

RACE PROGRESS AND RACE DEGENERACY.¹

(Conclusion.)

IN examining the problem of race progress and degeneracy in Europe at the present time, we cannot fail to be struck by the remarkable decrease of fertility in France.² The number of deaths exceeded the number of births in 1907 by 19,920. True, in 1900, the number of deaths also exceeded the number of births, but only because the influence of the World Exhibition in Paris caused a general increase of the death-rate; and, in 1900, the total number of births was 866,543, whereas in 1907 it was but 773,969, and, further, the death-rate last year was normal. Since 1901 the fertility of French couples has been steadily diminishing, falling during this space of time from 230 births per 10,000 inhabitants to 207. Now, this diminution of fertility is in no way to be accounted for by the diminution in the number of marriages; on the contrary, the number of marriages celebrated in 1907 (314,913) has only once been exceeded, namely in 1873; and the latter year was by no means a normal one, owing to the number of marriages having been certainly artificially augmented by the irregular conditions which prevailed during the three preceding years on account of the Franco-German war, and prevented large numbers of marriages from taking place. We must, therefore, in order to explain this phenomenon, which is pregnant with consequences for the future of civilization, have recourse to other factors.

The population of present-day France is derived principally from two races, the dolichocephalous (*Homo Europeanus*) being predominant in the north, and the brachycephalous type (*Homo Alpinus*) in the south. These races have, of course, mixed, and the French nation is the product of the constant mingling of two originally distinct and antagonistic racial elements; and this process of intercrossing goes on without interruption, owing to the perpetual stream which flows from the mountainous districts to the plains and valleys, and from the country to the town. Pro-

1. A Paper read before the Sociological Society, March 22, 1909.

2. Cf. the article of M. de Foville in *L'Opinion*, August 19, 1908. Also those of M. Paul Leroy-Beaulieu in *Journal des Débats*, August 29 and September 12, 1908.

fessor de Lapouge sees in this "bastardising" of the population the main factor in the decrease of the birth-rate in France.¹

"We see everywhere in our towns," writes Lapouge, "individuals with light eyes and dark hair; we find long faces combined with short crania; we find features which present all the appearances of having been made for another face—the nose too short, the mouth too broad, the chin too large. The arms are too short in comparison with the legs, or else the legs are too long for the body; the colour of the beard is different to that of the hair; brachycephalous persons have the typical aryan head . . . These palpable contradictions are often manifest in the shaping of one and the same organ. One side of the nose is too long, whereas the other side is too short; the eyes are differently coloured, or else the apple of the eye is placed in an eye-socket to which it is not adapted; the two hemispheres of the cranium are asymmetrical. This inner disharmony cannot but diminish the fertility of the products of such excessive crossing, especially as it frequently results in asymmetry of the uterus, or in a diminution of the vital power of the spermatozoa."²

The truth of the latter assertion is confirmed by the well-known phenomenon that, whereas among all other mammals the conception of progeny follows immediately on the female being covered a first, or, at the latest, a second time; among the human species the average time between marriage and the birth of a first child is from 16 to 17 months; or, in other words, procreation does not, on an average, take place until after a lapse of seven or eight months. This highly significant phenomenon, to which Lapouge has called attention, shows clearly that the procreating power of the human branch of the mammalian class—from whatever cause it may be—has suffered a marked regression, and is inferior to that of other species.³

The psychological difference between the two races is not less marked than the physical difference. The average dolichocephalous individual is individualistic, energetic, progressive; the average brachycephalous one is characterised by a strong belief in the efficacy of State action, as opposed to unrestrained individual

1. *Recherches anthropologiques sur le Problème de la Dépopulation*, in *Revue d'Economie Politique*, 1895, p. 1002, and 1896, p. 132.

2. *L'Hérédité dans la Science Politique*, in *Revue d'Anthropologie*, 1888, p. 184.

3. Lapouge, *Recherches*, etc., *loc. cit.*, 1895, p. 1011, observes: "J'ai attiré depuis longtemps l'attention sur l'asymétrie fréquente de l'utérus chez certaines métisses, et en particulier chez beaucoup de femmes de sang très mélangé. Elle est beaucoup plus fréquente chez les métisses d'*Homo Alpineus*."

liberty: he is consequently more or less indolent, timid, and conservative. There is no equilibrium among his psychical faculties, and his bursts of energy, although violent, are of short duration. In short, between the average northern and the average southern Frenchman there exists the same psychological difference, which is obvious to everyone, which exists between the average southern Frenchman and the average Norwegian.

Let us ask ourselves now, what must be the result of the union of two persons, each one of whom is tainted by physical disharmony, and the psychological characteristics of each are so profoundly different? Obviously, a first consequence must be the rearing of children, the asymmetry of whom will be still further accentuated; and a second inevitable consequence will be not less disastrous, as far as the fertility of the union is concerned, because it is a moral one, *i.e.*, the lack of that deep and intimate comprehension one of another by husband and wife, which alone can guarantee happiness in the wedded state. Where complete psychological heterogeneity exists—nay, complete psychological antagonism—estrangement must speedily ensue; and, although this estrangement need certainly not become enmity—in which case, in France, divorce offers an easy and reasonable solution—nevertheless it will, in the majority of cases, have an unfavourable repercussion on the fertility of the marriage.

Wieth-Knudsen has made a classification of the French departments¹ based on the average number of immigrants contained in each given group. This classification is based on the official figures given in the *Recensement de la Population*, 1901, and in the *Statistique annuelle du mouvement de la Population*, 1901—1902. The departments are classified in groups according to the number of persons inhabiting them who were born outside the department,* and the average fertility of each group is given. The result of this inquiry was as follows:—

Number of Departments in each Group.	Among 1,000 inhabitants how many were born outside the department. Census 1901.	Total number of married women between 15—45 years of age.	Average number of legitimate births (inclusive of stillborn infants) among 1,000 married women. 1901-2
1st Group, Seine Dept.	... 574	... 522,900	... 121
2nd Group, 13 Depts.	... 485 (max.) 230 (min.)	... 848,400	... 146
3rd Group, 20 Depts.	... 220—170	... 876,100	... 150
4th Group, 18 Depts.	... 166—128	... 852,800	... 167
5th Group, 18 Depts.	... 127—88	... 875,600	... 181
6th Group, 17 Depts.	... 87—25	... 850,200	... 224

1. Wieth-Knudsen, *Rassenkreuzung und Fruchtbarkeit*, in *Politisch-Anthropologischen Revue*, vii Jahrgang, No. 6.

We see from this statistical table that *the number of legitimate births increases in direct proportion to the diminution of the number of immigrants from outside, in each group of départements.* These figures certainly speak in favour of the theory of Lapouge. That the psychological antagonism of parents diminishes the fertility of marriage as much as physiological asymmetry, is of course more or less a deduction which we make *a priori* as a result of a consideration of probable consequences. Figures given by Wieth-Knudsen in the aforementioned essay as regards marriages between persons of heterogeneous religious beliefs, do however confirm this *a priori* deduction. Official statistics of the Kingdom of Prussia for the period 1875—1900 bring the following results:—

Harmonious Marriages.

Average fertility of Catholic marriages, 5 children.

Average fertility of Protestant marriages, 4 children.

Average fertility of Jewish marriages, 3·8 children.

Disharmonious Marriages.

Average fertility of mixed Catholic-Protestant marriages, 3·1 children.

Average fertility of mixed Jewish-nonJewish marriages, 1·7 children.

We see that the least fertile unions are those in which racial asymmetry is combined with religious disharmony, in the case of marriages between Jews and non-Jews. But the marriages between Catholics and Protestants are likewise less fertile than any of the "harmonious" marriages.

In the case of France other causes are certainly at work, causes which are economic in their nature; but we are inclined to think that these economic causes are secondary. There is certainly much truth in Olberg's contention¹ that "Eheleute, die sich freiwillig enthalten, Kinder zu erzeugen, beweisen dadurch zweifellos eine Entartung, eine Störung ihrer physiologischen ökonomie, sie mögen äussere Stigmata dieser Entartung tragen oder nicht." Schallmayer, in the essay already quoted by us,² contests this assertion and maintains that the sexual instinct of man is not to be confounded with the "conceptual" instinct. But this argument appears to us wholly insufficient, and its author seems to labour under a misconception as to the meaning of instinct and

1. *Fruchtbarkeit, in Zukunft*, 16 March, 1901, pp. 477 ff.

2. *Eugenik, etc.*, in *Zeitschrift für Sozialwissenschaft*, loc. cit. "Der normale Mensch besitzt nicht einen Fortpflanzungstrieb, sondern nur einen Geschlechtstrieb."

the rôle played by it in the struggle for existence. Instinct is developed by natural selection, for it is a case of adaptation, often unconscious, called forth by the elementary necessities of life itself: the persistence of the species depends on the adequate development of its instincts. Now, the most fundamental of all instincts is the sexual one, and on this instinct depends, first and foremost, the life of the species, *because it ensures the reproduction of the species*. Can we find any traces, among any other animal species, or among any of the primitive races of the human species, who live amongst unadulterated natural conditions, of a "conceptual" instinct apart from the sexual one? The two are inseparable; and, where they are separated, as may be the case among certain highly-civilised nations, this is in itself already a sign of degeneracy. Why should natural selection have been at such pains—if we may speak figuratively—to maintain this fundamental instinct, if it were merely a luxury, and not a necessity? And what reason could there possibly be for the existence of this luxury?

Every instinct has its reason in the necessities of life, and this is why natural selection has been careful to breed and develop any given instinct by eliminating all those individuals who possessed it insufficiently. The colouring of the fore-wing of *Phyllodes ornata* possesses biological value for that species, enabling it to escape detection by its enemies. Those insects whose fore-wing was less perfectly adapted to the colour of the surrounding leaves were more likely to be detected and destroyed. Now we must bear in mind that, to this morphological peculiarity, is added a corresponding instinct to lie motionless at the approach of an enemy, or on hearing any suspicious sound. This instinct, in harmony with the morphological structure of the organism, is a vital necessity for the species; and it is maintained by natural selection continually weeding out those individuals who, having a less developed instinct, do not remain motionless on the approach of danger, and betray their presence to their foes by stirring. So it is with every instinct, and so, of course, is it with the most fundamental of them all, on which the continuity of the species depends.

Every instinct, as we have said, has a reason in the necessities of life. Every instinct tends either to the reproduction of the species, or to the survival of the individual by enabling the latter to procure prey or to escape danger. But what would be the reason of a "sexual" instinct apart from all idea of reproduction? As an outlet for superfluous physiological energy it would be

wholly unnecessary, as muscular or cerebral work achieves the same object with less expenditure of nervous force. The separation of the sexual instinct from the notion of reproduction is but a perversion of the former, and is directly contrary to natural law. The very fact of such a separation existing is in itself a symptom of degeneracy.

To sum up this discussion we may say that the *primary* cause of the diminishing fertility of the French nation seems to be the ever-increasing disharmony and asymmetry of the population—both physiological and psychological—due to excessive intermingling and intercrossing, which has brought about ever-increasing “hybridisation.” There are also *secondary* causes which tend to make themselves felt especially strongly among the upper and middle classes, and among the peasantry; but we lack space to glance at these now. Chief among them is the system of deliberate restriction, but this system is itself the physiological consequence of underlying economic causes.

To the question—Is the tendency towards a diminution of fertility a healthy one? we would reply as a general rule in the negative. It impoverishes a nation by furnishing less material for natural selection to act upon; less material from which statesmen, philosophers, men of science, who enrich the intellectual patrimony, financiers and business men, who increase the material wealth, can be chosen. With regard to the consequences for France to-day, such a tendency must inevitably place her, from the military and commercial points of view, in a position inferior to her fertile rivals, Germany and Italy; and in view of the many admirable and great services which France has rendered to humanity, the consequences entailed, in the future, by her possible inferiority, could not be too highly deplored. The hypothesis of future inferiority in the military and commercial spheres is one which we consider with the deepest regret concerning a country of which we are proud to think that we are in the truest sense of the word a citizen, and to which we are consequently attached by all the dearest and most intimate ties of life, thought, and language.

Much more important, then, than the influence of environmental conditions on the germ-plasm, is the influence of internal or endogenous conditions. The truth of the dictum that the only guarantee for the fitness of any given society lies in the selection of its best members for breeding purposes, and not in the creation of favourable environmental conditions, is proved strikingly in the

case of France. In no country has civilisation attained a higher zenith than in France, in no country has the fight against tuberculosis and other contagious diseases have been more energetically pursued; and, to add to this, the diminution of fertility, which leaves a country which could support 80,000,000 inhabitants to be inhabited by scarcely half that number, must reduce the struggle for existence by reducing the number of competitors; thereby rendering life easier and alleviating many of those intolerable miseries which are the result of an unnecessarily brutal strife. All these forces at work tend to improve the conditions of life; and yet, do they improve the *race*, do they enhance its biological value? We answer: not necessarily. Mere improvement of environmental conditions does not affect a given course of hereditary evolution.

The fact is that not only are the germ-cells to a very large extent independent of external or exogenous environmental conditions, but that they also possess a capacity which is practically limitless within the bounds set by the vital conditions of the species, for spontaneous variation. According to Weismann, spontaneity would appear to be the origin of every germinal variation, as on the one hand the great quantity of possible combinations afforded by the number of the ids, and on the other the increasing perturbations caused by the miniature struggle for life among the determinants around the nutritive fluid of the germ plasm, must continually bring forth a vast number of variations for selection to operate with; and all these variations are spontaneous, *i.e.*, they arise independently of environmental conditions (we do not, of course, speak of variations caused by toxic infection), and are only *subsequently* checked or favoured, when they attain to biological importance, and according as they do or do not promote the adaptation of the species to its surroundings. The somatic results of such spontaneous germinal variations are well known. For instance, different puppies belonging to the same litter will nevertheless differ among themselves. Recent experiments of Przibram¹ have shown the following result to be obtained in breeding: a female cat whose right eye was blue and left eye yellow, was paired with a male cat with two blue eyes. Their five kittens had respectively: one of them two yellow eyes, two others two blue eyes, a fourth had a yellow right eye and a blue left eye, the fifth had a blue righteye and a yellow left one. Thus every possible combination was represented in this single litter. All such variations are spontaneous.

1. *Archiv für Entwicklungsmechanik des Organismus*, Band xxv, Heft 1-2.

It is difficult to judge as to whether a race is progressing or degenerating, as such progress or degeneracy is not the affair of a day, or of a century, but of long periods. Above all things, we must beware of confounding mere *ontogenetic* progress or regression with *phylogenetic* progress. For instance, as we have said, the increase of stature is not a proof of racial improvement; for such increase of stature, observable to-day in most European countries, is doubtless due, at all events in part, to better food and better conditions of living generally; and, as we pointed out, there is no reason for supposing that such conditions affect the germ-plasm. In the same way greater longevity cannot be accepted as proof of phylogenetic progress. Greater longevity may, indeed, even go hand-in-hand with racial degeneracy, for it may simply be due to the removal from the environment of certain diseases which formerly eliminated weak persons; or it may be due to better hygiene, which protects sickly and feeble children and allows them to reach maturity and to multiply; and under such conditions the most sickly may attain old age. We may be permitted to reproduce some figures formerly cited by us in support of our contention that increased longevity and race degeneracy may go hand-in-hand.² The one thing which most forcibly strikes the observer when he studies the British Registrar-General's statistics concerning the death-rates, is the increase of infantile longevity and the concurrent increase of juvenile mortality. But this phenomenon has unfortunately its counterpart in the increased mortality, in the diminished standard of life, of persons of forty-five and upwards. Thus in thirty years, from 1870 to 1900, the mortality of male infants under five fell from 75·0 to 58·0 (per 1,000 living males); that of children from five to ten years from 8·9 to 3·9; and that of children from ten to fifteen years from 4·5 to 2·2, or less than half. On the other hand, the mortality-rate among persons of thirty-five years of age has, during the same period, only fallen from 13·8 to 12·5; while that of persons from forty-five to fifty-five years of age has *increased* from 19·6 to 20·8; and that of persons from fifty-five to sixty-five years of age has increased from 33·9 to 38·9.

The lesson to be drawn from these figures is that ever-increasing numbers of weakly children have had their lives artificially preserved by medical science, who would otherwise have died in early infancy. These weak individuals, thus permitted to attain

2. Chatterton-Hill, *Heredity and Selection*, loc. cit., pp. 342, 343.

maturity and reproduce themselves, constitute a menace for the race, for they beget fresh generations of weaklings. Thus the decrease of juvenile mortality cannot be taken as a symptom of race progress; nor could the general increase of longevity or the general decrease of mortality. For both phenomena may be due to an improvement of the environment which enables the weak and sickly to avoid the dangers that would naturally beset them; but a race which thus counteracts the working of selection does so only at the risk of imminent peril, for it has entered on the path which leads to degeneracy and bankruptcy.

It is likewise extremely difficult to estimate the progress or degeneracy of a race according to the development of its intelligence. We by no means subscribe to Dr. Archdall Reid's views that mental tendencies and capacities are never inborn; for we hold that psychical traits correspond to anthropological types, and that the difference between, for instance, Eastern and Western thought, cannot be bridged over; any more than a negro tribe, however favourable the environment, can rise beyond a certain level of intellectual culture. But it is very hard to measure the distance which separates one period from another, as intelligence does not by any means mean the mere *amount* of knowledge; and, on the other hand, wider diffusion of education permits of a much larger amount of latent intelligence becoming active; but this latter phenomenon certainly does not imply that as much latent intelligence, or potential intelligence, did not exist in former ages as now. It is very probable that, if we take into consideration, firstly, the increase of the number of instruments at our disposal for the acquiring of knowledge, and the continual perfecting of these instruments; secondly, the great diffusion of education at the present day, and the facilities afforded for learning; it is very probable, we say, if we take these factors into consideration, that the Middle Ages were, on the whole, as intellectual as the contemporary era is. The production of Augustine, Roger Bacon, Thomas Aquinas, Dante, Giordano Bruno, Savonarola, among the Christians; of Averroes, Avicenna, and the illustrious historian Khaldoun, among the Mohammedans; tends to show that the latent intellectual capacity of the Middle Ages was not a wit behind that of to-day.¹

1. Already we find Auguste Comte protesting against "l'ingrate injustice de cette frivole philosophie qui conduit à qualifier irrationnellement de barbare et ténébreux le siècle mémorable où brillèrent simultanément, sur les divers points principaux du monde catholique et féodal, Thomas d'Aquin, Albert le Grand, Roger Bacon, Dante,

The germ-plasm then, we repeat, is in a very large measure independent of environmental conditions; when we have acquired this certainty, the result should be to make us considerably more optimistic as to the future progress of the human race in the Western world; for we see that the biological and hygienic conditions under which large masses of the population live, shameful and deplorable as they very frequently are, do not menace the physical welfare of society as much as is commonly thought.

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etc." (*Cours de Philosophie Positive*, 5e éd., t. v, p. 376.) And Comte says, further on: "Loin d'être radicalement hostile au développement intellectuel, comme on l'a trop proclamé, sous l'unique impression, d'ailleurs exagérée, des temps de décadence, le catholicisme l'a, au contraire, éminemment secondé." (*Ibid.*, p. 379.) Nevertheless, while recognising what is due to the Christian Church, we owe an especially deep debt of gratitude to Islam for the intellectual revival which took place under its auspices.