For the rest Wedgewood concentrated his fire on the definitions clause, particularly the phrase that they "require care, supervision and control for their own protection or the protection of others". The argument here was that, "merely under the words 'for the protection of others' you might bring in all the ideas of the Eugenic School"(40). Battle was joined when Wedgewood tried to introduce an amendment to clarify 'for the protection of others' and this battle does seem on the face of it to be evidence of continuing eugenic influence. Wedgewood pointed out that, "the ordinary way to interpret 'protection of others' is to say that it is protection against absolute physical violence" (41). Not only did McKenna entirely evade this point he refused to clarify exactly what the phrase in the bill meant.

Nevertheless having failed in his second major frontal, assault on the bill Wedgewood fought a brilliant rearguard action inserting small amendments en route whose effect was to narrow the interpretation of the bill to the interests of defective persons rather than any wider social goals. In Clause 11 (3) of the bill for example Wedgewood moved to insert after the words 'in the interests of the defective' the word 'alone' with the intention of focussing the bill on the mentally deficient themselves. As he put it, "I move these words, and hope they will be accepted by the honourable Member for St. Pancras, because I am sure the public understand that we are moving in the interest of the defective, and not in the interest of eugenics

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the better it will be" (42). Though the word alone was later replaced by the word himself the effect appears to be the same. Similarly in the next section of this clause Wedgewood managed to insert after the phrase 'under guardianship' the phrase 'in his own interest' (43).

In the Lords the roles of McKenna and Wedgewood were taken by Haldane and the Marquess of Salisbury but the issues were the same, even if dealt with in a more gentlemanly manner. On certain central struts of the bill Haldane, like McKenna, stood firm e.g. in the use of the words "protection of others" already referred to (44). But Salisbury managed to force concessions on the issue of an independent medical review of any inmate of an institution for the mentally defective (45). Salisbury also secured the insertion of an entirely new clause in the bill (Clause 18) which gave rather clearer rights to relatives and guardians of defectives with reference to visiting them while they were in institutions. When the bill returned to the Commons Wedgewood quite rightly commented, "I gladly recognise that nearly all the amendments we are now considering which have been made in the House of Lords are advances towards individual liberty, and therefore safeguards which we owe to Lord Salisbury's amendments in the other place" (46).

It has been shown that while the campaign for legislation on mental deficiency drew on certain eugenic theories; while the Eugenics Education Society played a prominent part in the agitation; and while the government's first bill contained unambiguously eugenic clauses the Act that finally found its way onto the statute book contained little, if any, eugenic influence. How can these developments be explained? A full explanation would doubtless require further more specifically focussed research but the material examined in this chapter prompts the following reasonably plausible hypothesis.

Shortly after the bill had finally been passed one of its most active supporters (and a member of the Royal Commission) made the following comment: "In view of the statements which have been repeatedly made by opponents of the bill that the measure owes its origin to a band of idealists whose sole object is to improve the breed of man, and who for this purpose care not what suffering they impose upon the living souls whose physical defects they hope to banish from the race, I think it well to remind my readers that the movement on behalf of the feeble-minded originated with much more humble and much more practical persons" (47). This was indeed the case. The call for legislation derived its legitimacy from certain sections of the medical profession and from the demands of administrators, either public or voluntary, who were actively involved in the handling of the mentally deficient section of the population (via prisons, schools, privately funded 'colonies' etc.).

Two organisations that may be regarded as representatives of these forces in the debate on legislation were the Medico-Psychological Association and the National Association for the Feeble-minded. Both appear to have been heavily involved in the legislative campaign, almost to the limits of their resources. The NAFM report for 1912 records that the parliamentary campaign "entailed unremitting effort both on the part of the committees concerned and of the staff" and that, "many thousands of letters and circulars were despatched, appealing to MPs and to persons interested, to use their influence in order to place the measure before the country" (48). The National Association closely coordinated its effort with that of the Medico-Psychological Association which discussed the bills frequently at its meetings and reported developments in its Journal of Mental Science. It is not being suggested here that these organisations did not include people who were sympathetic to the eugenic cause. Such is clearly the case. What will be argued here is that the primary objective of these organisations was to extend the boundaries of the Welfare State and more particularly their own power within it. While they were not averse to drawing on eugenic propaganda to support their case they certainly had no wish to jeopardise their primary project should such association prove to be counter productive.

The leading member of the Medico-Psychological Association most closely associated with helping the bill was Dr. Theo B. Hyslop who in an address to the Association argued that, "It seems almost unnecessary for us to endorse the findings of the Royal Commission,

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and yet it would appear advisable to add our testimony to it in order to help various sections of the community to appreciate the existence of evils which are real and not merely a fanciful necessity based upon theories emanating from any school of eugenics. I venture to submit therefore that we are agreed as to the need for immediate legislation for the mentally defective" (49). This remark reflected the consensus of the relevant section of the medical profession. Undoubtedly many of these were sympathetic to eugenic goals. Hyslop himself was on record as favouring the idea that marriages should be contracted partially on grounds of biological fitness and in the speech already referred to he described Clause 17 (e) of the first government bill in the following terms: "I, for my part, believe that it is one of the most important and farthest reaching of the benefits proposed and this sub-clause alone raises the principle of the bill to a higher plane than does any other item in it" (50).

Nevertheless in the Association^{*}s detailed deliberations on the bill can be found a more accurate picture of its priorities. The Association's special committee (set up to examine the bill) commented in its first report that while agreeing in principle with Clauses 1 and 2, "your committee feel that the sub-clauses are too vaguely worded, and that further definitions are needed, particularly in regard to section 1 (e) dealing with those who are to be deprived of the opportunity of procreating children" (51). This point was elaborated by Dr. Corner, a member of the Association's Parliamentary Committee and a consulting Physician to the National Association for Feeble-minded: "His sympathy was with the government in their effort to prevent the propagation of the unfit, but this clause (17(e)) seemed to him to be one which would arouse considerable opposition, and, as stated by the National Association for the Feeble-minded, and also by the MPA[®]s Special Committee it was too vague for an Act of Parliament, and would probably lead to much litigation" (52). The Association also expressed its reluctance about the black-list clause in the bill. It was argued that this implied an unnecessary social stigma. As Dr. Shuttleworth put it, "It would be iniquitous if by too stringent an application of the notification provisions of the bill useful careers should be rendered impossible" (53).

By September 1912 the committee had made up its mind that Clause 17 (le) should be left out entirely though they did conclude that, "it is felt that if the Act is thoroughly administered, the feebleminded who are capable of procreating children will before long be in safe keeping" (54). In a later report to readers of the Association's Journal Dr. Hayes Newington returned to the blacklisting Clause 12. He wished to see this clause deleted and commented, "Perhaps such a limitation would not satisfy the eugenists, who would probably wish that for their purposes the registration of the second class of defectives should be noted as well. It is much to be hoped for that the excellent principles of the eugenic body should not be imperilled by general mistrust arising from too vigorous application of detail" (55).

The views of the National Association for the Feeble-minded and its proposed changes in the bill were very similar. In its reports and in a memorandum sent to the MPA and published by them the NAFM expressed its opposition to the keeping of registers of defectives; it wanted Clause 17(1e) removed (but replaced by "who are in need of further care and control, and are a source of injury and mischief to themselves or others" (56)) and it wanted the wide powers granted to the Home Secretary (in the first bill) to be restricted by the advice of the new Commissioners to be appointed under the Act. Finally the Association favoured a new clause strengthening parental powers to some degree: "A new clause suggested providing that no parent, guardian or relative (above the age of 21 years) of any feeble-minded person shall be deprived of the control and protection of such person, upon proof to the Commissioners that such care and control would be adequate" (57).

I think it is reasonable to conclude from the above that the evidence as to eugenic influence on the making of the Mental Deficiency Act of 1913 is at least contradictory and needs to be placed in the context of other pressures for legislation on this submect (58). This context is perhaps one to which we have only recently become more sensitive both in terms of current practices and informs of historical explanation. We have (59) become more sceptical of those who claim to care for others after repeated

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demonstrations that the caring inevitably benefits the care 3 more than the cared for. A more detailed assessment of the eugenics influence on the 1913 Act may open up more promising avenues of enquiry which will contribute to this reassessment of our past and therefore our present.

Chapter V111 - FOOTNOTES

- A.R. Douglas The Ament His Position in the Community and his influence on the Future of the race (The Practitioner 86(1911) 310 -5) p.315
- 2. Which is not to say that some authors did not toy with the idea -W. Duncan Mckim even got as far as the practicalities - "in carbonic gas we have an agent which could instantaneously fulfill the need". (Heredity and Human Progress (C.P.Putnam 1906) p.193
- 3. Sir J. Barr A lecture on Eugenics (Medical Magazine X1X (1910) 635-9 p.635
- 4. D.W.Forrest Francis Galton: The Life and Work of a Victorian Genius (Elek books 1974) p.275
- 5. Thus it was not until 1921 that Marie Stopes established the Society for Constructive Birth Control and Race Progress. Several eugenists, among them Sir James Barr, supported her efforts. And see N.E. Himes - Medical History of Contraception (N.Y.Schocken Books 1970) p.259
- 6. See the discussion of M.Crackanthorpe in Ch.1V
- 7. in E.C. Paul Population and Birth Control (N.Y.1917 The Critic and Guide Co.) p.251
- 8. In view of the fact that "Probably not less than a million tracts furnishing elaborate information were sold in England between 1876 & 1891, when Mrs Besant ceased the publication of her Law of Population. It is not inconceivable that the figure might be 2 millions." Himes op.cit p.251
- 9. See letter from D.J. Hall Edwards (BMJ 25/5/1912 pp.1216-7); Discussion at the Section of State Medicine of the Royal Academy of Medicine 1912 reported in BMJ 10/2/1912 p.306; a paper by

Dr. G. Clarke - Eugenics & Sterilisation reported in the BMJ 16/12/1911 pp.1595-6

- 10. See the report in the BMJ 9/12/1911. This report is however heavily qualified and clarified by Dr.Nolan in a letter to the BMJ 6/4/1912
- 11. W.M. Flinde**rS**Petrie Janus in Modern Life (Archibald Constable Ltd.1907) p.87
- 12. This Commission was appointed on the 9th September, 1904, initially under the chairmanship of the Marquess of Bath who was replaced on the 25th February, 1905 by the Earl of Radnor. The Commission's other eleven members were the usual mixture of doctors, lawyers, bureaucrats and interested parties. Probably the most notable members were H.B. Donkin (appointed 7/10/05), C.S. Loch and Mrs. Hume Pinsent. The Commission terms of reference are perhaps worth noting here. The Commission was to "consider the existing methods of dealing with idiots and epileptics, and with imbecile, feeble-minded or defective persons not certified under the Lunacy laws: and in view of the hardship or danger resulting to such persons and the community from insufficient provision for their care, training and control, to report as to the amendment in the law or other measures which should be adopted in the matter due regard being had to the expense involved in any such proposals and to the "best mean of securing economy therein". On the 2nd of November, 1906 the Commission's terms of reference were extended, their additional task being, "to enquire into the constitution, jurisdiction and working of the Commission on Lunacy and of other Lunacy authorities in England and Wales, and into the expediency of amending the same or adopting some other system of supervising the care of lunatics and mental defectives, and to report as to any amendments in the law which should, in their opinion, be adopted". For the legal position before the 1913 Act see Proceedings of the National Conference on the Prevention of Destitution 1911 Mental Deficiency section; the report of the Royal Commission (P.P. 1908 XXXV-XXX1X); G.W. Ayers - England's First State Hospitals and the

Metropolitan Asylums Board 1867-1930 (Wellcome Institute 1972).

13. K. Jones - A History of the Mental Health Services (Routledge Kegan Paul 1972) p.199

14. See Appendix

- 15. Material in the possession of the Eugenics Society
- 16. E.R.111 (1911-12) p.355. The larger measure is probably a reference to Mr.Hill's Bill
- 17. G. Stewart (Commons XXXV111) Col.1444
- 18. See Appendix. There clames are reproduced app 211-2 Selver.
- 19. Thus Lord Robert Cecil was quite right to argue in the second reading debate that Mr.Stewart's Bill was "far less elaborate, it is far less costly and, as far as I can see it contains far greater safeguards for the liberty of the individuals". (Commons XL1) Col.743
- 20. Perhaps one may mention a more recent attack on the 1913 Act. The National Council of Civil Liberties in its evidence to the Royal Commission on the Law Relating to Mental Illness and Mental Deficiency (HMSO 1954) argued that basic safeguards contained in the 1890 Lunacy Act were not retained in the 1913 Act, hinting darkly at various pernicious 'influences'. One of the safeguards was the power of discharge. As they point out, "No powers of discharge were vested in any circumstances in the management of the Committee of the Hospital as they are in the Lunacy Act." (p.801) In fact, as has been shown the eugenists in their own bill did include a clause that invested institutions with powers of discharge without the permission of the central authority.
- 21. Wedgewood (Commons XL1 Col.710) Not surprisingly this clause inspired other more jocular comments: "I certainly think that people who vote Liberal are defective and I should certainly say

they ought to be subject to be dealt with under this Act". (Sir F. Banbury (Commons XL1 Col.721)

- 22. Wedgewood (Commons XL1 Col.706)
- 23. Handel Booth MP commented that, "it is with no little amusement that one reads your description of the 'progress' made on Thursday in Grand Committee in the absence of myself and others who are defending the names of the poor". (Times 23/11/12)
- 24. Wedgewood (Commons XL1 Col.711)
- 25. R.A. Leach The Government Mental Deficiency Bills (Local Government Press Co.1913) p.105
- 26. The Daily Herald 21/5/1912; 23/5/1917. And see his argument with Dendy 5/6/1912; 7/6/1912
- 27. Leach op.cit p.103
- 28. Wedgewood (Commons XXX1X Col.642)
- 29. The Nation 8th June 1912 p.309
- 30. Wedgewood (Commons XL1 Col.713)
- 31. (Commons XXX1X Col.644)
- 32. Manchester Guardian 20/7/12
- 33. T.J.Gerard The Mental Deficiency Bill (Dublin Review CL111 (1913) 21-40) p.21. Not surprisingly this view was popular with religious opponents of the Bill "The provisions of the Mental Deficiency Bill give extraordinary powers of detention, dangerous and unnecessary, framed with a view to conciliating eugenic cranks rather than with a due regard to the rights of the feeble-minded". (A.P. Mooney The Care of the Feeble-Minded) (The Month CXX (1912) 264-276) p.274

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- 34. (Commons XL1 Col.746)
- 35. (Commons XL1 Col.754)
- 36. Due in large part to spirited opposition by Wedgewood. There are brief references in Wedgewood's Memoirs of a Fighting Life (Hutchinson 1941) and C.V.Wedgewood - J.Wedgewood: Last of the Radicals (1951)
- 37. McKenna (Commons L111 Col.221)
- 38. Scott (Commons L111 Col.237)
- 39. McKenna (Commons L111 Col.221)
- 40. Wedgewood (Commons L111 Col.248)
- 41. Wedgewood (Commons LVI Col.110)
- 42. Wedgewood (Commons LV1 Col.238)
- 43. (Commons LV1 Col.241)
- 44. See footnote 40 and Lords X1V Col.1765-1766
- 45. (Clause 11)

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- 46. Wedgewood (Commons LV1 Col.2580)
- 47. W.H. Dickinson The Mental Deficiency Act (Contemporary Review 104 (1913) 331-339) p.331
- 48. National Association for the Feeble-Minded 1912 Report p.11
- 49. Much of the following is taken from a convenient collection of reprints from the Journal of Mental Science, henceforth referred to as Mental Deficiency. For this quote Mental Deficiency p.6

- 50. Mental Deficiency p.8
- 51. Mental Deficiency p.16
- 52. Mental Deficiency p.51
- 53. Mental Deficiency p.23
- 54. Mental Deficiency p.55
- 55. Mental Deficiency p.78
- 56. Mental Deficiency p.92
- 57. Full text of clause Mental Deficiency p.93
- 58. In a sense I am merely trying to follow up Mr. J. Ward's remark about the legislation - "It is providing soft jobs for professional people, the very classes who support this kind of legislation". (Commons LV1 Col.431) A crude remark no doubt but worth of further investigation.
- 59. For an excellent critical commentary on the functionalism and teleology that prevails in the historical explanation of social reform see the Introduction to David J.Rothman - The Discovery of the Asylum (Boston 1971: Little Brown and Company) - See also Chapter 1 above.

Chapter V111 - APPENDIX

This appendix is intended to provide the reader with a detailed set of references to the legislation and parliamentary debates discussed in the preceding chapter, as well as the most controversial clauses in the Government's first bill.

A Bill to provide for the better care and protection of feeble-minded persons (Stewart, Bill 11)

Text		P.P. 1912/ 3 11
First Reading	19/2/1912	Commons 1912 XXX1V
		Col. 307
Second Reading	17/5/1912	Commons 1912 XXXV111
		144 3- 1519
Committee Report made	17/7/1912	Commons 1912 XL1 362
Report text		P.P. 1912/13 V11
Report Minutes)		
Amended Bill		P.P. 1912/13 11

A bill to amend the Law relating to mentally deffective and epileptic persons (Hills, Bill 134)

Text		P.P. 1912/13 111
First Reading	15/4/1912	Commons 1912 XXXV11

A Bill to make further and better provision with respect to feebleminded and other mentally defective persons (McKenna, Bill 213)

Text First Reading	16/5/1912	P.P. 1912/13 111 Commons 1912 XXXV111 129			
Second Reading	10/6/1912		XXX1X		
		627-647	27-647		
	19/7/1912	11 11	XL1 703-770		
Committee Report made	3/12/1912	Commons 1912	XL1V 2068		
Report)		P.P. 1912/13 1X			
Minutes))			111		
Am e nded Bill		P.P. 1912/13	111		

A Bill to make further and better provision for the care of feebleminded and other mentally defective persons and to amend the Lunacy Acts (McKenna, Bill 55)

Mentioned in King's Speech	1 0/ 3/1913	B Commons 1913 L		
		Col.12		
Text		P.P.1913 1V	7	
First Reading	25/3/1913	Commons L 1489		
Second Reading		Commons 1913 L111		
		219-252		
		274-296		
		807-850		
Committee +Report made	15/7/1913	Commons 191	.3 LV 1036	
Report)		P.P. 1913 V11		
Minutes)				
Amended Bill		P.P. 1913 1V		
Report and Third Reading		Commons 193	L3 LV 1036	
		11 II	LV1	
			61-255	
	29/7/1913	11 11	LV1	
			421 - 499	
Bill received from Lords	12/8/1913			
Lords amendments considered	13/8/1913	19 91	LV1	
			2570-2600	

McKenna's Second Bill in	the Lords				
First Reading	30/7/1913	Lords	1913	X1V	1546
Second Reading	7/8/1913	11	11	11	1693
Committee	11/8/1913	11	11	11	1757
•					-1826
Report	12/8/1913	11	11	11	1856
Third Reading		11	11	11	1859
Royal Assent	15/8/1913	**	11	11	1954
Ruyar Assent	•••				

METHOD OF DEALING WITH MENTALLY DEFECTIVE PERSONS.

Persons subject to be dealt with.

PERSONS SUBJECT TO BE DEALT WITH AS BEING DEFECTIVE.

17.—(1) Save as expressly provided by this Act, the following persons, and no others, shall be subject to be dealt with under this Act, that is to say, persons who are defectives and—

- (a) who are found wandering about, neglected, or cruelly treated;
- (b) who are charged with the commission of any offence, or are undergoing imprisonment or penal servitude
 - or detention in a place of detention, or a reformatory, or industrial school, or any inebriate reformatory;
- (c) who are habitual drunkards within the meaning of the Inebriates Acts, 1879 to 1900;
- (d) in whose case, being children discharged on attaining the age of sixteen from a special school or class established under the Elementary Education (Defective and Epileptic Children) Act, 1899 [62 & 63 Vict. c. 32], such notice has been given by the local education authority as is herein-after mentioned;
- (c) in whose case it is desirable in the interests of the community that they should be deprived of the opportunity of procreating children;
- (f) in whose case such other sircumstances exist as may be specified in any order made by the Secretary of State, as being circumstances which make it desir-

able that they should be subject to be dealt with under this Act.

(2) The following classes of persons shall be deemed to be defectives within the meaning of this Act:--

- (a) Idiots; that is to say, persons so deeply defective in mind from birth or from an early age as to be unable to guard themselves against common physical dangers;
 - (b) Imbeciles; that is to say, persons who are capable of guarding themselves against common physical dangers, but who are incapable of earning their own living by reason of mental defect existing from birth or from an early age;
 - (c) Feeble-minded persons; that is to say, persons who may be capable of earning their living under favourable circumstances, but are incapable, through mental defect existing from birth or from an early age,—

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र को ' हे दे (i) of competing on equal terms with their normal fellows; or

(ii) of managing themselves and their affairs with ordinary prudence;

(d) Moral imbeciles; that is to say, persons who from an early age display some mental defect coupled with strong vicious or criminal propensities on which punishment has little or no deterrent effect;

(c) Mentally infirm persons; that is to say, persons who through mental infirmity arising from age or the decay of their faculties are incapable of managing themselves or their affairs.

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If any person intermarries with or attempts to intermarry with any person whom he knows to be a defective within the meaning of this Act,or if any person solemnizes or procures or connives at any marriage knowing that one of the parties thereto is a defective he shall be guilty of a misdemeanour.

Conclusion

"The problem for each individual is to discover the attitude or explanation that suits his temperament.Difficulties arise less from disagreement than from people not knowing themselves, from their taking themselves too seriously, and from their thinking they know the whole truth"

T.Zeldin - Politics and Anger

The conclusion to this research offers the opportunity to highlight some of its main points and to make some more general remarks on the wider significance of some of the issues discussed. By first chapter is 'theoretical' and it may be desirable to make some comment as to its purpose and presuppositions. To begin with I should frankly say that in my view it is impossible to establish some definitive way of writing the history of ideas whose superiority over its rivals can be clearly demonstrated. Indeed the full implications of this argument must be accepted-the notion that the humanities can follow a rational progression which will lead to accumulated piles of knowledge is a chimera and an illusion. Rather they exist in the form of disputes and disagreements. Thus there will always be reductionist historians, thematic historians, even Foucauvian historians and nothing anyone can say will make them go aw y.

Within this limitation my figst chapter restricted itself to a (doubtless partial) exploration of what the prevailing methods are and why they might be unsatisfactory. To argue that something is unsatisfactory is not to subject it to a 'critique', not to indict it as an infringement of the elementary rules of reasoning, not to prove that it is 'unscientific', 'metaphysical, or even 'incoherent'-it is not indeed to indulge in any of the sterile denunciations so favoured by the accented modes of academic communication.Rather it is to state a reasoned preference for doing something else.I have tried to make this point with the excepte drawn from the history of biology, namely animal semantics. An obscure example perhaps, of which I have no special knowledge, but one in which the different types of reasoning are clearly apparent. The value of this example for me is not that Foucault demonstrated that the positivists were wrong(or metaphysical, incoherent etc.etc.). This is surely

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impossible. If Aldrovandi et.al. cannot be taken as incredulous fools or irrational beings nor equally can J.von Gachs et.al. What Foucault did provide in that context was a reasoned alternative to their kind of activity and some suggested guidelines towards another kind, in a way which I found convincing. To say anything more definite than this appears to me to be impossible.

In my examination of the possible alteratives I drew exclusively on Foucault and Althusser, a selection which no doubt could be added to.At its simplest I would argue that these two have a common concern with the structuration of ideas.What are the boundaries of a particular discourse? What sort of glue is it that binds the elements together? What makes biology biology or marxism marxism? Their own researches have led to dramatic redrawings of our picture of very familiar ideas as I discussed with reference to theories of evolution for excuple.I did not intend to suggest that these were entirely new problems nor that they had provided complete solutions to them, nor yet that I had applied their solutions in any rigorous or consistent way. But I did seek to suggest thet they had thought through some of the central issues in an exemplary way, and only in this sense did I try to 'follow' them. This is surely acceptable. It is plainly impossible to 'follow' or 'apply' in any convertional sense, a writer like Foucault, who has installed idiosyncrasy and ecoteric, almost poetic, modes of expression at the very heart of his discourse(1).

Thus thinking through the kinds of considerations raised by Althusser and Foucault formed the background to what decoded to me two ereas that had to be dealt with.Firstly to describe as accurately as possible the theoretical structure of Lugenics and having described it, to account for all the var and texts produced in its name by reference to this structure. The second area was to explain why Eugenists sounded like Darwinians insofar as they deployed biological concepts and yet that deployment culuinated in something rather different from Dervinism both in its concepts and its results.

The results of these two investigations were firstly that eugenics as a discourse was seen to be characterised by certain basic ambiguites or difficulties, the various atteanted

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resolutions of which explained the superficial diversity of eugenic statements. And secondly that these characteristics were not the result of 'ideology', still less the underhand theft by ill-intentioned men of pure science but were ro ted in certain problems characteristic of the very doctrine from which they sought to borrow. But then, of course, had that not been the case, they would not have been intercated in borrowing it.

In endless contemplation of these rather dry procedural matters one may lose sight of the object of interest, Eugenics. In one sense of course the material examined here is of purely historical interest-or, put less politely, dead. It has been a matter of filling in some gaps in the historical record. Yet there are perhaps some broader issues to be considered which give the writings of the old sugenists a little more than purely antiquarian interest. Plainly the guestions raised by these old controversies are not yet dead. The interest in Darwin and Dorwinism has not died down but has rether intensified to the point where there is a veritable Darwin industry.Not only is a vast amount being done to fill in the details of Derwin's life and work but the structure of his theory and its implications are still being actively discussed(2).Complementary with this has been a renewed interest in the biological side of human nature and its implications for Mankind(3). It is common knowledge that for many years biologically based explanations were frowned on in the social sciences.Yet the question of biology's place in these sciences is a highly charged topic not merely within academia but amongst a wider audience-one need only think of the controversies over intelligence for example. It seems ressonable to assume that these issues will not go away. Looked at from this perspective the old Lugerists deserve some credit.For all their errors and prejudices(amply recorded here) they insisted that the implications of modern biology be considered, and, where appropriate, acted on.

Indeed even in a literal sense one may exaggerate the degree to which the issues are dead.One is often struck by how many of the problems the old eugenists grappled with remain open questions...on alcoholism for example some of the old ideas cannot simply be dismissed out of hend(4); the vexed question of genius and madness

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remains(5); the nature-murture controversy, rhetorically resolved by some vague gesture towards 'interaction', is still a live question(6). We cannot, it would seem, cloim to have laid all the ghosts to rest and look back on the eugeststs from a firm base of clear and unassailable certainties.

If these so ewhat speculative propositions be granted what links dare one draw between historical study and current concerns? Firstly that, in this area at least, science/ideology distinctions of the familiar kind are very difficult to sustain. This is a position which must be pressed even against the present study. Chapter two undoubtedly suffers from the considerable limitation that Darwinism is taken as a unified entity. This entity must surely be dissolved into Derwinism as doctrinal statement, Darwinism as scientific practice and so on. In other words it should be treated as a much more dislocated and multilevelled phenomenon than it conventionally is.A second feeling towards which this study tends is to avoid the obstract polarisation of internalism and externalism. The acceptable element in internalism is clearly the thorough analysis of ideas and doctrines without the all too easy recourse to reflection, psychologies of motives and so on. Equally the materialist seperation of ideas and the rest of the world lacks conviction.Discourses are not fenced off from the rest of human activity yet neither are they simply passive vesels for the expression of 'interests' or 'motives' constituted elsewhere.Finally, with reference to a question already alluded to, may one hope that an excellination of past efforts cannot impede, and, if only by indicating previous pitfalls, may assist, in the halting progress towards that 'interaction' of Man's biological and social characteristics that has long been sought and not yet found?

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Conclusion - FOOTNOTES

- See the interesting discussion of Foucault by Heyden White in J.Sturrock(ed) Struturalism and Since (Oxford University Fress 1979)
- 2) For example from quite different angles N.Macheth Darwin Retried (Gatnstone Press 1974) and F.S.Moorhead and M.M. Kaplan(ed) - Mathematical Challenges to the neo-Darwinian Interpretation of Evolution (Philadelphia:The Wistar Institute Press 1967)
- 3) Aside from the writings of the Sociobiology school the seventies produced many readers and surveys of the various issues e.g. J.B.Bresler(ed) - Genetics and Society (Addison Wesley 1973), I.H.Porter and R.G.Skalbo(ed) - Heredity and Society (Academic Press 1973), A.Hazur and L.S.Robertson -Biology and Social Behaviour (N.Y.:Free Press 1972).
- 4) See M.Keller The Great Jewish Drink Mystery(Brit.Jnl. Addiction 64(1970)287-96) and comments in A.Forrest(ed) -Companion to Psychiatric Studies (Churchill Livingstone 1973) and D.N.Beron, N. Compston and A.M. Dawson - Recent Advances in Medicine (Churchill Livingstone 1973) ch.7.
- 5) J.R.Smythies Biological Psychiatry (Heinemann 1968) p.6
- 6) See Zigler's chapter in H.C.Hayward(ed) Social/Cultural Aspects of Mental Retardation (M.Y.:Appleton Century Crofts 1970). And in this context cf.the following comment: "For many years I have been continually surprised to learn how little most mental health devotees know about the possible hereditary contributions to the phenomena they are studying and teaching. Moreover many do not want to know", in D.Fosenthal Genetic Theory and Abnormal Behaviour (McGraw Hill 1970) p.ix

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