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THE RACIAL COMPOSITIONS OF THE ITALIAN POPULATION

I intend to differentiate the various racial components of the Italian population. I have based my discriminant criterion on various elements:

a) the study of all historical sources,

b) the examination of the beliefs about the

local ethnical origin,

c) the analysis and comparison of the somatic characteristics noted and described by Livi in the two volumes of his "ANTROPOMETRIA MILI-TARE" - Roma, 1898 and 1905 - on the recruits of a century ago. Such an analysis has a particular importance in regard to the provincial populations which reside at the boundaries of the Ethnias, and are apt to represent a mixed population,

d) the analysis and comparison of the statural data of the 1972 recruits which I have calculated

and summarized.

I call Ethnias and not sub-races or "varieties" or "types" the racial groups I have discriminated because the question is controversial and leads to argument outside the scope of the present study.

I want to dispel a belief which is largely ingrained in people that there were in Italy during the course of time large movements of population and/or deep interbreeding between the Ethnias. Without denying it on the whole, we must resist it because in the Metal Ages the population has left the precarious life of the Neolithic and was organising permanent settlements and rural com-munities. The stability "in loco" of the various archaic tribes constitute, even partially, a factor of undoubtedly genetic homogeneity during the millennia. From the beginning of the I millennium B.C. or so, no great movements of population occurred in Italy, so that we can assume that the present population "grosso modo" is the descendant of the ancient one and it shows, more or less, the same phenotype maintaining its own original genotype.

It is generally spoken about the various invasions in Italy, which were in. order of time: Phoenicians, Greeks, Carthagineans, Barbarians, Arabs (only in Sicily), Normans (only in Sicily and Southern Italy), and others of a minor importance.

But, studying this phenomenon in historical field and by statistical analysis, we must reconsider and redimension it, and calculate its effects on an-

other level.

The Phoenicians and the Carthagineans were intrepid and able sailors and very able merchants. The Greeks were also very able merchants and dealers of their artigianal industry. These populations were not inclined to either a sedentary way of life or pastoral or agricultural activity, neither had they a disposition to expand. Therefore their colonies were really posts and sites on the sea coast or military settlements formed by mercenaries living under rigid discipline. They might constitute the garrison of some Sicel communities (in Sicily) in which they have a modest contact with the native population. It is to be noted that the Phoenician and Carthaginean colonies were in Sardinia and Sicily, while the Greek colonies were in Sicily and in Magna Graecia, i.e. on the coastal territories of the Italic Ethnia (Campanis, Lucaneans, Bruttis), and Japygean Ethnia. If interbreeding happened, and presumably it did, its weight on the numerous Sicel population was modest. Another element limited the intercrossing: Western Sicily was populated by the Elymian tribes of very hard and austere habit who lived in an endogamous society.

Ethnias	1	2	3	4	5	6	7	8	9
Ligurian Gallic Euganean Illyrian Rhaetian Etruscan Japygean Italic Sicilian Sardinian	83.2 2.2 85.1 1.0 85.0 0.3 85.0 0.0 — 82.5 1.6 80.2 1.1 82.2 1.9 79.7 0.6 77.4 0.4	10 47 12 45 14 41 19 37 — 9 49 7 55 8 53 7	1 655 7.2 1 652 5.1 1 665 3.3 1 679 6.6 1 667 — 1 651 9.7 1 631 5.7 1 635 7.8 1 632 8.1 1 617 5.8	1 726 8.5 1 722 10.3 1 727 8.4 1 765 14.5 1 740 — 1 723 13.5 1 684 9.9 1 695 1 8.6 1 678 7.5 1 662 10.6	71 4.3 71 4.2 62 3.7 85 5.1 73 4.4 72 4.4 53 3.2 59 3.6 46 2.8	+15 70 $+22$ 6 $+7$ 30 $+24$ $+25$ $+25$ 24	370 $+2700$ $+450$ 100 $+43$ $+500$ $+450$ 1600 600 170	3 285 6.1 15 580 29.0 4 144 7.7 898 1.7 391 0.7 4 596 8.6 4 063 7.6 14 141 26.3 5 123 9.5 1 524 2.8	1 115 147 1 215 166 1 045 53 1 282 282 1 122

Columns meaning: (1) cephalic index mean and its SD. (2) porcentages of "type" -top value "blond", inferior value "brown". (3) and (4) statural means in mm. and their SDs. a century ago recruits levy 1859—1863, and levy 1972. (5) statural increase in the century in mm. and % of it in regard to the old stature. (6) area in sq. km. (thousands) of the territory I have assigned — in the limits of the present national boundaries. (7) and (8) population in thousands: 1st col. calculated by me at the middle of the I millenium B. C.; 2nd col. 1972 figures in the present national frontiers, and (inferior line) percentage on the total Italian amount. (9) 1972 net income in thousands liras "pro capite", and its SD.

It could be said the same about the Lucanean and Brutti tribes of Magna Graecia.

The so-called Greek invasion which developed in Magna Graecia and Sicily from the IX to the III centuries B.C. was not a demographical phenomenon, but only a cultural predominance over the poor culture of the primitive natives. I calculated that at the middle of the I millennium B.C. the population of Southern Italy and Sicily which presumably was affected by the Greek colonies amounted to a million. It is obvious that their genetic patrimony could not suffer from the limited population of the colonies.

I redimensioned also the fact about the German Barbarians whose amount was much exaggerated by the ancient historians. The Barbarians were not populations migrating "en masse", but generally they were primitive armies of very primitive warriors who had only an aim: plunder. Very few parts of these Barbarians settled down, and in course of time have been assimilated by the natives whose genetical patrimony was not affected. Their invasions began in 401 and ended in the VIII century A.D. They were, in order of time: Visigoths (401-415), a dominion of 14 years; Vandals (450-536), a dominion of 86 years; Ostrogoths (489-555), a dominion of 66 years; Longobardens (568-774), a dominion of 204 years. I do not mention the Huns (452-453) and the king Radagasio (405-406). The Longobard dominance was the most heavy over continental Italy and Etrury, inhabited by Ligurians, Gauls, Euganeans, Illyrians, Etruscans, and Ombres which all together amounted, after my calculation for such period of time, to nearly three millions. It is obvious that the modest quantity of Barbarians who decided to settle down among the natives could not alter the genotype of those Ethnias.

The Arab invasion of Sicily and their dominance of about two centuries and a half (827—1072) was rather heavy for the natives demography as the Arab migration represented, by my calculation, a tenth of the Sicilian population. It is difficult to detect through the analysis of the anthropometric data the effects of this invasion because Arabs and Sicilians represent two akin varieties of the Euro-African Type of the Mediterranean Race. Worthless to mention the dominance of Normans in Southern Italy and Sicily, as they were a handful of adventurers who could not affect in any way the Italic and Sicilian genetic patrimony.

The racial groups I discriminated in the Italian population are:

1. three Varieties of the Euroafrican Type of the Mediterranean Race: a) Italic, b) Sicilian, c) Sardinian.

2. the Celts with the two Ethnias of Ligures and of Gauls.

3. the Venetis with the two Ethnias of Euganeans and Illyrians,

4. the Etruscan Ethnia, 5. the Japygean Ethnia,

6. the Rhaetian Ethnia.

The ancient historians considered distinctly these populations which had their own customs, uses, and languages. They called them "peoples",

sometimes "stirpi" (stocks), some were divided into tribes. These historians represented some of these "peoples" as bound by so-called "blood-links", a term obviously equated with our "genetical relation". I expound in the following table, as a summary, the results of my calculations, analyses, and essential constants.

The somatic characters considered by Livi and which I used were: (a) cephalic index; (b) stature of the recruits of 1859-63 levies: (c) "type" which was considered by Livi as "blond" and "brown". He has calculated the data as he says "... for the blond type the percentage of blue eyes is added to the percentage of blond hair and the total is divided by two...; for the brown type with the same procedure . . . dark eyes (chestnut or black) and black hair and the total is divided by two . . .

I calculated the stature means of the recruits of 1972 levy (born in 1953) in order to determine the stature increase during the century. This increase, apart the natural evolution supported by genetic impulse and inherent to each racial group, is due to extra-genetic factors. The stature increase is essentially the lengthening of the long bones, though there is, too, a collateral increase in other parts of the skeleton, as for instance the thorax. Therefore it is a process of more rapid, or more vivid perienchondral ossification. This phenomenon is caused undoubtedly by a greater influence of the glands which intervene in the harmonious development of the long bones.

It is probable that the homogenous conduct of the osteoblasts and osteoclasts is sharpened. It is possible also that the acquisition of larger quantities or of different nature and /or origin of chemical elements, both organic and inorganic (affecting the nutrition) causes a keener function of the glands and contemporary acts on the cartilage of the diaphysis of the long bones. Or, as an alternative, may be such acquisition induces in the normal physiology of the body a brisker development of the collagen fibres of the diaphysis and increases the level of calcium and phosphorus in the bone tissue.

Apart these aspects of the stature increase, it is ascertained that the stature varies following the uniformity or diversity of the environment in



which the population live, and the social and nutritional customs they have or they acquire.

. I have assumed that within the same genotype or at least its varieties:

a) the coastal populations are taller than those living inland;

b) the isolated populations, all the other conditions being similar, have a minor stature;

c) in general the population of the chief town of a province or of an Ethnia affects the stature of the population of these aggregations where it lies, showing higher stature than that of the population of other provinces.

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