so far all is clear. But when we ask, what part is due to heredity and what to environment, our difficulties begin. For this is, in fact, another mode of stating the problems of variation. If heredity vicans that like begets like, variation means that like begets unlike; and the question arises, "Is all variation due to environ-ment? if not, bow much of the variation or unlikeness is due to heredity and much to environment?" win held that every new animal and vegetable form is developed from a proviously existing form by variations that prove useful to it in competition with "lellows, foce, and physical forces," either by way of combat, or procurement of food, or self-protection, or in some other way, and that are transmitted to and rendered permanent in some or all of the offspring. lie believed that such variations, termed "individual variations," occur frequently, are widely spread, are usually small, and that the new forms originate by a gradual process from the slow elimination of the old forms and the slow "fixing" of the new. It would appear from certain experiments by Professor Tower and others that it may be possible by environment so to modify the germ-plasms at a certain stage of the parent's life that the progeny may be unlike the parent in certain innate characters. This subject of inherited characters is of prime importance in au-thropology, as applied to methods of improving the race or educating the individual in such a way that faults of heredily may be corrected by education, i.e., the providing of suitable physical, intellectual, and moral influences to which the individual may be liable or responsible.

The Problem of Variation.

The Most Valuable Primitive Race.

While in Europe and America recently the doctor came into contact with many scientific men, and everywhere he found a universal craving for the means of study regarding the Australian aboriginal for literature and for specimens, In one Continental University, famous for its anthropological work and activity, he found that Australia was represented by a planter cast of a single aboriginal ekull. In a British University, with one of the most complete and best catalogued collections in the world of local anthropology the comparative collection was poor; not a single Australian epecimen was included. In one of the most famous American Universities the professor of anthropology said he had not a bone of an Australian aboriginal. A celebrated neurologist in another University was lamenting that it was hapossible for him to examine and study the brains of our aboriginals and marsupinls)

paper went on to say-The The authropology of the most interesting and educationally the most valuable primetive race on the face of the earth at the present time is almost unrepresented in places where there are men carnestly desiring the means of study. The comparatively little that has been done, however, is of great value. In every book on anthropology Australia bulks large in the index. But in Australia itself comparatively little

as being done, no University has a chair or lectureship on anthropology, nor a collection of specimens that would adequately Sinstrate even a single lecture. The mumeans of studying them so as to make the results available for the use of the scientitic world at large.

The Key to Knowledge.

Centuries ago nature "side-tracked" race in Australia. At the present time, despite some drawbacks or interference from outside, that race remains to a large extent in primitive conditions. It is capable of easting light on the evolution of human races in a way and to an extent that probably no other can equal. It gives us the key, from a study of present customs, to the origin and meaning of the mythology of the Greeks and the Romans, and of mythology generally. It supplies the with data regarding the bodily variations occurring in primitive races, and the place and value of variations in estimating the zoological stratum or horizon to which races belong. . Its customs supply us with materials for a critical study of the origin and development of folk-lore, art, writing, language, mental emotions, morality, religion, and marriage. The primitive pages are here in abundance, but only for a little while.

Study Obstructed by Governments, The Sibylline books are presented open to

us as a gift, and as a people we say we cannot be bothered. The Governments officially and public bodies appear to do little except to create difficulties and impose restrictions on the workers here and elsewhere. It is extremely painful to state these facts; but, on an occasion like this, a witness who was dumb on an integral part of his subject would be adjudged as mute of malice;" his silence would be treason against science, the Commonwealth, and the human species.

A Pure Stock.

An American writer who undertook a mission to Australia and wrote critically and sympathetically on its institutions, says:-- "Australia is peopled by an almost oure British stock. Three-fourths of the inhabitants were born in the colonies, and four-fifths of the remainder are natives of the British Islands. This homogenity of population has some pleasant and desirable But it is at the cost of some national inbreeding, and at the sacrifice of the virility and aggressive energy begotten by the fusion of kindred races, and of the greater amount of variation and wider scope for natural selection in nation building that the mingling of different people causes." The criticism regarding national inbreeding and the sacrifice of the virility and aggressive energy begot-ten by the fusion of kindred races appears plausible, but what are the anthropological facts? On the subject of inbrueding, coasider for a moment cousin-marriage, the most intense inbreeding that custom, law, religion, and normal human feeling allow. In Fig. as in many other places, cousen marriage was not merely permissible, but imperative. But the Fijians made a distinction among consins. The children of two brothers were not allowed to marry. So, likewise, the children of two sisters But the children of a brother and were not allowed a sister were compelled to marry. And the progeny of such marriage was more numerous and the physical condition of it much superior than in the case of the progeny of mixed or outbred marriages. The greatest vitality is found among the inbreds. More light is cast on this subject by a study of the marriage of half brother and half-sister not uterine related. The whole of the details regarding inbreeding in animals, including human beings, are not known, nor are the principles fully established. But it is clear that the vast majority of people who talk about cousin marriages and racial inbreed ing have no clear knowledge of the sulject. From the race point of view there are infinite possibilities of good for Australia, and no known or suspected dangers that need influence either the trend or the details of the country's present immi-

gration policy. British Stock in Australia Changing. But the British stock in Australia will change, apart altogether from the influence of inbreeding or outbreeding. There is vidence that changes due to changed enironment have already taken place in the Judging from what is already known enironment will modify the physical structure of the race, the bones, the form of he head, the vocal organs, the appearance of the skin, hair, and eyes; it will change he times during childhood at which maximum growth occurs; it will modify the time of adolescence and the climateric; it will influence the mental and moral characters, the appetites, passions, and aspirations of the young and the old; it will reduce the birth-rate; it will modify our medical pathology. And all these changes under intelligent and judicious guidance, and by rational living according to wisely-directed education will contrioute to the well-being of the people and expand national life to its fullest possible development. After the stock and the individual we consider the environment, the importance of which as determining character and conduct cannot be overrated. It is very much a matter of circumstance and opportunity whether a boy with "the bump of acquisitiveness" will become a prince of thieves or the curator of a national museum. The rising generafluenced tremendously by the school and the school curriculum, by housing and general sanitation, by the control of communicable diseases, by the way in which State children are looked after, by the legislative control of the weak-minded, by our attitude towards enthetic diseases, by alcoholism, by our care of the poor, and by the way in which we regard mar-

The Union of Love.

The ideal of evolution, it is mid, is not a gladiator's show as used to be thought, but an Eden. In civilised countries men have ceased to engaged in hand-to-hand combat for wives as prizes. But the conditions of Eden do not hold universally in the matter of mating. Homes, too often, are cages, not nests. Marriages in the majority of cases in the most civilised countries are determined by the love of money or the fear of the lack of it, by property, by the necessities or the consent of the parents, by social position, by caste distinctions, by political interest, and suchlike. Love, natural affection nature's selection, as the basis of union of men and women, these have never had a fair trial in any country or at any time, with one possible exception. And the result, if not generally disastrous, usually falls far short of the ideal life, a state in which both parties reach the highest possible development of every physical, mental, and moral facelty with which nature has endowed

One has said, "No writer has dared to describe the full marry rdom of one of the victims of the influence of property in the woman's world of love. would be too horrible." Women themselves, the best and the worst of them, are silent for various reasons. And men don't think, don't know, and don't under-

Pension for Widowed Mothers.

There are indications that in this comtry, choice in unions will be less fettered and this should be encouraged. Harry unions, not too early however, are desirable, especially among professional people. The best that people give in the way of public service might be made better if they added children of their own to the gift But this implies fair salaries in the posi-

tions they occupy, and a State pension to widowed mothers-one of the greatest needs in any State. Further, as bearing on the marriage question, no womin, married or single, should be compelled to engage in any work that renders her unfit for motherhood, unless she beneff has decided to forego maternity. Nor should she be required to follow any occupation that preher from remaining in the vents possible closest contact: with progeny from Libre. point view of physical nurture and mental and moral education. In this country happily there are few, if any, occupations which in themselves have the effeat of incapaciwomen, teachers, and suchlike proverbially make good wives.

Checking the Birth of the Unfit. This is as far as we are warranted to go in advising or in restraining, for beyoud this we have no real knowledge. The cattle breeder knows from experience what strains will give him beef or milk, and he "selects" accordingly: the breeder of sheep knows what will give him wool or mutton, and he utilises his knowledge; has we don't know what will give those particular qualities of body, mind, or mornis that the world requires, nor the proportions in which they should be mixed, in the all-sorts of people that go to the making of a world: At the present time some medical men and others advocate abortion in the case of prognancy of, or impregnation by, the unfit; euthanesia of the unfit; sterilisation of the unfit, and the medical regulation of marriage. This is their programme, their platform, their panacca. Without pronouncing any opinion on these as abstract propositions or as subjects for academic discussion, when these people ask legal powers for these purposes one is constrained to ask, what is the anthropological position? Professor Thomson, about two years ago, wrote -"Perhaps the time, may come when the noblest social sentiment and a maturer science will agree that this bud and that should not be allowed to open; but the time is not yet. The biologist distrusts social surgery because of his ignorance, the armiogist rejects it because the thought of it makes the foundations of society tremble, and because the social ideal of good citizens is wider than the ideal of good physique; and the practical man will not hear of it because he knows that it is not in us to practice it. Even if the way were clear it would be like destroying fruits and leaving roots, and securing a firtitions comfort by an entirely artificial method of disowning our social liabilities. Marrett, Reader in Social Anthropology in the University of Oxford, as showing the relative values of eugenics and general social improvement, says; "We may easily fall into the mistake of supposing our race to be degenerate, when poor fe ding and exposure to un-healthy surroundings on the part of the mothers are really responsible for the crop of weaklings that we deplore. To improve the race by way of eugenics, though doubtless feasible within limits, remains an un-realised possibility through our want of knowledge. On the other hand to improve the physical environment is fairly straightahead work, once we can awake the public conscience to the need of undertaking this task for the benefit of all classes of the

community alike." Compulsory Military Service.

A matter that has a distinct bearing on the welfare of our country and the wellbeing of our citizens, and one that is of great interest to other people, is compulsory mulitary service. Surely in this country we can so train our lads in play, sports, physical exercises, camping out, swimming. horse-riding, and suchlike exercises as to make them bealthy, alert, self-reliant, unselfish, mutually helpful, co-operative-in short, skilled in all that pertains to war, should war be unavoidable. And in peace these qualities can always be exercised to their fullest extent; and such exercises will help to preserve our youths from those forms and effects of commercialism that would san the foundations of our individual and social life.

Man Master of His Fate. The chief discovery of recent years in regard to the emotions is that they are, first of all, "states of the body." The mind has only a secondhand relation to them. It enters at the end, not at the beginning. We perceive something by the senses, say, a bear; the bodily condition of trembling enspee; and then we have the mental emotion of fear subsequent to and consequent on the trembling. Now if we can check the trembling or substitute some other bodity state for it, or interpose some other emotion between the trembling and the oncoming of the fear we obviate or prevent the fear. Here is the secret of all self-control. The moral is, assume the bodily positions and movements and manners and tones of the voice that to the emotional state you desire, and you will become the thing you set. Be dead to one set of influences, alive to another, or, in apostolic words, "Reckon yourselves therefore dead indeed unto sin, but alive Oliver Wendell unto nghteousness," Holmes spoke of the fatalism that characterised the theological thought and the metaphysical theories in reference to free will and self-control. His feelings revolted against it and his intellect protested. He felt that, after all man and master of his fate. He and, I reject the mechanical doctrine which makes me the slave of outside influences, whether it work with the logic of Edwards or the average of Buckle, whether it come in the shape of the Greek's destiny or the Mohammedan's fatalism (he might hade added, or that time oppression of an old theology or the arrogance of a new science), or in that other aspect, dear to the hand of helievers whom Beerly of Everton, speaking in the character of John Wesley, characterised as The erocodile crew that believe ir election. But I claim the right to umit jall mechanical ideas which have crowned into the sphere of intelligent choice between right and wrong. pound of flesh I will grant to Nemeck; but, to the name of human nature, not one drop of blood-not one drop." Nature, we now know, is no Nemecis, and the pound of flesh will not be exacted.

(Applaase.)

