Thesis -

For the degree of D.Sc. in Public Health,

by

John Berry Haycraft M.B., B.Sc., F.R.S.E.

Subject: —

An examination of those factors which influence man's well-being & mental progress.
If we study the history of any civilization, whether it be of Greece, Rome, or of the Moor in Spain, we notice several distinct stages of development. First of all there is the struggle for a position among or above surrounding nations; countries are conquered, cities are taken. After this we find a period of comparative quiet, when those who are so disposed can think and reason, while others go on with, or struggle for power. At this stage man's thoughts turn naturally to the universe in which he is placed, by which he seeks to measure many of nature's most striking mysteries. He regards them much better than when he turns his attention to man himself and tries to solve them in the light of his own experience, his destiny, and to explain away the facts of his life, psychology. The Arab and philosophers have added little to our knowledge of man, but of nature much. A glance at a map of the stars...
will indicate this, & many scientific terms as algebra, algorithm, alcohol, alchemy are all of Arabic derivation. The Greek civilization so linked with dependent upon Eastern & Egyptian science has left us much to be thankful for. The names of Euclid, Archimedes, Aristotle, Eratosthenes, Apollonius will ever be household words to the scientific. Plato, Socrates, & others have written about man rather as speculative than scientific observers. While Euclid & Archimedes remain still amongst us as masters, Greek philosophy, having a slender basis of fact, remains of interest merely to the student who investigates the development of human thought from the historical point of view. The civilization of Western Europe has passed into yet another phase of development. Galileo, Kepler, Newton & Faraday have probed many of the depths of nature. The philosophers have been, & are still amongst us. Instead of Plato & Socrates we have the English, Scotch, & German schools of philosophy represented by Descartes,
Bacon, the immortal Spinoza, Hume, Kant, Hegel, &c. &c. With these two we must class the speculative philantropists such as Condorcet, St. Simon, Wallace & Karl Marx.

In addition Western Europe has taken boldly a step far in advance, a step famine: predicated in the part by the faltering attempts of a few Alexandrian, Jewish & Arabian physicians. Man himself is being studied scientifically, both man the mind & man in the apparatus. These studies are absorbing the attention of the most eminent minds of the century.

Harvey, Galen, Signor, &c. &c. &c. have directed man's frame, & assigned to many of his organs their appropriate functions. James Mill, Wever, Young, Bain, Ferrier & Helmholtz have uncovered some physiology; already the senses, emotions, memory, will, are treated as things subject to the ray of light, or drop of water, to laboratory experiment. Galton, Dubelet, Broca, Galton &c. &c. by means of the statistical method
have studied his hereditary qualities, the law of their transmission, his physical and mental variations under changing circumstances. Malthus has formulated the law governing the increase of the species. Scientific historians have followed and the growth and decay of nations have recorded events not only as food for patriotic vanity but for the idle amusements of superficial leisure but rather as indicating points of national development. Darwin, Lamou, Lyell and other have paved the way to the great doctrine of Evolution, which, as taught by Darwin and Herbert Spencer, has already proved that mass progress is upward from an ancestry of mean and undeveloped type, that it indicates many of the factors which have influenced and produced this development.

When a nation has reached the stage of its development it becomes possible for the first time to control with foresight its future development. It is commonly said that as with the life of a man, so with the life of a nation. In both cases growth is followed...
Sooner or later by decay. This has been in
doubtedly true in the past in the case of in-
dividual nations. Accurately with our present
Knowledge of history, & of developmental
physiology it is possible to discover the
causes of degeneration, & it yet remains
to be shown whether or no it may not be
possible to act in such a way as indefinitely
to prolong a national prosperity in the future.
Amongst the many causes of decay in past
civilisations, was the determination of breed
resultant from intermarriages with less
capable nations. The Athenians were
surrounded by barbarous of lower mental
stamps, whilst these they interbred in spite of the
numerous prohibitory laws. As a result the
shrewdness of their intellect has degenerated into
Shrewdness & cunning, which are among their
adjectives at the present day. Even in a more
marked degree the ancient Roman stock
interbred with foreign races. At one time
Marriage fell into such disrepute from
extreme concubinage, frequently with slaves,
that in Caesar's time, laws, giving a premium
for...
to marriage were introduced. When the Emperors removed to Constantinople a Roman nation of pure blood was hardly to be found.

The Moslems were a most capable, active, and intellectual race, but the modern Arab is very different. He is of the old stock that went forth with Mohammed and the Persians to conquer Africa, and a large part of Europe; but theirs, down to the tenth dilution, by interbreeding with the negroes and other inferior races.

The Arab conquerors could not have taken place without polygamy. The race and a large one could not otherwise have multiplied rapidly enough to hold a people the countries they conquered. The race suffered in consequence. It was no longer a race of conquerors.

The great Scandinavian invasion of the north of Europe, extending east to the Mediterranean Coasts, has been the single great event in the history of that nation. From a small and sparsely populated

The intellectual development of Europe. Trager Vol. 7 Chap. VII
Country, bravery, capacity & enterprise sailed out with the Vikings in their warships. By the weather less capable remained at home. By such natural causes can we account for the unimportant position these people have subsequently held among the nations of Europe.

As Bacon in his Essay on England remarks, that Holland was protected by her continual war both with Spain & England, & by her schemes of colonization. She was actually depopulated of her best citizens. She passed into a state of torpor which it is easy to account for. It was no question of natural decay, it was a question rather of extermination. Enough has been said to show that the decay of nations has in the past been due to causes subject to human control. The ancient Greeks & Romans were as machines on a wide ocean without chart or compass. They knew not whence to turn & acted only as circumstances suggested presented themselves. We are travelling since they have tired, & we can by intended experience avoid errors into which others have fallen.
It is the object of this thesis to investigate these factors, now operating among us, which are leading either to progress or to degeneration & decay. An attempt will be made to ascertain which of these sets of factors is the most powerful. Such an attempt would probably be futile, inasmuch as statistical evidence as to the physical & mental condition of our people, has only recently been obtained with anything like exactitude, & comparisons made with our ancestors of fifty years ago is impossible. It is of course still a question whether, knowing that which operates against the future progress of our race, mankind will be willing to use this knowledge, carefully as it does, in many cases, personal, sacrifice. There is reason to believe that this will be the case. The savage is thoughtless of the moment. If he has enough to eat & to drink he is happy & content. When the sun is shining he thinks & of the long winter, the snow, the blinding hail. The great characteristic of the civilized man is that thoughts of the future are ever blended with those of the present, & self denial is practiced.
in order that good shall result, it may be years hence. Those around us rarely look beyond their own lives, or those of their direct children. If they think, they work for others it is to relieve distress which comes before their eyes or stands in their laps. It seems to be only a natural development of self-restraint to a still higher platform which man may seem reach. His actions will be then more purely altruistic. He will recognize that upon the condition of the community of which he forms a unit will depend the condition of the yet unborn. He will hold his life as a sacred trust knowing that upon his wisdom, virtue may depend the happiness, the well-being of generations yet to come, whose future lies in his hands.
What is to be desired in man's future development

He has now to answer an important question, What constitutes progress, What constitutes degeneration? In studying any change produced by civilization we can then determine whether it indicates a change towards higher things or the reverse. It is only possible to answer this question by the light of the past. If we can trace and the lines of man's past development if we can determine in this way the changes that may have taken place, it will be easy to form a picture of what mankind may be, and the ways and means whereby this may be brought about.

According to Darwin the early progenitors of man were of ape-like form, covered with hair. Both hands were hands, their ears were pointed, capable of movement, their bodies were provided with a tail. The feet were prehensile, they were arboreal in their habits. They wandered about in families in warm forested lands.†

† From an ape-like ancestry the various races of man have sprung, each differentiating

† descent of man Vol 1 p 248
developing on its own lines. The race to which we belong has certainly reached a stage far in advance of at least half the other races inhabiting the globe.

The master-key to man's development, the understanding of human development is the fact that long ago the race developed definite instincts. Man owes his character, his intelligence, to the preservation of his species to his having formed communities for self-help and defence. This spirit of aggregation leading in the first instance to the formation of clans and tribes has already produced great nations. At the present time we less than 280 million souls acknowledge the sovereignty of one species her Majesty the Queen. In discussing the dependence of intelligence on the possession of the preserves instinct one remarks that all intelligent animals are preserves. We have no example of that is called an intelligent animal that does not cooperate with those of its kind. The dog, allied closely with the cat, bear, hunts in a state of nature in "packs" the cat, bear, tribe
living singly. The elephant, the horse, the beaver live together in communities. Among the birds, the solitary eagle has not the intelligence of the sociable jackdaw, never standing or perched. In the case of man, otherwise than by association in communities, could the instinctive formulation of thought in language have arisen? His important difference that mankind could have progressed intellectually beyond what was possible for any individual animal to develop. Without social relationships transference of its experiences, its successes, its failures from one generation to those to come is impossible. Every individual must the in this case work out his own life, guided alone by the light of his own experience, preceded by a knowledge of the experiences of his own kind. Inasmuch as social intercourse has done so much for mankind in the past we may look naturally for its equal, beneficent action in the future. It is improbable that the humanitarian action of social relationships is at an end. It is more probable that mankind will
ready benefits yet to come from a closer & more developed bond between man & man. A study of savage tribes of a low order teaches us that man was driven in the first instance to combine, in order to resist some common foe or to undertake some work of uncommon difficulty. The task accomplished the bond was often broken. As a result of frequent estrangement one finds some simply organized community bound together by ties of common interest. Of late a good fellowship there is little, or at any rate it exists chiefly between the male & female members of the tribe. The law is that of the stronger & there is little regard for human life. Infanticide is common among savage tribes. In Tahiti as many as two thirds of all children are murdered. What said a reply to Burton 'am I to blame when my sister has children that she can sell?' In Fijiee the custom of their gods indicates the character of the people. Inbatimona

The marriage of near New Irish p 108
of the origin of civilization Lubbock p 3
in the brain, cattle. As we approach the murderer, Kumbukumavuva is the rester, 
Tunamabuza is the adulterer. The Cuvuva does not exist in Eastern Africa. Nothing
constitutes an honourable man, murder - the more atrocious the midnight crime, the better - makes the hero of
after long dwelling together, the relationshp between one member of a community
another steadily improves. Such is the
case in our own country. Human life is
a sacred thing with us. So many actions
gained in the case of a savages are viewed
eyes as ceremonies. Imputable the bonds that
make us are not by any means. The bonds of
love alone. Most Englishmen are not fond
of owning that even in the century the brave
Englishmen must, as a trade, to decay
passing ships on their rocky coast. For the
sake of flotsam and jetsam.

without too that some of us have vague ideas concerning battles in the West

f. Fiji & the Lijians vol. 1 p 218
f. Burton's first footsteps in East Africa p 176
f. View of Troublesome Ch XV
India & Tasmania. This man was the guinea
Fer are ignorant of the game that goes on in
the Stock Exchange, the panic, created, the
hitting & bearing, the fortunes made short.
Besides the game crimes how many are the
dishonorable failures, the dishonest trustees
& partners. The whole system of merchandizable
interests is founded, not on the remuneration
of labor by adequate reward, but rather on
the right of each to do best for himself, the
devil take the hindmost.
Every man, no, every creature & plant must
grow & thrive, but not as the deadly pecan tree
which casts all that come near. In an
ideal community men will be "Altruists" and
"Egoists." There will be no "sacerdnti" still
for "emancipers" for no two men are
alike. The wicked man will be he who
has worked most capably, not he who
has perspired in the most eminent
degree the faculty of overreaching his neighbors.
Whatever government whatever laws it makes
little for all the true social qualities are
there, which, whether present injustice, or seeks
to oppress, only to live & help Others to live.
without such qualities, St. Simon & Harf mean
may mean ingenious mechanisms; they
will break down their material interest.
It is probable that intellectually man will
continue to develop. Jevons & Huxley believe that
this has taken place in a marked degree
already as to cause increased cranial
enlargement during the last few hundred
years. Whether the data are sufficient to
warrant his conclusion, the a priori
evidence points in the same direction.
It is improbable that the more intellectual
life that men are now leading will continue to lead with such less influence
on the race, so selective influences are
working to the same end.
It is possible that man will degenerate
unmuscularly, as regards mere volume.
strength. When this is not confounded with
loss of muscular strength, this change will be an
advantage rather than the reverse.
Individual strength of arms is necessary
to the savage, his precursors continued
depends on the possession of these qualities.
As a result of a civilized life not only are the muscles less used, but selective influences tend rather to retain the mentally than the muscularly vigorous. A vigorous active frame is an essential basis for happy emotions, but the mean of bone and teeth will be replaced, by a vigorous but less muscular type.

Animals of hearing and vision is distinctly less among civilized than among savage races. Darwin noticed that the Freginals could distinguish objects at a greater distance than his own sailors. Savage usually cope objects can, like drops, must be seen; their hearing is proportionately better. It is possible that the ideally developed man may not have the clear sight even of Darwin's sailors without this being of any disadvantage to him.

At the present time, an average Englishman is not called upon to use his eyes more than to read ordinary print or to tell the time over the way. Thistles in the case of certain aldermenic individuals a keen
Scent serves but no great purpose & he is not called upon at any moment to fly at the slightest sound of alarm.
To make up for the loss of more acute sensation we have already developed & probably will continue to develop a greater power of discriminating minute qualities of differences in sensory stimuli. The perception of minute differences of color for example is probably greater than that of the savage. Twenty shades of color known to every gentleman. The cases for the toilet are called by a savage one described by a single term. Much of this is no doubt due to want of a suitable vocabulary on the part of the savage. He has, in his simple life, rare use occasion to communicate his thoughts respecting color, even if he had any, & the necessary words are therefore wanting to him. This however indicates a distinct want of education & the value of this in developing power of discrimination is well known. A practiced deer is able to distinguish shades of color, which would have been hopeless
confused by noise when the first entered the
workshop. The ear of the musician unable
to detect the sound heard by the savage, is yet
able to tell of addition differences utterly
unknown to the latter. The conductor who
can distinguish not only the sound of every
instrument in his orchestra, but who can
follow the role which each performer
plays in the part he is performing, lives
in a world into which the savage has
not entrance. Such defects of vision as
are commonly attributed to civilization, are
due probably to the want of complete
civilization. It often occurs that in
Preschool 10 per cent of school children
may have defective vision, while in
this University the percentage increases
to 26. This is due to such numerous causes,
associated rather with an imperfect
civilization, that we may anticipate
in the future, an improvement will take
place. Although sight will never be as keen
as with the savage, myopia asphymatism
will surely disappear as people
learn to use better lights, read in better light.
with the head in a comfortable position.
The faculty of memory will probably
and develop. The holy dog have excellent
memories for faces, localities. The priests
of India who handed down their sacred
hymns by word of mouth from generation
to generation had memories the like of
which we shall never see again. So too
the books of Western Europe say the story
of the dead brave. They kept their deeds alive
in the hearts of their countrymen. Now
we have books too many notebooks
which make settings. A good memory is
a most useful thing, but it is not
as essential as it was to our forefathers.
On this account it will not be as exercised
as formerly, by device will cease to
be what it once was.

In sum up in the remark the ideal
man will "love the true, hate the false" a humanity
will exist with "sweeter manners purer laws."
He will be brought into some complete relationship
with nature by the help of his senses. In consequence
the basis of intellectual life will be widened.
An organism may be, during its lifetime, moulded by its surroundings often to a very considerable extent. These changes, provided they have arisen anterior to, or during, the child-producing period may be transmitted to its offspring.

Everyone knows the effect of temperature and exposure to prevalent winds on vegetation and life. In climbing from the valley once the heathmoss down one finds the trees more slender: so is the corncockle, the heathstraw, the heather growing in the stables, yield.

Sempé has shown that the size of the common cymeous stigmatic varies directly with the quantity of water in which it grows, so that in small tanks it is possible to obtain a dwarfed species. But once and above these mere changes in size, one can observe actual structural changes, the production of the action of environment on an organism.

*Annual Life* p. 160
The animal vegetable world has been produced during countless ages by the
measuring forces which change round
the organism. These changes are so slow
that one can rarely demonstrate them
in any experiment lasting for so short a period
as a human life time. The number of
cases in which environment has been
observed to produce structural changes is
not numerous. Schmankewitsch showed
that it was possible to raise a breed of
Artemia Milhanseni from Artemia Salina
which live in salt water at 4° Béarnœ,
by gradually raising the percentage of salt
to 25° Béarnœ. The transformation was
slow, occurring only in the course of several
generations. He also performed the reverse
experiments. Not only did he obtain alteration
in the shapes of organs but processes of
ing growth were produced by this change
in the water.

I have myself observed a curious case
in which transformation of one structure
into another took place as a result of
St. Lepus minor.
The trachea of almost all animals is lined by ciliated epithelium. In the cat the tracheal rings overlap posteriorly. There is a muscle 'trachealis' which can diminish the size of the trachea, but in doing it helps the surfaces of the mucous membrane against one another. Since the rings overlap at this site, and also, stratified squamous epithelium develops during the life of the animal, Hunter's gull may be mentioned to in this connection.

Man is likewise subject to the action of the environment with quantitatively or qualitatively, under favourable circumstances his stature may increase & his mental faculties may be sharpened & widened. If his surroundings are of a different kind he may become dwarfed & his mental powers wither from disuse. These changes will be by the law of heredity impressed on his progeny. No subject is worthy of more close study to anyone concerned with the interests of humanity than these facts which are involving, bewildering & determining in great measure his future development.
The action of environment on physical well-being

Height may be taken as a test of physical excellence if comparisons are drawn between those of the same race. Thus, if under different circumstances, the bodies of Englishmen drawn from the same district, change during some few generations in stature, this change will indicate to some extent at least the favourableness of the condition under which they are living. If the people are smaller than the neighbouring countrymen we may conclude that town life has had a deleterious effect on its inhabitants drawn as they were in the first instance from the country round about. One must be careful in all cases not to compare the stature, say of the town population in one quarter of the country with a country population from another part. Englishmen are on the average smaller than the Irish or Scotch, in England. There is a distinct district of small men running from Kent through the Midland Counties into Scotland. It is impossible absolutely to determine whether...
The physical condition of the inhabitants of country districts is improving. Sufficiently reliable statistics as to stature etc. are even now not to be obtained. Few healthy environments have not been in powerful operation, but against this we have to set the selective influence which draws into the towns the most physically and mentally capable.

The general hygiene conditions have been much improved during the last few hundred years. The enormous ravages of the Black Death in 1348 & the Sweating Fevers of the 16th & 17th Centuries indicate pretty well the hygiene conditions of the people. Poverty & Leukemia, both due in all probability to want of appropriate food, are diseases which have now practically disappeared. Much has been written about the two-roomed cottage. From considerable experience of cottage folk I have been driven to the conclusion that from a purely hygiene point of view, it was better to be one of a large family sleeping in a single room for eight hours than the other
This century saw a rise in the best squares of a densely populated manufacturing town. What wonders do some of the petty people own at the present day in the damp cottage. I am myself acquainted with a district in Norfolk a badly drained green. The inhabitants for miles around suffer to an almost incredible extent from rheumatic & cardiac affections. The knows that in past times there existed large tracts of similar country in the Eastern counties. Little attention was paid in any part of the country to drainage, with the certain result on the well being of the inhabitants.

When we turn however to the urban population it is easy, whether a modern town life is conducive to health and bodily vigour. It is easy to study groups of men and women working at similar occupations, gauge their physique, and compare them with the standard drawn from the country around. Statistics on a large scale are at hand enabling us to compare at a glance the condition of urban with rural populations.
Most Statisticians who have examined the subject agree that the mean height of a town bred man is less than that of a countryman; his weight and chest capacity is also less.

Robertson in a table containing the results of an investigation into the heights of over 57,000 individuals compares the stature of the town & country populations, the lower & middle classes. Among officials of the army & navy, clergymen, & doctors the average height is 68.66 inches. Among barristers, solicitors, bankers, merchants, and classes living for the most part in towns with an indoor lift the average height is 67.93 inches. Among town shopkeepers it is 67.28 inches.

When we turn to the lower classes we shall find in all cases a lower mean height. They exist under less favourable circumstances are obliged to work at an early age, are often badly clothed & fed. Whereas the mean height for the upper classes is nearly five feet nine inches the average for the lower classes is 66.8 inches.

But here again, as Robertson has shown, "Manuel of Anthropometry Ch. VII."
The town artizan is worn off than the countryman. Among agricultural labourers, quarry men etc, the average height is 67.10 inches, while among town artizans the average is 66.77 inches. Factory hands, tailors, shoemakers give a mean height of 66.87. It is interesting to note in the table the low stature of idiots & imbeciles, their mean being 64.89 inches.

The percentage mortality of a population is another index of general well-being. In country districts the mortality may be as low as 15 per 4000 per annum. The Scottish reports which give separate districts both town & country, with these individual death-rates, may be consulted here with advantage. The low country mortality above stated is reached in Lewis & other places in the year 1886. In the English Registrar General's Reports, mortality statistics are given for such towns as Derby, Norwich, Brighton, etc. Which overcrowding is not very great & there are few injurious trades. In such towns the mortality is generally under 20 per 4000.
Taking a year in no way exceptional say 1884 we find that the mortality in Manchester, Liverpool, Preston, & Glasgow was nearer 30 than 20 per 1000.

Taking the case of any particular town we find that the more concentrated the inhabitants are in any one quarter the greater is the disease & mortality. In this Amstel may be mentioned the table of Gardner. This observer showed that with a population of only 56 persons per square mile the mortality was only 15 per 1000. In this table the mortality increases until it reaches 27 per 1000 in the case of a population of 2,900 per square mile. The concentration of the population seen in many towns is associated generally with bad hygienic conditions other than the mere want of pure air. In addition, the people are generally engaged in unhealthy occupations are ill fed & frequently addicted to bad living. The author has frequently walked from Belgravia into the City & thence into Whitechapel, Seven Dials, or Pentonville, 7. Reuter from Tardieu & Polya's text of Hygiene 419.
In the purpose of contrasting within the same town the well-to-do classes, who residing only part of the year in London live in the best part of it, with those who are born and die in small ill-ventilated houses with all the surroundings of poverty and squalor.

The contrast is unmistakable. On one hand one sees youth reared and redundant in health and power; on the other hand there is mean stature, shuffling gait, faces on which hopeless struggling, despair, ignorance and often crime is written.

Unhealthy occupations are frequently carried on by poorer classes in towns where one is often struck with the miserable and inadequate appearance of workers leaving the factory gates. Statistics give conclusion support to the impressions which every one must have formed of the artisan class in manufacturing towns. Thus among those who are engaged in the manufacture of needles, file makers, glass cutters, the percentage who suffer from Thuring is calculated at 60 per cent.
Lithographers, grinders, celladon makers, grindstone makers, brush makers, gave over 40% of all their cases, while over 30% of moulders, type founders, watchmakers, stone cutters, cigar workers, handbookers, glass workers, suffer from this disease. Dr. Berts statistics were published in 1873 and although these trades are still injurious to health, great improvements in the general ventilation of workshops and the removal of injurious dust particles have since been made.

Not only are the working men injured but a great many trades are dangerous to the well-being of the neighbourhoods in which they are located. The smoky chimney not only fills the atmosphere with carbon particles, but discharges at the same acid within the vicinities. The depressing influence of town life on the community at large will be realized when we remember how large a number are subject to it. London contains half a larger population than the whole of Scotland, & the five largest towns in
England contains over one fifth of the whole population.

Public attention has long earnestly been directed to the question of town hygiene. The opening up of the more densely packed parts of our large towns, the provisioning of recreation grounds for the children, better drainage & ventilation, these & other improvements are already having a salutary effect. In addition the provident poor have cheaper food & clothing without a corresponding fall in the wage paid. It is satisfactory to read in the English Registrar General’s Reports, page xii (1856) that the healthiness of towns as measured by their death rate is improving; & that more rapidly than the improvement which is likewise taking place in the rural death rate.
The Action of Environment on Man's Mental Development.

It is obvious that the gross intellectual possessions of a race may not only be the result of its own intellectual conquests, but will depend on its intellectual heritage as well. Salton in the introduction to his Hereditary Genius states I think conclusively that man for man we are superior to the Greeks, perhaps as he says as inferior to them as the Bees are to bees. Nevertheless our intellectual possessions are greater, for we have what the ancients had, much more in addition. Do we will deny that the intellectual possessions of western Europe increase year by year. Can we show that the "mean" European possesses an individual intellectual power?

Sapir remarks the cranial capacity of the Parisians from the twelfth to the nineteenth Century has increased to such an extent that we may be allowed to Anthropology Sapir p 121
attribute this to the progress of civilisation. While recognising this fact, the conclusion drawn with great caution it is probable that the "mean" man has a more complex activity than he possessed a few centuries ago. This will result both from the direct action of surroundings, from selection where the most mentally capable will tend to survive. Any mental progress must be very slow, difficult or impossible to judge. We can however study these factors which are acting either for good or bad, taking up in the first instance those factors which directly affect the individual.

In country districts owing to the drain of capable men into the towns the intellectual as well as the physical "mean" will tend to be lowered. In opposition to this lowering we have the influence of improved hygienic conditions tending to assist all organic activities including that of the brain. Add to this the great attention lately drawn to the study of nature, which has probably stimulated many to reap the full advantages
of life spent in the fields & lanes. The educational advantages of a country-type training are I believe generally underestimated. We consider Hodge a dull fellow, we look upon the farmer or the Squire as out of the world. This is as a rule the result of our own ignorance, incapacity for judging outside our own limited standpoint. To know the opinions of the rising politician, to argue the chances of the coming war, the laughter and scandal of the clubs, they is of interest to us. Those who know less we know we consider know less. In point of fact a country life is better that of the labourer or of the farmer includes considerable intellectual training. The labourer must plough and harrow, must pluck, must harvest. He has experience in the cultivation of a large number of plants, the feeding of cattle & horses. He must use his pruning hook & sickle. Must jell his cart & build his rich & easy things to do. In addition he has the care of his garden & pig. Every year the crops are different & he is in
the midst of coping with ever varying nature. As will subsequently be seen this is a very different occupation from that of the factory hand who all his life sharpens pins or assists the movements of a machine at rhythmic intervals.

Still more in the case of a farmer is the life he leads calculated to develop his man, for as is proverbially true failure is certain unless farming be commenced in early youth.

In order to develop mentally the brain must be used. Life must be full of incident, or that must be supplied in part by the thoughts and lives of others. The saying that "a man can do anything who has three shepherds at his back" is a true one. For this reason.

Such a man possessed an ancestry of healthy men, taught by nature to adapt their actions to circumstances which were constantly varying.

It is impossible to say whether or not the "mean" from man is progressing in mental capacity. In the town competitive
chiefly an mental -generally on very few
mental grounds will determine survival.
Opposed to this will be the deterioration
of physique which will operate against
all activities mental or otherwise. Moreover,
a town life is not mentally stimulating
to the majority, if perhaps more stimulating
to the few than the country life.
The surroundings of an ordinary
town lad are not very conducive to
mental development. Start up against
the walls of a town he is not taught to
study nature: the fields & lanes are
our greatest earliest lessons. It is true
that he may associate with his fellows,
but humanity is a difficult study &
unsuitable for a growing mind. In a
room where the objects present have
been made by some manufacturer,
they are there, they have a name &
a use & that is all the child will learn
from them. If he is studying he will read
with great advantage to himself, but
the best books he will put will only take
him far from the lanes & fields.
Through which he had much better wander alone.

His occupation too, in after life, unless he is engaged in professional duties with, as a rule, and he of a developing mind. Half-timers of those living in towns are engaged in manufacture or trade. That which is perhaps most characteristic of modern social life is division-of-labour which leads to the production of better things as a rule at smaller cost. This implies however that each individual spends his or her time in doing fewer kinds of actions.

Let us study first the condition of the lower classes. There my house papered.

Some few or six men came. They put up the paint of the doors. One man could do it. None of the others can mind paper. Another two or three paint of paper, another three grains of the doors. So day they cannot work, a piece of the wall is uneven, the plasterer has not arrived. Of one of those complex machines used for cutting, printing, folding say the
Times newspaper, was used daily nearly for cutting paper, one would exclaim at the waste of energy. Why run a machine a part of which is alone made use of? It will probably be a question whether the nation can afford a similar waste of human energy, whether the cheapening of postal papers is worth the narrowing of human lives. It is a great law in physiology that "use" within limits assists as essential for proper development. The arm never grows to its full girth without exercise; the brain too will never develop unless it be allowed to functionate. What then is to be expected of one who spends every day in papering walls, sharpening pen needles or sorting pins? It is the suppression of nineteen-twentieths of the brain. Turning now to the study of the action of occupation upon the mental development of the town and middle classes, one strikes with the fact that the same subdivision of labor occurs although to a less extent. The everyday work of a clerk or a shopman.
is a continual repetition of a very few
processes, without any possibility of spontaneous
exercise of ability. Their labour is purely that
of a machine. When the accounts are
correctly balanced, an article correctly
weighed, & the money received & credited
nothing remains to be done; there is no
"scope" in such a life. The manufacturer
himself does little more than exercise
supervision over those who are under him.
If in the manufacture of an article any
technical knowledge is required he
consults or hires a chemist. He is concerned
as a rule merely with the article from
the business point of view, endeavouring
to get as much for as he can, &
paying as little to his workmen as they
will take. Trade too consists of a repetition
of simple actions & success depends
as much, if not more, on the state of the
market as on any capacity on the
part of the trader. Since the last few
years meat has been getting more abundant
& yet its price is only just falling at a
corresponding rate. This simply means that
by cooperation among the sellers the buyers have paid more than they should have done. The money which has thus been diverted to the pockets of a few can hardly have been acquired in a way which indicates necessarily, either a high moral or intellectual standard. During the same period taxermen have been able to afford diamond rings & jewelled watches & the jewellers have suffered through no fault of their own. No doubt in trade mental qualities, as in everything else, are of service, but these qualities, seen in all probability to the greatest extent in stock-jobbers, are not of a solid or valuable kind. Trade tends to develop "sharpness" rather than anything else. Sharpness in itself is a valuable quality, the intellectual aspect generally implying the power to argue "from particular to particular," from a moral aspect it is admirable when used to fight & conquer nature, but when used to overreach one's fellow men it is decidedly immoral.

Out of 180 men distinguished in Science Galton finds that no less than
three out of every five were born in the country or in a small country town, while one was born in London or one in a large town. Captain Dalton does not compare the number of inhabitants living in the country with those living in the towns he elects to call "large" so that in this way any deductions as to relative productiveness of mental power in country as compared to urban districts can hardly be considered final. Still the statistics are noteworthy as indicating how large a number of our real men are country bred. Mind you, for some years in a large manufacturing town there been stench with the fact that few of the younger rising men were town bred. Most of these were imported from the country round about.
Part III  Selection influences at work in the community

If we read in our Registrar General's Report of any given year, say that of 1886 we find that the population of Great Britain and Ireland was 36 millions and odd. The individuals who form the population, although they count each of as much value as the other for statistical purposes, differ vastly from one another in their value to the community. In the first place they comprise various races differing in their development from one another. We have Pre-celtic, Celtic, Teutonic, and Scandinavian blood, these Islands having been invaded by successive invasions from the South and East, and the various conquerors, partially exterminating some, intermarrying with others, and displacing the rest of the race they found in possession. The displacement has been to the North
and West.

As we pass towards the extreme North and West we find an increasing number of the present inhabitants who are descendants of old and effete stocks.

Both the Irish and the Highlanders of Scotland are not only markedly different mentally as compared with the English and Lowland Scotch, but they have in greater extent those qualities common to most half savage tribes; they are improvident, and incapable of long sustained labour.

Speaking of intellect, and the productive sciences of men, Galton places the Lowland Scotch first, the English next, and the Irish last. The Anglo-Irish, and Anglo-Welsh coming after the English.

Dr. Beddoe, comparing one Celtic race with another, remarks:

"The Welsh rise most in commerce, the
Lowland Scotch next, and the Irish northern.

The Welsh hold their own in Science, the Scotch more, the Irish less. In the attainment of military or political positions (mere Savage qualities) the case is altered. Here the Scotchmen, especially the Highlanders, bear away the palm; the Irish retrieve their position, and the Welsh are little heard of.

This statistical evidence is in accordance with common observation. The very few men having purely Celtic names such as McLeod, or O'Flaherty, &c., who rise to great intellectual eminence, is remarkable.

Then putting aside race differences we have individual differences. We are now in the 19th Century. Practically however although a large number of the community participate in many of the material advantages of this century, such as railway traffic, cheap carriage of letters, access to books, cheap tools, better hygienic conditions, &c., we have still amongst us a large number in the lowest of the
slaves, the country tramps, and the very poor, who may hardly be said to reap any benefit whatever from our civilization. In nine cases out of ten this is their own fault, as will presently be seen; at least to put it more correctly they are not capable of profiting by the advantages that surround them.

When we come to the thought of this age we find that still fewer live in it. The thought of the Century is the outflow from some few hundred brains, and not many thousands there are who are capable of assimilating it. What a vast gap is there between the keen brain of a Newman or a Darwin and that of Hodge ploughing his plough, or an average factory hand, or the miserable tramp.

This is in great part an organic difference, not one of breeding or training. We have progressed in our moral and religious feelings, but the progression is not with all; there is again an insurmountable gap between a Ruskin or a Shaftesbury, and the brute who
beats his wife, or who perpetrates one of the many crimes recounted in any daily paper.

Also though there is heightened acceptance by a few of Divine truth with its obligatory moral conduct is a vast improvement upon the lives of those who, holding in a narrow and perverted sense the doctrines of One who taught to love, demonstrated by their inquisitorial fives that they had missed the very kernel of the matter, yet religious persecution is still rife amongst us, and narrow persecutions of beautiful creeds are still launched from a hundred pulpits.

The success of the Salvation Army only shows how large a proportion of the population rejoice like the savages of the middle ages to be stimulated in religious devotion by sequacious accessories. The uplifted cross and banner is replaced by the "Hallelujah Chorus", the stirring chorus, and the quasi military spirit of the whole. Recently at Brighton a sect has been formed with that calling...
it's self "the Army of the Lord." The
Author from personal experience is convinced
of the true sincerity of these devotees. Yet
they repeat, in our age, amongst
the lowest of the people that which spread
like contagious fire through all classes
a few hundred years ago. These people
believe truly in their possession of Divine
Grace which calls upon them, amongst
other things, to dance before the Lord.
In these exercises, which are peculiar
and ungraceful jumping movements, they
continue for hours, until complete
Exhaustion supervenes. The dancing
religion devotees and pious Baptists
of Early times are thus still with us.
It is necessary always to draw
a sharp line between the poor and the
criminal classes. Selection acting during
the course of a few hundred years has
undoubtedly drawn much intellect from
the poorer class, and transferred it to
the middle and upper classes. It is
certain that an average man taken from
the latter will be more capable than one
drawn from the former class. Yet it is as certain that the difference will be not so very great.

The poorer classes are constantly fertile of greatness, and men are everyday changing one rank of society for another. The poorer classes are in every way to be treated with the utmost respect; for, man for man, they are little inferior to the upper classes. One may here remark that our custom of bowing only to a man or woman in our own rank of life or station to those in a station above us is but an indication of an ignorant snobishness, which pays tribute bribed and not to womanhood and manhood.

The only excuse for this is that men as a rule seldom seek to look below the surface of things. They see the vainglorious and the thief living in the same street with the honest artisan and worker, and they class them together and speak of them as of the lower classes. For in reality it is the greatest injustice to confound them, and this has done much
to lower the independence of many a poor and honest man. Men have in this country long ceased to be serfs, and much of the separation which now exists between classes is an artificial one, and is broken through every day. We ought in passing to remark that amongst the poor too are a large number of the less capable, improvident, 'ner-do-wells' who have sunk from the upper and middle classes.

Criminals there are in every class, but as a result of their own rebellion against social they do not as a rule succeed and suffer for it by sinking to the lowest station.

Few have gone through life without feeling how purely artificial class distinctions are. As one engaged for some years in teaching science the author constantly being made aware how unfit many of his pupils were for any high mental work. Simple mechanical operations such as cleaning windows or mowing grass would be the fitting occupations of many men striving to earn a living in a
learned profession. Amongst the poorer classes how many a bright-eyed, intelligent youth are found, tied by poverty and want of opportunity, to manual duties which do not afford from him a tithe of what he is capable of. They are the leaven of the class.

Nothing there is more certain than that we have amongst us a medley of humanity of every degree and kind, and we have now to ask ourselves from this raw material, we are going to evolve a better race, in which the average shall at any rate, be as capable and as moral as the best of us now. The answer is simple: the raw material must be freed from its grossest parts, and the purer parts retained. We have seen that environment may do something for humanity. The intelligence of the masses has been raised, but human progress has largely been due to the extermination of those least fit to survive. Just as nations come and go, giving up their places to their and better races, so in a given race, those individuals least fitted to survive must gradually be
eliminated. These seem hard statements to those
who have not looked nature in the face, and seen
this process actually before their eyes.
Nature is working her way in this direction, and
it is essential that humanity must work and act
intelligently on the same lines.
I propose now to consider three causes which,
acting within a community, determine the question
of the survival of the fittest, but before proceeding
with this inquiry a few remarks may be made
as to the teaching of Malthus for the reason that
his name will frequently be referred to, and his
doctrines are generally misunderstood.
Few writers on social questions are more often
quoted than Malthus, and yet very few readers
have mastered his works, judging at least from
nine tenths of their quotations. That he is a
byword of contempt for most writers is simply
saying that his writings were too scientific for the
age they were written in. Darwin at any rate
acknowledges his indebtedness to Malthus
for valuable thoughts and suggestions, which
helped him in the formulation of his great
theory of natural selection.
Malthus pointed out what every scientific biologist
would now admit, that a population tends to increase in a geometrical ratio, doubling about every twenty-five years. The most conceivable increase in agricultural produce would certainly not be more than an arithmetical one. Starting with a population fairly provided with food, it would tend to increase rapidly beyond the food supply; but in most countries there are checks to this increase. The checks are of two kinds. 

1st) Positive checks-the result of severe labour, poverty, bad nursing, overcrowding in towns, excesses, diseases, famine, wars, and bad climate; add to this vicious restraint, such as promiscuous intercourse. These prevent the population from increasing as it would otherwise tend to do.

2nd) Preventative checks. These are checks adopted as a result of man's foresight. Amongst these may be mentioned the habit of marrying late, and exercising control over the number of children. Malthus insists upon the advantages of these latter checks only when immorality is at the same time avoided. As he points out, these checks are largely in operation in civilized countries. The average age at which a man marries in England is 23.2 years, and for a woman 24.6. This, of course, indicates considerable constraint.

In turning to the subject matter of this chapter, we have first to consider the question whether, or not, we are furnishing to the next generation a progeny derived from the best, or the worst specimens of the present race. Are we breeding from our best stock? Is there any selection at all? or are we breeding from our worst?

Malthus on Population, Chap. II
Looking at the English Registrar General's returns for 1888, page vii, I found that the number of marriages per 1000 of population had steadily diminished from 8.5 to 7.3 per 1000 since 1869, due no doubt to the fall per head of the value of English exports as shown in the tables of the Report drawn up for that purpose. During the same period the value per head of British exports has fallen, as shown by table in the same page of Report. The depression in trade is related to the fall in marriage rate, no cause is to effect, commercial difficulties restraining the prudent from committing themselves to greater responsibilities. Such trade depression will as we shall see have a selective influence for the bad on the next generation, fewer of the prudent having offspring, the latter being recruited more largely from the improvident who would follow their natural inclinations come what would. Occupation too has an important selective action. In many trades and professions apprenticeships have to be followed before adequate remuneration for labor can be obtained. The reward of a specialist is greater, is longer delayed than the reward of a worker in some general field of labor. It is the prudent and capable man alone who will wait for his reward. In the same Report page VIII I find the following table showing average ages of marriage of Bachelors and Spinster in occupational groups. (1884-85)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Bachelors</th>
<th>Spinster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miners</td>
<td>24 - 6</td>
<td>22 - 4.6</td>
</tr>
<tr>
<td>Textile hands</td>
<td>24 - 3.8</td>
<td>23 - 4.3</td>
</tr>
<tr>
<td>Shoemakers - Tailors</td>
<td>24 - 9.2</td>
<td>24 - 3.1</td>
</tr>
<tr>
<td>Artisans</td>
<td>25 - 3.6</td>
<td>23 - 7.0</td>
</tr>
<tr>
<td>Labourers</td>
<td>25 - 5.6</td>
<td>23 - 6.6</td>
</tr>
<tr>
<td>Occupation</td>
<td>Bachelors</td>
<td>Operators</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Commercial Clerks</td>
<td>26 - 25</td>
<td>24 - 43</td>
</tr>
<tr>
<td>Shipmen &amp; Ship Keepers</td>
<td>26 - 67</td>
<td>24 - 22</td>
</tr>
<tr>
<td>Farmers &amp; Seas</td>
<td>29 - 23</td>
<td>26 - 91</td>
</tr>
<tr>
<td>Professional</td>
<td>31 - 22</td>
<td>26 - 40</td>
</tr>
<tr>
<td>Independent Classes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This table indicates amongst what classes restraint and influence most frequently is exercised. The lower classes, those with least foresight, and those engaged in trades requiring less capacity, will contribute each year more to the coming population than the more prudent and more capable; for this reason, that not only the woman but also the man becomes less fertile with increasing age.

Matthews Duncan has shown that at least 2/3 of the population are produced by women under 30 years of age, and a woman is most fecund at from 20 to 24 years old.

Then in each class represented in the table, it is probable, as has already been suggested, that the most improvident will marry earliest, and have largest families, so that there is a strong tendency for the production of individuals of inferior type in the next generation. In addition, it is probable that preventative measures are now being used to a large extent by women in the middle and upper classes in England.

---

"Fecundity, Fertility, and Sterility, 1871, Chap. 1, 2, 3"
wishing to avoid the trouble of a large family, only one
or two are born, thereby diminishing considerably the
fertility of the class.

It will be seen that we have selective influences
at work which operate in lowering the breed. Against
this however we must put the higher mortality,
especially the higher infant mortality, of the lower and
impoverished classes. Here again it is impossible
to determine which of these opposing factors is
strongest, and in what direction the result will tend.
It is certain that the restraining of impov'rous marriage
is much to be desired, and also that those who are
capable and of sufficient means, owe it as a duty
to the state in no way to shirk the responsibility
of such children as they may in the course of
nature produce.

As we have already seen, every man owes his intellect
and every thing which is beat in him to the fact that he
is one of a species living in communities. No self
abnegation on behalf of others is too great, and unselfishness
and helpfulness to others are our greatest virtues.
There is however such a thing as being cruelly kind
as everyone knows, and many are the deeds done.
with the best intentions which are nevertheless most harmful in their result. But in helping others, as in everything else, our actions must be judicious, and there are many considerations which are worthy of our discussion in connection with almsgiving, which if duly weighed should modify considerably our practice.

In Britain, as I think everyone will allow we have a people working hard for existence. They would be wanting in the bare necessities of life were trade to cease, and were they to turn to the soil alone for support. As Dr. Hume pointed out a community tends to double every 20 or 25 years, and this would take place with us but for the fact that men and women marry late, and have small families, and considerable emigration occurs as well. As it is the population increases each year, the competition for employment is great, and the weaker falls to the wall. Although it is probable that the capable and industrious are as a rule able to look after themselves, it is certain that great misery exists among men and women without much push and capacity, but who are quite devoid of natural vice, or improvidence. It is quite certain too that many, from ill health, misfortune, or injudicious management are in great distress, and this in all classes of society. Among those who are willing to work, who are virtuous and in
every way be respected, there is undoubtedly a great deal of silent and uncomplaining misery. On the other hand, we have perhaps greater misery among those who are improvident and vicious forming the vagrant and the criminal classes of the community. I wish to show that the latter class has wrongly excited the charity of mankind, and the former has been grossly neglected.

In olden times a distinction was sharply drawn between the deserving poor and the vagrant beggar class. The act 5th and 6th Edward 6th was for putting down vagrant beggars, and relieving those poor in very need. Alms were "sundry demanded" by collectors appointed for the purpose, of every man and woman according to their ability for the relief of the poor. These poor corporations having little effect, by the 6th Elizabeth any one obstinate refusing to contribute was subject to proceedings, and liable to fine and imprisonment.

Our present poor-law system, as will be soon stated from the Elizabethan period, for its main principle, viz. the compulsory taxation of the people for the relief of the poor, was then for the first time enforced. In the history of Poor-law in England, besides these abuses, such as the misuse and appropriation of funds as we gather from 14th Charles, Section 11.
we have ever the question arising as to the dealing with the vagrant criminal classes. It seemed then, as it seems now, an insuperable difficulty to assist alone the poor in very deed. Various acts of parliament, such as 14. Elizabeth indicate the fact. This act was entitled "An act for the punishment of vagabonds and the relief of the Poor and impotent." It begins by declaring that "all parts of the realm of England and Wales be presently with coigns vagabonds, and sturdy beggars exceedingly pestered, by means whereby daily happeneth horrible murders, thefts, and other great outrages to the high displeasure of Almighty God, and to the great annoyance of the common weal."

John Locke, one of the greatest intellects of England has produced, acted on a commission of which he drew up the report for considering the proper methods for setting on work, and employing the poor and making them useful to the public." Speaking of the multiplication of the poor, and the increase of the tax for their maintenance, he remarks that this evil proceeds neither from want of provisions or want of employment, but that it is caused by the relaxation of discipline, and the corruption.
of manners. He was of opinion that above one half of those receiving parish relief are able to earn their own livelihood. If we examine the condition of pauperism in England, taking the year 1886 we find that 33.3 persons per 1000 of population, or one in thirty, were in receipt of Poor Law relief. This is exclusive of vagrants. For the last 30 years the indoor relief, corresponding as it does to permanent accommodation, has remained practically the same, and the number receiving outdoor relief is diminished to nearly half, a result in the highest degree satisfying.

In Ireland the number receiving relief is 80 per 1000, or 1 in 12 of the population, together with 12.9 per 1000 of annual emigrants. Both emigration and pauperism are steadily increasing in Ireland. In Scotland 24 per 1000, or 1 in 41 of the population receive relief. In considering the numbers actually relieved, we have to add to this register relief, large sums expended in private charity, helping to keep alive persons, the exact number of whom it is impossible to estimate. We must say that per 1000 of population in England 33.3, plus vagrants and those relieved by private charity, are assisted in
their struggle for existence. Even this unknown quantity does not represent the burden that falls upon the workers of the community. Among the 1000 who are supposed to support the 33.3 persons, are reckoned all those who are in asylums, hospitals, the aged and incapable, children, minors, and the paupers themselves.

Subtracting all these from the 1000 you have a considerably diminished residue on whose shoulders the burden really falls. We must subtract also the independent classes, for to give bread in charity that other men prepare gives them the work and not you. A man or woman living what is called an independent life is no longer concerned with the production of wealth, the only influence and direct to some extent its distribution. It comes then to this that a very much smaller number of workers than 1000 are supporting, or helping to support a much larger number of men or women than 33.3.

If this burden can be shown to be a just and right one then whatever hardship it entails it must be borne, but if the burden is unjust and is really an evil, then on that account and because it imposes great hardship on those least fitted to bear it, it must be thrown away. I think the words of Dr. Locke spoken
in 1696 may with justice be repeated at this very hour. 

While there are doubtless numbers who, through no fault of their own are brought on the parish, yet we still have the sturdy beggar, the drunkard, and the man who will not work, and is not ashamed to beg. 

The existence of such persons is highly injurious to the well-being of the community as I wish to show. In the first place we are artificially keeping alive that which by natural selection should insensibly die. These are the dregs of the community by the separation from which the pure metal will alone ultimately be obtained. It is not as if the question was one which concerned the present generation only. Every morning I meet a young, healthy looking pair singing discordant sounds in the streets. They have one child, and another coming, and the oldest is but 9 or 10. 

This is but an example of what the present system leads us to. But for indiscriminate charity that man would not have been able to marry at so young an age, and, if incapable mentally, would, through poverty, never have heard, even had he possessed a fair family. 

This were far better than that these children born vagrants with no education, or training, or
acquired habits of industry should themselves marry, struggle through life, raise children. The whole family dying out miserably in one or two generations.

What protracted misery. The ignorant will sooner help them with a trifle, gives this to keep alive distress. So true is this that one learns from the populations of modern Europe that with charity come want. We create our paupers, and we keep up by our ignorant philanthropy, the pauper race.

As well subsequently be apparent these remarks would not apply to a family brought down by misfortune. If such a family are at all capable and honest, then give no longer the trifle that is in any case cruelly tried. Help largely that they may once more have a chance of living like human beings, and not be hopelessly brought down amongst the dogs of our cities. If men or women are past the in which they are capable of producing children, any help given them will only influence the condition of this generation. If the unworthy are helped during the child bearing period, or before it, then we are imposing a tax upon generations yet to come.

But when we turn to the worthy and
industrious, who, from the many experiences of life
are brought to poverty, the case is entirely different. One
is revolted at the heartless cruelty of humanity.
I suppose few men have not met the case of the
struggling youth, the suddenly bereaved widow,
the orphan born of honest and upright parents.
A little help generously and judiciously given at
the right time may make many a life happy.
The youth assisted in his early struggles may
make a successful career for himself; the
widow may be kept from despair, and the
orphan prevented at least from coming as a
permanent burden on society. Prevention is
ever better than cure, when men have once
gotten one can do but little.

Another bad feature of our poor law which
makes it a most immoral institution is
that within the same house come at least the
unfortunate poor, and the criminal classes.
For this reason if for no other the poor but
independent classes look with horror at this
possible ending of their days. From experience
gained when acting as medical officer to a
large workhouse, I can say that eight out of
ten of the inmates if allowed out of the
house with sixpence in their pockets could not have passed the first public house. They were a medley of born tramps, idiots and those mentally abnormal, broken down drunkards and prostitutes. Together with these, and in the same rooms were respectable old men and women, too old to work, and also both men and women overtaken in sickness and unable to earn their own living. One example may be quoted – an old woman of over seventy had twice married, both her husbands had been soldiers, both were killed in battle. She had had five sons, all of whom had been in the Service, and were dead, most of them having been killed in action. She had had a daughter who had married a soldier. The old woman, having out lived all her children worked till she was seventy four. Guerreuse of the 24th, supervened, and she came to the workhouse as a common pauper. Is not this picture a satire on modern charity? I think it is apparent that judgment is required in the distribution of charity. When we have to help the worthy and the unworthy we have every moral right to help the former first. As far as
private charity is concerned I think the best maxim is this: When one has given away all one has to give in helping humanity from falling, it is time then to think about the fallen. Of course it follows that were this maxim observed fewer would be found amongst the ranks of the fallen, and these would only represent desperate and hopeless cases.

Another and most important point has to be breached, and one on which Matthew actually most fully. When we give in charity either publicly or privately we are distributing not creating wealth. In a given year the workers of the community are able to produce so much bread, and cheese, and clothes etc. If I give a piece of bread or meat to a beggar, it is merely assigning to him the produce of another man's labor, or of my own. If this is done as it is in England (or still more in Ireland) to any considerable extent the bread and meat left for the workers will become considerably less, and in consequence its price will rise. Now this may not be of

*Matthew on Population Ch V and VI Book III*
So much consequence to me personally, but it will be of infinite consequence to those who are struggling just to keep their heads above water. A large number of these will, as a result of assistance rendered to others be thrown themselves on public charity.

As Matthew himself says, although the poor laws may have alleviated a little the intensity of individual suffering, it has spread the evil over a large area. Statistical proof of this view is not difficult to obtain. One may refer to the Registrar General's Reports for Ireland in 1886. On page 18 a table is given showing that as the value of potatoes varies, so do the numbers very of those seeking relief.

The poor law system, and unwise private charity, keep alive the very worst of the race, and allow them to propagate, thus materially altering the breed of future generations. Through this waste of effort, and want of judgment in giving, large numbers of those eminently fitted to survive sick without hope, or possibility, and the race is the loser.

X: Chap V. op. cit.
Other factors influencing the race of

Selection.

Our educational system is not by any means what it is to be desired apart from the ways and means of teaching. The intellectual men of the nation are not sufficiently drawn into intellectual paths. Intellectual training of a high order is rarely open to the poor, so there are few positions in which men of a high type may hold unless they have independent means. Men of refined taste with mental power are driven to trade simply because there are few paid positions where with small but sufficient remuneration they could hope to follow their pursuits in which they are most fitted. Our scholarship system having a noble origin has degenerated in great part to a system of giving money prizes. His selection is its influence unwarranted as reward goes to the capable, but its abuses are great.
Scholarships were given in old days to enable poor men to get a university education. Now sums of money are given to those who pass highest in Examinations. In point of fact a large perhaps the larger number of awards are given to the sons of well-to-do people who have had the full advantage of the best previous training, who would in any case follow a professional career. In examining into the cases of students receiving scholarships in the Mason College I found that eight out of every ten were the sons of well-to-do people, and that they would in any case have finished their college career. The work to attract students from one university to another by the tribe of a Scholarship is of course contemptible, having no influence whatever on the welfare of education generally.

It may be urged that many cases of real ability were enabled by the scholarship system to rise to the
positive they now occupy. This is true but it is equally true that all the advantages of the system might be obtained at the tenth of the cost by nurses administered privately by educational bodies with the help of poor and capable men. This latter system prevails largely both in Germany and America.

Masculine as the community has to support either by public or private funds the deceased really incapable of masculine as this should always be its duty, it is obvious that the state has a right to control the production of children in no way fitted to look after themselves in after-life. The state has a perfect right to prevent marriage between persons suffering from disease or transmissible malformation, or between those who have no expectation of being able to support a family. It is a fact that can be doubted by no one that if the race were propagated by the strong & capable the community...
would be much the better for it. Much suffering would be spared humanity. Public assistance has now been to be trained long before legislative interference would be sanctioned. We should remember that the fates of the future depend almost entirely on our present actions. For more philosophical is the custom that prevails among the Chinese of reflecting honor even titles back to past ancestry. A man's ancestry contribute in every way to his success or misfortune, his own children not at all.

There are constantly beholden to their fellows for assistance. They depend on mutual goodwill for most of the advantages that society offers them. Good will & help become therefore important selective factors when use should be based on some principle of right & wrong. At present the rich man is one God, everyone is willing to help him, he is a universal command. One dies with a man who has made
his money on the stock exchange, and another has been made rich by selling bad tea. Such men grow rich and flourish in the land, and we help them, although to make them rich many a man in the time of the deck has become poorer. Many another has had his fortune ruined by foolishness and foolishness.

First men are primarily admired by women. The mature for spirit and manliness. What any man can become, and what it is difficult to express from becoming. Men admire women not only for physical beauty, which is always to be desired, but are partly influenced by silly tricks of manner, but little by real nobility of character. We are all too little endowed with strong and unsurmountable admiration for what is ideally perfect both physically, mentally, and morally. We do not look at men or women as they are, but we judge them too much by mere accessories.
As a result of this we accept in preserving
what had much better never have been
at all, much of what is great & noble
is allowed to succumb to what we call
the cruelty of fate.

John Berry Haycraft