### IV. Evolution in General

## THE FACTORS OF SOCIAL EVOLUTION

The Behaviour of a single inanimate object depends on the co-operation between its own forces and the forces to which it is exposed: instance a piece of metal, the molecules of which keep the solid state or assume the liquid state, according partly to their natures and partly to the heat-waves falling on them. Similarly with any group of inanimate objects. Be it a cart-load of bricks shot down, a barrowful of gravel turned over, or a boy's bag of marbles emptied, the behaviour of the assembled masses—here standing in a heap with steep sides, here forming one with sides much less inclined, and here spreading out and rolling in all directions—is in each case determined partly by the properties of the individual members of the group, and partly by the forces of gravitation, impact, and friction, they are jointly and individually subjected to.

It is equally so when the discrete aggregate consists of organic bodies, such as the members of a species. For a species increases or decreases in numbers, widens or contracts its habitat, migrates or remains stationary, continues an old mode of life or falls into a new one, under the combined influences of its intrinsic nature and the environing actions, inorganic and organic.

It is thus, too, with aggregates of men. Be it rudimentary or be it advanced, every society displays phenomena that are ascribable to the characters of its units and to the conditions under which they exist. Here, then, are the factors as primarily divided.

From The Principles of Sociology (London: Williams and Norgate, 1876), vol. 1, part 1, pp. 9-15; part 2, pp. 455-62; part 8 (1896), p. 325.

122

These factors are re-divisible. Within each there are groups of factors that stand in marked contrasts.

Beginning with the extrinsic factors, we see that from the outset several kinds of them are variously operative. They need but barely enumerating. We have climate, hot, cold, or temperate, moist or dry, constant or variable. We have surface, much or little of which is available, and the available part of which is fertile in greater or less degree; and we have configuration of surface, as uniform or multiform. Next we have the vegetal productions, here abundant in quantities and kinds, and there deficient in one or both. And besides the Flora of the region we have its Fauna, which is highly influential in many ways; not only by the numbers of its species and individuals, but by the proportion between those that are useful and those that are injurious. On these sets of conditions, inorganic and organic, characterizing the environment, primarily depends the possibility of social evolution.

When we turn to the intrinsic factors we have to note, first, that, considered as a social unit, the individual man has physical characters which are potent in determining the growth and structure of the society. He is in every case more or less distinguished by emotional characters which aid, or hinder, or modify, the activities of the society, and the developments accompanying them. Always, too, his degree of intelligence and the tendencies of thought peculiar to him, become co-operating causes of social quiescence or social change.

Such being the original sets of factors, we have now to note the secondary or derived sets of factors, which social evolution itself brings into play.

First may be set down the progressive modifications of the environment, inorganic and organic, which the actions of societies effect.

Among these are the alterations of climate caused by clearing and by drainage. Such alterations may be favourable to social growth, as where a rainy region is made less rainy by cutting down forests, or a swampy surface rendered more salubrious and fertile by carrying off water; or they may be unfavourable, as where, by destroying the forests, a region already dry is made arid: witness the seat of the old Semitic civilizations, and, in a less degree, Spain.

Next come the changes wrought in the kind and quantity of plant-life over the surface occupied. These changes are three-fold. There is the increasing substitution of plants conducive to social growth, for plants not conducive to it; there is the gradual production of better varieties of these useful plants, causing, in time, extreme divergences from their originals; and there is, eventually, the introduction of new useful plants.

Simultaneously go on the kindred changes which social progress works in the Fauna of the region. We have the diminution or destruction of some or many injurious species. We have a fostering of useful species, which has the double effect of increasing their numbers and making their qualities more advantageous to society. Further, we have the naturalization of desirable species, brought from abroad.

It needs but to think of the immense contrast between a wolfhaunted forest or a boggy moor peopled with wild birds, and the fields covered with crops and flocks which eventually occupy the same area, to be reminded that the environment, inorganic and organic, of a society, undergoes a continuous transformation of a remarkable kind during the progress of the society; and that this transformation becomes an all-important secondary factor in social evolution.

Another secondary factor which must not be overlooked, is the increasing size of the social aggregate, accompanied, generally, by increasing density.

Apart from social changes otherwise produced, there are social changes produced by simple growth. Mass is both a condition to, and a result of, organization in a society. It is clear that heterogeneity of structure is made possible only by multiplicity of units. Division of labour cannot be carried far where there are but few to divide the labour among them. There can be no differentiation into classes in the absence of numbers. Complex co-operations, governmental and industrial, are impossible without a population large enough to supply many kinds and gradations of agents. And sundry

developed forms of activity, both predatory and peaceful, are made practicable only by the power which large masses of men furnish.

Hence, then, a derivative factor which, like the rest, is at once a consequence and a cause of social progress, is social growth, considered simply as accumulation of numbers. Other factors cooperate to produce this, and this joins other factors in working further changes.

The next secondary or derivative factor to be noted, is the reciprocal influence of the society and its units—the influence of the whole on the parts, and of the parts on the whole.

As soon as a social combination acquires some permanence, there begin actions and reactions between the society as a whole and each member of it, such that either affects the nature of the other. The control exercised by the aggregate over its units, is one tending ever to mould their activities and sentiments and ideas into congruity with social requirements; and these activities, sentiments, and ideas, in so far as they are changed by changing circumstances, tend to re-mould the society into congruity with themselves.

In addition, therefore, to the original nature of the individuals and the original nature of the society they form, we have to take into account the induced natures of the two. Superposed modifications are continually undergone by the units; and the altered units are ever superposing modifications of social structure on the previous modifications. Eventually this co-operation becomes a potent cause of transformation in both.

Yet a further derivative factor of extreme importance remains. I mean the influence of the super-organic environment—the action and reaction between a society and neighbouring societies.

While there exist nothing but small, wandering assemblages of men, devoid of organization, the conflicts of these assemblages with one another cannot work changes of structure. But when once there have arisen the definite chieftainships which these conflicts themselves tend to initiate, and especially when the conflicts have ended in permanent subjugations, there arise the rudiments of political organization; and, as at first, so afterwards, the wars of societies with one another have all-important effects in developing the social structure, or rather, one moiety of it. For I may here, in passing, briefly indicate the fact to be hereafter exhibited in full, that while the industrial organization of a society is mainly determined by its inorganic and organic environments, its governmental organization is mainly determined by its super-organic environment—by the actions of those adjacent societies with which it carries on the struggle for existence.

There remains in the group of derived factors one more, the potency of which can scarcely be over-estimated. I mean that accumulation of super-organic products which we commonly distinguish as artificial, but which, philosophically considered, are no less natural than all others resulting from evolution. There are several orders of these.

First come the material appliances, which, beginning with roughly-chipped flints, end in the complex automatic tools of an engine-factory driven by steam; which from boomerangs rise to thirty-five ton guns; which from huts of branches and grass grow to cities with their palaces and cathedrals. Then we have language, able at first only to eke out gestures in communicating simple ideas, but eventually becoming capable of expressing highly-complex conceptions with precision. While from that stage in which it conveys thoughts only by sounds to one or a few other persons, we pass through picture-writing up to steam-printing: multiplying indefinitely the numbers communicated with, and making accessible in voluminous literatures the ideas and feelings of innumerable men in various places and times. Concomitantly there goes on the development of knowledge, ending in science. Counting on the fingers grows into far-reaching mathematics; observation of the moon's changes leads at length to a theory of the solar system; and at successive stages there arise sciences of which not even the germs can at first be detected. Meanwhile the once few and simple customs, becoming more numerous, definite, and fixed, end in systems of laws. From a few rude superstitions there grow up elaborate mythologies, theologies, cosmogonies. Opinion getting embodied in creeds, gets embodied, too, in accepted codes of propriety, good conduct, ceremony, and in established social sentiments. And then there gradually evolve also the products we call æsthetic; which of themselves form a highly-complex group. From necklaces of fishbones we advance to dresses elaborate, gorgeous, and infinitely varied; out of discordant war-chants come symphonies and operas; cairns develop into magnificent temples; in place of caves with rude markings there arise at length galleries of paintings; and the recital of a chief's deeds with mimetic accompaniment gives origin to epics, dramas, lyrics, and the vast mass of poetry, fiction, biography, and history.

All these various orders of super-organic products, each evolving within itself new genera and species while daily growing into a larger whole, and each acting upon the other orders while reacted upon by them, form together an immensely-voluminous, immensely-complicated, and immensely-powerful set of influences. During social evolution these influences are ever modifying individuals and modifying society, while being modified by both. They gradually form what we may consider either as a non-vital part of the society itself, or else as an additional environment, which eventually becomes even more important than the original environments—so much more important that there arises the possibility of carrying on a high type of social life under inorganic and organic conditions which originally would have prevented it....

[The following passage recapitulates Part I of the *Principles* and introduces the remainder.] After recognizing the truth that the phenomena of social evolution are determined partly by the external actions to which the social aggregate is exposed, and partly by the natures of its units; and after observing that these two sets of factors are themselves progressively changed as the society evolves; we glanced at these two sets of factors in their original forms.

A sketch was given of the conditions, inorganic and organic, on various parts of the earth's surface; showing the effects of cold and heat, of humidity and dryness, of surface, contour, soil, minerals, of floras and faunas. After seeing how social evolution in its earlier stages depends entirely on a favourable combination of circumstances; and after seeing that though, along with advancing development, there goes increasing independence of circumstances, these ever remain important factors; it was pointed out that while dealing with principles of evolution which are common to all societies, we might neglect those special external factors which determine some of their special characters.

Our attention was then directed to the internal factors as primitive societies display them. An account was given of "The Primitive Man-Physical": showing that by stature, structure, strength, as well as by callousness and lack of energy, he was ill fitted for overcoming the difficulties in the way of advance. Examination of "The Primitive Man-Emotional," led us to see that his improvidence and his explosiveness, restrained but little by sociality and by the altruistic sentiments, rendered him unfit for co-operation. And then, in the chapter on "The Primitive Man-Intellectual," we saw that while adapted by its active and acute perceptions to primitive needs, his type of mind is deficient in the faculties re-

quired for progress in knowledge.

After recognizing these as the general traits of the primitive social unit, we found that there remained to be noted certain more special traits, implied by his ideas and their accompanying sentiments. This led us to trace the genesis of those beliefs concerning his own nature and the nature of surrounding things, which were summed up in the last chapter. And now observe the general conclusion reached. It is that while the conduct of the primitive man is in part determined by the feelings with which he regards men around him, it is in part determined by the feelings with which he regards men who have passed away. From these two sets of feelings, result two all-important sets of social factors. While the fear of the living becomes the root of the political control, the fear of the dead becomes the root of the religious control. On remembering how large a share the resulting ancestor-worship had in regulating life among the people who, in the Nile-valley, first reached a high civilization—on remembering that the ancient Peruvians were subject to a rigid social system rooted in an ancestor-worship so elaborate that the living might truly be called slaves of the dead—on remembering that in China, too, there has been, and still continues, a kindred worship generating kindred restraints; we shall perceive, in the fear of the dead, a social factor which is, at first, not less important, if indeed it is not more important, than the fear of the living.

And thus is made manifest the need for the foregoing account of the origin and development of this trait in the social units, by which co-ordination of their actions is rendered possible.

Setting out with social units as thus conditioned, as thus constituted physically, emotionally, and intellectually, and as thus possessed of certain early-acquired ideas and correlative feelings, the Science of Sociology has to give an account of all the phenomena that result from their combined actions.

The simplest of such combined actions are those by which the successive generations of units are produced, reared, and brought into fitness for co-operation. The development of the family thus stands first in order. The respective ways in which the fostering of offspring is influenced by promiscuity, by polyandry, by polygyny, and by monogamy, have to be traced; as have also the results of exogamous marriage and endogamous marriage. These, considered first as affecting the maintenance of the race in number and quality, have also to be considered as affecting the domestic lives of adults. Moreover, beyond observing how the several forms of the sexual relations modify family-life, they have to be treated in connexion with public life; on which they act and which reacts on them. And then, after the sexual relations, have to be similarly dealt with the parental and filial relations.

Sociology has next to describe and explain the rise and development of that political organization which in several ways regulates affairs—which combines the actions of individuals for purposes of tribal or national offence and defence; which restrains them in certain of their dealings with one another; and which also restrains them in certain of their dealings with themselves. It has to trace the relations of this co-ordinating and controlling appa-

ratus to the area occupied, to the amount and distribution of population, to the means of communication. It has to show the differences of form which this agency presents in the different social types, nomadic and settled, military and industrial. It has to describe the changing relations between this regulative structure which is unproductive, and those structures which carry on production and make national life possible. It has also to set forth the connexions between, and reciprocal influences of, the institutions carrying on civil government, and the other governmental institutions simultaneously developing—the ecclesiastical and the ceremonial. And then it has to take account of those modifications which persistent political restraints are ever working in the characters of the social units, as well as the modifications worked by the reactions of the changed characters of the units on the political organization.

There has to be similarly described the evolution of the ecclesiastical structures and functions. Commencing with these as united to, and often scarcely distinguishable from, the political structures and functions, their divergent developments must be traced. How the share of ecclesiastical agencies in political actions becomes gradually less; how, reciprocally, political agencies play a decreasing part in ecclesiastical actions; are phenomena to be set forth. How the internal organization of the priesthood, differentiating and integrating as the society grows, stands related in type to the co-existing organizations, political and other; and how changes of structure in it are connected with changes of structure in them; are also subjects to be dealt with. Further, there has to be shown the progressive divergence between the set of rules gradually framed into civil law, and the set of rules which the ecclesiastical organization enforces; and in this second set of rules there has to be traced the divergence between those which become a code of religious ceremonial and those which become a code of ethical precepts. Once more, the science has to note how the ecclesiastical agency in its structure, functions, laws, creed, and morals, stands related to the mental nature of the citizens; and how the actions and reactions of the two mutually modify them.

The simultaneously-evolving system of restraints whereby the

minor actions of citizens are regulated in daily life, has next to be dealt with. Ancillary to the political and ecclesiastical controls, and at first inseparable from them, is the control embodied in ceremonial observances; which, beginning with rules of class-subordination, grow into rules of intercourse between man and man. The mutilations which mark conquest and become badges of servitude: the obeisances which are originally signs of submission made by the conquered; the titles which are words directly or metaphorically attributing mastery over those who utter them; the salutations which are also the flattering professions of subjection and implied inferiority-these, and some others, have to be traced in their genesis and development as a supplementary regulative agency. The growth of the structure which maintains observances; the accumulation, complication, and increasing definition of observances; and the resulting code of bye-laws of conduct which comes to be added to the civil and religious codes; have to be severally delineated. These regulative arrangements, too, must be considered in their relations to co-existing regulative arrangements; with which they all along maintain a certain congruity in respect of coerciveness. And the reciprocal influences exercised by these restraints on men's natures, and by men's natures on them, need setting forth.

Co-ordinating structures and functions having been dealt with, there have to be dealt with the structures and functions co-ordinated. The regulative and the operative are the two most generally contrasted divisions of every society; and the inquiries of highest importance in social science concern the relations between them. The stages through which the industrial part passes, from its original union with the governmental part to its ultimate separateness, have to be studied. An allied subject of study is the growth of those regulative structures which the industrial part develops within itself. For purposes of production the actions of its units have to be directed; and the various forms of the directive apparatus have to be dealt with—the kinds of government under which separate groups of workers act; the kinds of government under which workers in the same business and of the same class are combined (eventually differentiating into guilds and into unions); and

the kind of government which keeps in balance the activities of the various industrial structures. The relations between the forms of these industrial governments and the forms of the co-existing political and ecclesiastical governments, have to be considered at each successive stage; as have also the relations between each of these successive forms and the natures of the citizens: there being here, too, a reciprocity of influences. After the regulative part of the industrial organization comes the operative part; also presenting its successive stages of differentiation and integration. The separation of the distributive system from the productive system having been first traced, there has to be traced the growing division of labour within each—the rise of grades and kinds of distributors as well as grades and kinds of producers. And then there have to be added the effects which the developing and differentiating industries produce on one another—the advances of the industrial arts themselves, caused by the help received from one another's improvements.

After these structures and functions which make up the organization and life of each society, have to be treated certain associated developments which aid, and are aided by, social evolution—the developments of language, knowledge, morals, æsthetics. Linguistic progress has to be considered first as displayed in language itself, while passing from a relatively incoherent, indefinite, homogeneous state, to states that are successively more coherent, definite, and heterogeneous. We have to note how increasing social complexity conduces to increasing complexity of language; and how, as a society becomes settled, it becomes possible for its language to acquire permanence. The connexion between the developments of words and sentences and the correlative developments of thought which they aid, and which are aided by them, has to be observed: the reciprocity being traced in the increasing multiplicity, variety, exactness, which each helps the other to gain.

Progress in intelligence, thus associated with progress in language, has also to be treated as an accompaniment of social progress; which, while furthering it, is furthered by it. From experiences which accumulate and are recorded, come comparisons leading to generalizations of simple kinds. Gradually the ideas of

uniformity, order, cause, becoming nascent, gain clearness with each fresh truth established. And while there have to be noted the connexion between each phase of science and the concomitant phase of social life, there have also to be noted the stages through which, within the body of science itself, there is an advance from a few, simple, incoherent truths, to a number of specialized sciences forming a body of truths that are multitudinous, varied, exact, coherent.

The emotional modifications which, as indicated above, accompany social modifications, both as causes and as consequences, also demand separate attention. Besides observing the inter-actions of the social state and the moral state, we have to observe the associated modifications of those moral codes in which moral feelings get their intellectual expression. The kind of behaviour which each kind of régime necessitates, finds for itself a justification which acquires an ethical character; and hence ethics must be dealt with in their social dependences.

Then come the groups of phenomena we call æsthetic; which, as exhibited in art-products and in the correlative sentiments, have to be studied in their respective evolutions internally considered, and in the relations of those evolutions to accompanying social phenomena. Diverging as they do from a common root, architecture, sculpture, painting, together with dancing, music, and poetry, have to be severally treated as connected with the political and ecclesiastical stages, with the co-existing phases of moral sentiment, and with the degrees of intellectual advance.

Finally we have to consider the inter-dependence of structures, and functions, and products, taken in their totality. Not only do all the above-enumerated organizations, domestic, political, ecclesiastical, ceremonial, industrial, influence one another through their respective activities; and not only are they all daily influenced by the states of language, knowledge, morals, arts; but the last are severally influenced by them, and are severally influenced by one another. Among these many groups of phenomena there is a consensus; and the highest achievement in Sociology is so to grasp the vast heterogeneous aggregate, as to see how each group is at each

stage determined partly by its own antecedents and partly by the past and present actions of the rest upon it....

Like other kinds of progress, social progress is not linear but divergent and re-divergent. Each differentiated product gives origin to a new set of differentiated products. While spreading over the Earth mankind have found environments of various characters, and in each case the social life fallen into, partly determined by the social life previously led, has been partly determined by the influences of the new environment; so that the multiplying groups have tended ever to acquire differences, now major and now minor: there have arisen genera and species of societies.

# THE ORGANIC ANALOGY RECONSIDERED

#### What is a Society?

This question has to be asked and answered at the outset. Until we have decided whether or not to regard a society as an entity; and until we have decided whether, if regarded as an entity, a society is to be classed as absolutely unlike all other entities or as like some others; our conception of the subject-matter before us

remains vague.

It may be said that a society is but a collective name for a number of individuals. Carrying the controversy between nominalism and realism into another sphere, a nominalist might affirm that just as there exist only the members of a species, while the species considered apart from them has no existence; so the units of a society alone exist, while the existence of the society is but verbal. Instancing a lecturer's audience as an aggregate which by disappearing at the close of the lecture, proves itself to be not a thing but only a certain arrangement of persons, he might argue that the like holds of the citizens forming a nation.

But without disputing the other steps of his argument, the last step may be denied. The arrangement, temporary in the one case, is lasting in the other; and it is the permanence of the relations among component parts which constitutes the individuality of a

From The Principles of Sociology (London: Williams and Norgate, 1876), vol. 1, part 2, pp. 465–69, 613–16.

whole as distinguished from the individualities of its parts. A coherent mass broken into fragments ceases to be a thing; while, conversely, the stones, bricks, and wood, previously separate, become the thing called a house if connected in fixed ways.

Thus we consistently regard a society as an entity, because, though formed of discrete units, a certain concreteness in the aggregate of them is implied by the maintenance, for generations and centuries, of a general likeness of arrangement throughout the area occupied. And it is this trait which yields our idea of a society. For, withholding the name from an ever-changing cluster such as primitive men form, we apply it only where some constancy in the distribution of parts has resulted from settled life.

But now, regarding a society as a thing, what kind of thing must we call it? It seems totally unlike every object with which our senses acquaint us. Any likeness it may possibly have to other objects, cannot be manifest to perception, but can be discerned only by reason. If the constant relations among its parts make it an entity; the question arises whether these constant relations among its parts are akin to the constant relations among the parts of other entities. Between a society and anything else, the only conceivable resemblance must be one due to parallelism of principle in the arrangement of components.

There are two great classes of aggregates with which the social aggregate may be compared—the inorganic and the organic. Are the attributes of a society, considered apart from its living units, in any way like those of a not-living body? or are they in any way like those of a living body? or are they entirely unlike those of

both?

The first of these questions needs only to be asked to be answered in the negative. A whole of which the parts are alive, cannot, in its general characters, be like lifeless wholes. The second question, not to be thus promptly answered, is to be answered in the affirmative. The reasons for asserting that the permanent relations among the parts of a society, are analogous to the permanent relations among the parts of a living body, we have now to consider.

#### A Society Is an Organism

When we say that growth is common to social aggregates and organic aggregates, we do not thus entirely exclude community with inorganic aggregates: some of these, as crystals, grow in a visible manner; and all of them, on the hypothesis of evolution, are concluded to have arisen by integration at some time or other. Nevertheless, compared with things we call inanimate, living bodies and societies so conspicuously exhibit augmentation of mass, that we may fairly regard this as characteristic of them both. Many organisms grow throughout their lives; and the rest grow throughout considerable parts of their lives. Social growth usually continues either up to times when the societies divide, or up to times when they are overwhelmed.

Here, then, is the first trait by which societies ally themselves with the organic world and substantially distinguish themselves from the inorganic world.

It is also a character of social bodies, as of living bodies, that while they increase in size they increase in structure. A low animal, or the embryo of a high one, has few distinguishable parts; but along with its acquirement of greater mass, its parts multiply and simultaneously differentiate. It is thus with a society. At first the unlikenesses among its groups of units are inconspicuous in number and degree; but as it becomes more populous, divisions and sub-divisions become more numerous and more decided. Further, in the social organism as in the individual organism, differentiations cease only with that completion of the type which marks maturity and precedes decay.

Though in inorganic aggregates also, as in the entire solar system and in each of its members, structural differentiations accompany the integrations; yet these are so relatively slow, and so relatively simple, that they may be disregarded. The multiplication of contrasted parts in bodies politic and in living bodies, is so great that it substantially constitutes another common character which marks them off from inorganic bodies.

This community will be more fully appreciated on observing that progressive differentiation of structures is accompanied by progressive differentiation of functions.

The multiplying divisions, primary, secondary, and tertiary, which arise in a developing animal, do not assume their major and minor unlikenesses to no purpose. Along with diversities in their shapes and compositions there go diversities in the actions they perform: they grow into unlike organs having unlike duties. Assuming the entire function of absorbing nutriment at the same time that it takes on its structural characters, the alimentary system becomes gradually marked off into contrasted portions; each of which has a special function forming part of the general function. A limb, instrumental to locomotion or prehension, acquires divisions and sub-divisions which perform their leading and their subsidiary shares in this office. So is it with the parts into which a society divides. A dominant class arising does not simply become unlike the rest, but assumes control over the rest; and when this class separates into the more and the less dominant, these, again, begin to discharge distinct parts of the entire control. With the classes whose actions are controlled it is the same. The various groups into which they fall have various occupations: each of such groups also, within itself, acquiring minor contrasts of parts along with minor contrasts of duties.

And here we see more clearly how the two classes of things we are comparing distinguish themselves from things of other classes; for such differences of structure as slowly arise in inorganic aggregates, are not accompanied by what we can fairly call differences of function.

Why in a body politic and in a living body, these unlike actions of unlike parts are properly regarded by us as functions, while we cannot so regard the unlike actions of unlike parts in an inorganic body, we shall perceive on turning to the next and the most distinctive common trait.

Evolution establishes in them both, not differences simply, but definitely-connected differences—differences such that each makes

the others possible. The parts of an inorganic aggregate are so related that one may change greatly without appreciably affecting the rest. It is otherwise with the parts of an organic aggregate or of a social aggregate. In either of these the changes in the parts are mutually determined, and the changed actions of the parts are mutually dependent. In both, too, this mutuality increases as the evolution advances. The lowest type of animal is all stomach, all respiratory surface, all limb. Development of a type having appendages by which to move about or lay hold of food, can take place only if these appendages, losing power to absorb nutriment directly from surrounding bodies, are supplied with nutriment by parts which retain the power of absorption. A respiratory surface to which the circulating fluids are brought to be aerated, can be formed only on condition that the concomitant loss of ability to supply itself with materials for repair and growth, is made good by the development of a structure bringing these materials. So is it in a society. What we call with perfect propriety its organization, has a necessary implication of the same kind. . . .

Here let it once more be pointed out that there exist no analogies between the body politic and a living body, save those necessitated by that mutual dependence of parts which they display in common. Though, in foregoing chapters, comparisons of social structures and functions to structures and functions in the human body, have in many cases been made, they have been made only because structures and functions in the human body furnish the most familiar illustrations of structures and functions in general. The social organism, discrete instead of concrete, asymmetrical instead of symmetrcial, sensitive in all its units instead of having a single sensitive centre, is not comparable to any particular type of individual organism, animal or vegetal. All kinds of creatures are alike in so far as each shows us co-operation among its components for the benefit of the whole; and this trait, common to them, is a trait common also to communities. Further, among the many types of individual organisms, the degree of this co-operation measures the degree of evolution; and this general truth, too, is exhibited among social organisms. Once more, to effect increasing

co-operation, creatures of every order show us increasingly-complex appliances for transfer and mutual influence; and to this general characteristic, societies of every order furnish a corresponding characteristic. Community in the fundamental principles of organization is thus the only community asserted.

But now let us drop this alleged parallelism between individual organizations and social organizations. I have used the analogies elaborated, but as a scaffolding to help in building up a coherent body of sociological inductions. Let us take away the scaffolding:

the inductions will stand by themselves.

We saw that societies are aggregates which grow; that in various types of them there are great varieties in the degrees of growth reached; that types of successively larger sizes result from the aggregation and re-aggregation of those of smaller sizes; and that this increase by coalescence, joined with interstitial increase, is the process through which have been formed the vast civilized nations.

Along with increase of size in societies goes increase of structure. Primitive wandering hordes are without established unlikenesses of parts. With growth of them into tribes habitually come some differences; both in the powers and occupations of their members. Unions of tribes are followed by more differences, governmental and industrial—social grades running through the whole mass, and contrasts between the differently-occupied parts in different localities. Such differentiations multiply as the compounding progresses. They proceed from the general to the special: first the broad division between ruling and ruled; then within the ruling part divisions into political, religious, military, and within the ruled part divisions into food-producing classes and handi-craftsmen; then within each of these divisions minor ones, and so on.

Passing from the structural aspect to the functional aspect, we note that while all parts of a society have like natures and activities there is hardly any mutual dependence, and the aggregate scarcely forms a vital whole. As its parts assume different functions they become dependent on one another, so that injury to one hurts others; until in highly-evolved societies, general perturbation is caused by derangement of any portion. This contrast between undeveloped and developed societies, is due to the fact that, with

increasing specialization of functions comes increasing inability in each part to perform the functions of other parts.

The organization of every society begins with a contrast between the division which carries on relations, habitually hostile, with environing societies, and the division which is devoted to procuring necessaries of life; and during the earlier stages of development these two divisions constitute the whole. Eventually there arises an intermediate division serving to transfer products and influences from part to part. And in all subsequent stages, evolution to the two earlier systems of structures depends on evolution of this additional system.

While the society as a whole has the character of its sustaining system determined by the general character of its environment, inorganic and organic, the respective parts of this system differentiate in adaptation to the circumstances of the localities; and, after primary industries have been thus localized and specialized, secondary industries dependent upon them arise in conformity with the same principle. Further, as fast as societies become compounded and recompounded and the distributing system develops, the parts devoted to each kind of industry, originally scattered, aggregate in the most favourable localities; and the localized industrial structures, unlike the governmental structures, grow regardless of the original lines of division.

Increase of size, resulting from the massing of groups, necessitates means of communication; both for achieving combined offensive and defensive actions, and for exchange of products. Scarcely traceable tracks, paths, rude roads, finished roads, successively arise; and as fast as intercourse is thus facilitated, there is a transition from direct barter to trading carried on by a separate class; out of which evolves, in course of time, a complex mercantile agency of wholesale and retail distributors. The movement of commodities effected by this agency, beginning as a slow flux to and reflux from certain places at long intervals, passes into rhythmical, regular, rapid currents; and materials for sustentation distributed hither and thither, from being few and crude become numerous and elaborated. Growing efficiency of transfer with greater variety of transferred products, increases the mutual dependence of parts at

the same time that it enables each part to fulfil its function better.

Unlike the sustaining system, evolved by converse with the organic and inorganic environments, the regulating system is evolved by converse, offensive and defensive, with environing societies. In primitive headless groups temporary chieftainship results from temporary war; chronic hostilities generate permanent chieftainship; and gradually from the military control results the civil control. Habitual war, requiring prompt combination in the actions of parts, necessitates subordination. Societies in which there is little subordination disappear, and leave outstanding those in which subordination is great; and so there are established societies in which the habit fostered by war and surviving in peace, brings about permanent submission to a government. The centralized regulating system thus evolved is in early stages the sole regulating system. But in large societies that become predominantly industrial, there is added a decentralized regulating system for the industrial structures; and this, at first subject in every way to the original system, acquires at length substantial independence. Finally there arises for the distributing structures also, an independent controlling agency.

#### SOCIETAL TYPOLOGIES

A GLANCE at the respective antecedents of individual organisms and social organisms, shows why the last admit of no such definite classification as the first. Through a thousand generations a species of plant or animal leads substantially the same kind of life; and its successive members inherit the acquired adaptations. When changed conditions cause divergences of forms once alike, the accumulating differences arising in descendants only superficially disguise the original identity—do not prevent the grouping of the several species into a genus; nor do wider divergences that began earlier, prevent the grouping of genera into orders and orders into classes. It is otherwise with societies. Hordes of primitive men, dividing and subdividing, do, indeed, show us successions of small social aggregates leading like lives, inheriting such low structures as had resulted, and repeating those structures. But higher social aggregates propagate their respective types in much less decided ways. Though colonies tend to grow like their parents, yet the parent societies are so comparatively plastic, and the influences of new habitats on the derived societies are so great, that divergences of structure are inevitable. In the absence of definite organizations established during the similar lives of many societies descending one from another, there cannot be the precise distinctions implied by complete classification.

Two cardinal kinds of differences there are, however, of which

From The Principles of Sociology (London: Williams and Norgate, 1876), vol. 1, part 2, pp. 569-76.

we may avail ourselves for grouping societies in a natural manner. Primarily we may arrange them according to their degrees of composition, as simple, compound, doubly-compound, trebly-compound; and secondarily, though in a less specific way, we may divide them into the predominantly militant and the predominantly industrial—those in which the organization for offence and defence is most largely developed, and those in which the sustaining organization is most largely developed.

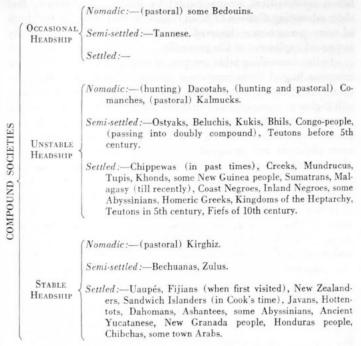
We have seen that social evolution begins with small simple aggregates; that it progresses by the clustering of these into larger aggregates; and that after consolidating, such clusters are united with others like themselves into still larger aggregates. Our classification, then, must begin with societies of the first or simplest order.

We cannot in all cases say with precision what constitutes a simple society; for, in common with products of evolution generally, societies present transitional stages which negative sharp divisions. As the multiplying members of a group spread and diverge gradually, it is not always easy to decide when the groups into which they fall become distinct. Here the descendants of common ancestors inhabiting a barren region, have to divide while yet the constituent families are near akin; and there, in a more fertile region, the group may hold together until clusters of families remotely akin are formed: clusters which, diffusing slowly, are held by a common bond that slowly weakens. By and by comes the complication arising from the presence of slaves not of the same ancestry, or of an ancestry but distantly allied; and these, though they may not be political units, must be recognized as units sociologically considered. Then there is the kindred complication arising where an invading tribe becomes a dominant class. Our only course is to regard as a simple society, one which forms a single working whole unsubjected to any other, and of which the parts cooperate, with or without a regulating centre, for certain public ends. Here is a table, presenting with as much definiteness as may be, the chief divisions and sub-divisions of such simple societies.

Nomadic: - (hunting) Fuegians, some Australians, Wood-Veddahs, Bushmen, Chépángs and Kusúndas of Nepal. HEADLESS Semi-settled:-most Esquimaux. Settled:-Arafuras, Land Dyaks of Upper Sarawak River. Nomadic:- (hunting) some Australians, Tasmanians, OCCASIONAL Semi-settled:-some Caribs HEADSHIP Settled:-Some Uaupés of the upper Rio Negro. SIMPLE SOCIETIES Nomadic: (hunting) Andamanese, Abipones, Snakes, Chippewayans, (pastoral) some Bedouins. Semi-settled:-some Esquimaux, Chinooks, Chippewas (at VAGUE AND present), some Kamtschadales, Village Veddahs, Bodo UNSTABLE and Dhimáls. HEADSHIP Settled: - Guiana tribes, Mandans, Coroados, New Guinea people, Tannese, Vateans, Dyaks, Todas, Nagas, Karens, Santals. Nomadic:\_\_ STABLE Semi-settled:-some Caribs, Patagonians, New Caledonians, HEADSHIP Kaffirs Settled: - Guaranis, Pueblos.

On contemplating these uncivilized societies which, though alike as being uncompounded, differ in their sizes and structures, certain generally-associated traits may be noted. Of the groups without political organization, or with but the vaguest traces of it, the lowest are those small wandering ones which live on the wild food sparsely distributed in forests, over barren tracts, or along seashores. Where small simple societies remain without chiefs though settled, it is where circumstances allow them to be habitually peaceful. Glancing down the table we find reason for inferring that the changes from the hunting life to the pastoral, and from the pastoral to the agricultural, favour increase of population, the development of political organizations, of industrial organization, and of the

arts; though these causes do not of themselves produce these results.

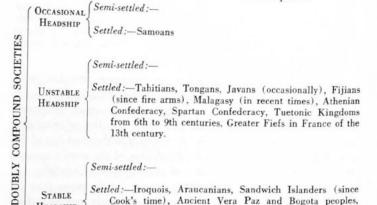


The second table, given above on this page, contains societies which have passed to a slight extent, or considerably, or wholly, into a state in which the simple groups have their several governing heads subordinated to a general head. The stability or instability alleged of the headship in these cases, refers to the headship of the composite group, and not to the headships of the simple groups. As might be expected, stability of this compound headship becomes more marked as the original unsettled state passes into the completely settled state: the nomadic life obviously making it difficult to keep the heads of groups subordinate to a general head. Though not in all cases accompanied by considerable organization, this coalescence evidently conduces to organization. The com-

HEADSHIP

pletely-settled compound societies are mostly characterized by division into ranks, four, five, or six, clearly marked off; by established ecclesiastical arrangements; by industrial structures that show advancing division of labour, general and local; by buildings of some permanence clustered into places of some size; and by improved appliances of life generally.

In the succeeding table are placed societies formed by the recompounding of these compound groups, or in which many governments of the types tabulated above have become subject to a still higher government. The first notable fact is that these doublycompound societies are all completely settled. Along with their greater integration we see in many cases, though not uniformly, a more elaborate and stringent political organization. Where complete stability of political headship over these doubly-compound societies has been established, there is mostly, too, a developed ecclesiastical hierarchy. While becoming more complex by division of labour, the industrial organization has in many cases assumed a caste structure. To a greater or less extent, custom has passed into positive law; and religious observances have grown definite, rigid, and complex. Towns and roads have become general; and considerable progress in knowledge and the arts has taken place.



after the 10th century.

Cook's time), Ancient Vera Paz and Bogota peoples,

Guatemalans, Ancient Peruvians, Wahhabees (Arab), Omán (Arab), Ancient Egyptian Kingdom, England

There remain to be added the great civilized nations which need no tabular form, since they mostly fall under one head—trebly compound. Ancient Mexico, the Assyrian Empire, the Egyptian Empire, The Roman Empire, Great Britain, France, Germany, Italy, Russia, may severally be regarded as having reached this stage of composition, or perhaps, in some cases, a still higher stage. Only in respect of the stabilities of their governments may they possibly require classing apart—not their political stabilities in the ordinary sense, but their stabilities in the sense of continuing to be the supreme centres of these great aggregates. So defining this trait, the ancient trebly-compound societies have mostly to be classed as unstable; and of the modern, the Kingdom of Italy and the German Empire have to be tested by time.

As already indicated, this classification must not be taken as more than a rough approximation to the truth. In some cases the data furnished by travellers and others are inadequate; in some cases their accounts are conflicting; in some cases the composition is so far transitional that it is difficult to say under which of two heads it should come. Here the gens or the phratry may be distinguished as a local community; and here these groups of near or remote kinsmen are so mingled with other such groups as practically to form parts of one community. Evidently the like combination of several such small communities, passing through stages of increasing cohesion, leaves it sometimes doubtful whether they are to be regarded as many or as one. And when, as with the larger social aggregates, there have been successive conquests, resulting unions, subsequent dissolutions, and re-unions otherwise composed, the original lines of structure become so confused or lost that it is difficult to class the ultimate product.

But there emerge certain generalizations which we may safely accept. The stages of compounding and re-compounding have to be passed through in succession. No tribe becomes a nation by simple growth; and no great society is formed by the direct union of the smallest societies. Above the simple group the first stage is a compound group inconsiderable in size. The mutual dependence of parts which constitutes it a working whole, cannot exist without some development of lines of intercourse and appliances for com-

bined action; and this must be achieved over a narrow area before it can be achieved over a wide one. When a compound society has been consolidated by the co-operation of its component groups in war under a single head—when it has simultaneously differentiated somewhat its social ranks and industries, and proportionately developed its arts, which all of them conduce in some way to better co-operation, the compound society becomes practically a single one. Other societies of the same order, each having similarly reached a stage of organization alike required and made possible by this co-ordination of actions throughout a larger mass, now form bodies from which, by conquest or by federation in war, may be formed societies of the doubly-compound type. The consolidation of these has again an accompanying advance of organization distinctive of it—an organization for which it affords the scope and which makes it practicable—an organization having a higher complexity in its regulative, distributive, and industrial systems. And at later stages, by kindred steps, arise the still larger aggregates having still more complex structures. In this order has social evolution gone on, and only in this order does it appear to be possible. Whatever imperfections and incongruities the above classification has, do not hide these general facts-that there are societies of these different grades of composition; that those of the same grade have general resemblances in their structures; and that they arise in the order shown.

#### MILITANCY AND INDUSTRIALISM

We pass now to the classification based on unlikenesses between the kinds of social activity which predominate, and on the resulting unlikenesses of organization. The two social types thus essentially contrasted are the militant and the industrial.

It is doubtless true that no definite separation of these can be made. Excluding a few simple groups such as the Esquimaux, inhabiting places where they are safe from invasion, all societies, simple and compound, are occasionally or habitually in antagonism with other societies; and, as we have seen, tend to evolve structures for carrying on offensive and defensive actions. At the same time sustentation is necessary; and there is always an organization, slight or decided, for achieving it. But while the two systems in social organisms, as in individual organisms, co-exist in all but the rudimentary forms, they vary immensely in the ratios they bear to one another. In some cases the structures carrying on external actions are largely developed; the sustaining system exists solely for their benefit; and the activities are militant. In other cases there is predominance of the structures carrying on sustentation; offensive and defensive structures are maintained only to protect them; and the activities are industrial. At the one extreme we have those warlike tribes which, subsisting mainly by the chase, make the appliances for dealing with enemies serve also for procuring food, and have sustaining systems represented only by their women, who

From The Principles of Sociology (London: Williams and Norgate, 1876), vol. 1, part 2, pp. 576-96,

are their slave-classes; while, at the other extreme we have the type, as yet only partially evolved, in which the agricultural, manufacturing, and commercial organizations form the chief part of the society, and, in the absence of external enemies, the appliances for offence and defence are either rudimentary or absent. Transitional as are nearly all the societies we have to study, we may yet clearly distinguish the constitutional traits of these opposite types, characterized by predominance of the outer and inner systems respectively.

Having glanced at the two thus placed in contrast, it will be most convenient to contemplate each by itself.

As before pointed out, the militant type is one in which the army is the nation mobilized while the nation is the quiescent army, and which, therefore, acquires a structure common to army and nation. We shall most clearly understand its nature by observing in detail this parallelism between the military organization and the social organization at large.

Already we have had ample proof that centralized control is the primary trait acquired by every body of fighting men, be it horde of savages, group of brigands, or mass of soldiers. And this centralized control, necessitated during war, characterizes the government during peace. Among the uncivilized there is a marked tendency for the military chief to become also the political head (the medicine man being his only competitor); and in a conquering race of savages his political headship becomes fixed. Among semicivilized the conquering commander and the despotic king are the same; and they remain the same among the civilized down to late times. The connexion is well shown where in the same race, we find a contrast in the habitual activities and in the forms of government. Thus the powers of the patriarchal chiefs of Kaffir tribes are not great; but the Zulus, who have become a conquering division of the Kaffirs, are under an absolute monarch. Of advanced savages the Fijians may be named as well showing this relation between habitual war and despotic rule: the persons and property of subjects are entirely at the king's or chief's disposal. We have seen that it is the same in the warlike African states, Dahomey and

Ashantee. The Ancient Mexicans, again, whose highest profession was that of arms, and whose eligible prince became king only by feats in war, had an autocratic government, which, according to Clavigero, became more stringent as the territory was enlarged by conquest. Similarly, the unmitigated despotism under which the Peruvians lived, had been established during the spread of the Ynca conquests. And that race is not the cause, we are shown by this recurrence in Ancient America of a relation so familiar in ancient states of the Old World.

The absoluteness of a commander-in-chief goes along with absolute control exercised by his generals over their subordinates, and by their subordinates over the men under them: all are slaves to those above and despots to those below. This structure repeats itself in the accompanying social arrangements. There are precise gradations of rank in the community and complete submission of each rank to the ranks above it. We see this in the society already instanced as showing among advanced savages the development of the militant type. In Fiji six classes are enumerated, from king down to slaves, as sharply marked off. Similarly in Madagascar, where despotism has been in late times established by war, there are several grades and castes. Among the Dahomans, given in so great a degree to bloodshed of all kinds, "the army, or, what is nearly synonymous, the nation," says Burton, "is divided, both male and female, into two wings"; and then, of the various ranks enumerated, all are characterized as legally slaves of the king. In Ashantee, too, where his officers are required to die when the king dies, we have a kindred condition. Of old, among the aggressive Persians, grades were strongly marked. So was it in warlike Ancient Mexico: besides three classes of nobility, and besides the mercantile classes, there were three agricultural classes down to the serfsall in precise subordination. In Peru, also, below the Ynca, there were grades of nobility-lords over lords. Moreover, according to Garcilasso, in each town the inhabitants were registered in decades under a decurion, five of these under a superior, two such under a higher one, five of these centurions under a head, two of these under one who thus ruled a thousand men, and for every ten thousand there was a governor of Ynca race: the political rule being

thus completely regimental. Till lately, another illustration was furnished by Japan. That there were kindred, if less elaborate, structures in ancient militant states of the Old World, scarcely needs saying; and that like structures were repeated in mediæval times, when a large nation like France had under the monarch several grades of feudal lords, vassals to those above and suzerains to those below, with serfs under the lowest, again shows us that everywhere the militant type has sharply-marked social gradations as it has

sharply-marked military gradations.

Corresponding to this natural government there is a like form of supernatural government. I do not mean merely that in the ideal other-worlds of militant societies, the ranks and powers are conceived as like those of the real world around, though this also is to be noted; but I refer to the militant character of the religion. Ever in antagonism with other societies, the life is a life of enmity and the religion a religion of enmity. The duty of blood-revenge, most sacred of all with the savage, continues to be the dominant duty as the militant type of society evolves. The chief, baulked of his vengeance, dies enjoining his successors to avenge him; his ghost is propitiated by fulfilment of his commands; the slaying of his enemies becomes the highest action; trophies are brought to his grave in token of fulfilment; and, as tradition grows, he becomes the god worshipped with bloody sacrifices. Everywhere we find evidence. The Fijians offer the bodies of their victims killed in war to the gods before cooking them. In Dahomey, where the militant type is so far developed that women are warriors, men are almost daily sacrificed by the monarch to please his dead father; and the ghosts of old kings are invoked for aid in war by blood sprinkled on their tombs. The war-god of the Mexicans (originally a conqueror), the most revered of their gods, had his idol fed with human flesh: wars being undertaken to supply him with victims. And similarly in Peru, where there were habitual human sacrifices, men taken captive were immolated to the father of the Yncas, the Sun. How militant societies of old in the East similarly evolved deities who were similarly propitiated by bloody rites, needs merely indicating. Habitually their mythologies represent gods as conquerors; habitually their gods are named "the strong one," "the

destroyer," "the avenger," "god of battles," "lord of hosts," "man of war," and so forth. As we read in Assyrian inscriptions, wars were commenced by their alleged will; and, as we read elsewhere, peoples were massacred wholesale in professed obdience to them. How its theological government, like its political government, is essentially military, we see even in late and qualified forms of the militant type; for down to the present time absolute subordination, like that of soldier to commander, is the supreme virtue, and disobedience the crime for which eternal torture is threatened.

Similarly with the accompanying ecclesiastical organization. Very generally where the militant type is highly developed, the political head and ecclesiastical head are identical—the king, chief descendant of his ancestor who has become a god, is also chief propitiator of him. It was so in Ancient Peru; and in Tezcuco and Tlacopan (Mexico) the high-priest was the king's second son. The Egyptian wall-paintings show us kings performing sacrifices; as do also the Assyrian. Babylonian records harmonize with Hebrew traditions in telling us of priest-kings. In Lydia it was the same: Cræsus was king and priest. In Sparta, too, the kings, while military chiefs, were also high priests; and a trace of the like original relation existed in Rome. A system of subordination essentially akin to the military, has habitually characterized the accompanying priesthoods. The Fijians have an hereditary priesthood forming a hierarchy. In Tahiti, where the high-priest was royal, there were grades of hereditary priests belonging to each social rank. In Ancient Mexico the priesthoods of different gods had different ranks, and there were three ranks within each priesthood; and in Ancient Peru, besides the royal chief priest, there were priests of the conquering race set over various classes of inferior priests. A like type of structure, with subjection of rank to rank, has characterized priesthoods in the ancient and modern belligerent societies of the Old World.

The like mode of government is traceable throughout the sustaining organization also, so long as the social type remains predominantly militant. Beginning with simple societies in which the slave-class furnishes the warrior-class with necessaries of life, we have already seen that during subsequent stages of evolution the

industrial part of the society continues to be essentially a permanent commissariat, existing solely to supply the needs of the governmental-military structures, and having left over for itself only enough for bare maintenance. Hence the development of political regulation over its activities, has been in fact the extension throughout it of that military rule which, as a permanent commissariat, it naturally had. An extreme instance is furnished us by the Ancient Peruvians, whose political and industrial governments were identical—whose kinds and quantities of labour for every class in every locality, were prescribed by laws enforced by state officers-who had work legally dictated even for their young children, their blind, and their lame, and who were publicly chastised for idleness: regimental discipline being applied to industry just as our modern advocate of strong government would have it now. The late Japanese system, completely military in origin and nature, similarly permeated industry: great and small things-houses, ships, down even to mats-were prescribed in their structures. In the warlike monarchy of Madagascar the artizan classes are all in the employ of government, and no man can change his occupation or locality, under pain of death. Without multiplication of cases, these typical ones, reminding the reader of the extent to which even in modern fighting states industrial activities are officially regulated, will sufficiently show the principle.

Not industry only, but life at large, is, in militant societies, subject to kindred discipline. Before its recent collapse the government of Japan enforced sumptuary laws on each class, mercantile and other, up to the provincial governors, who must rise, dine, go out, give audience, and retire to rest at prescribed hours; and the native literature specifies regulations of a scarcely credible minuteness. In Ancient Peru, officers "minutely inspected the houses, to see that the man, as well as his wife, kept the household in proper order, and preserved a due state of discipline among their children"; and householders were rewarded or chastised accordingly. Among the Egyptians each person had, at fixed intervals, to report to a local officer his name, abode, and mode of living. Sparta, too, yields an example of a society specially organized for offence and defence, in which the private conduct of citizens in all its details

was under public control enforced by spies and censors. Though regulations so stringent have not characterized the militant type in more recent ages, yet we need but recall the laws regulating food and dress, the restraints on locomotion, the prohibitions of some games and dictation of others, to indicate the parallelism of principle. Even now where the military organization has been kept in vigour by military activities, as in France, we are shown by the peremptory control of journals and suppression of meetings, by the regimental uniformity of education, by the official administration of the fine arts, the way in which its characteristic regulating system ramifies everywhere.

And then, lastly, is to be noted the theory concerning the relation between the State and the individual, with its accompanying sentiment. This structure which adapts a society for combined action against other societies, is associated with the belief that its members exist for the benefit of the whole and not the whole for the benefit of its members. As in an army the liberty of the soldier is denied and only his duty as a member of the mass insisted on; as in a permanently encamped army like the Spartan nation, the laws recognized no personal interests, but patriotic ones only; so in the militant type throughout, the claims of the unit are nothing and the claims of the aggregate everything. Absolute subjection of authority is the supreme virtue and resistance to it a crime. Other offences may be condoned, but disloyalty is an unpardonable offence. If we take the sentiments of the sanguinary Fijians, among whom loyalty is so intense that a man stands unbound to be knocked on the head. himself saying that what the king wills must be done; or those of the Dahomans, among whom the highest officials are the king's slaves, and on his decease his women sacrifice one another that they may all follow him; or those of the Ancient Peruvians, among whom with a dead Ynca, or great curaca, were buried alive his favourite attendants and wives that they might go to serve him in the other world; or those of the Ancient Persians, among whom a father, seeing his innocent son shot by the king in pure wantonness, "felicitated" the king "on the excellence of his archery," and among whom bastinadoed subjects "declared themselves delighted because his majesty had condescended to recollect them"; we are sufficiently shown that in this social type, the sentiment which prompts the assertion of personal rights in opposition to the ruling power, scarcely exists.

Thus the trait characterizing the militant structure throughout, is that its units are coerced into their various combined actions. As the soldier's will is so suspended that he becomes in everything the agent of his officer's will; so is the will of the citizen in all transactions, private and public, overruled by that of the government. The co-operation by which the life of the militant society is maintained, is a *compulsory* co-operation. The social structure adapted for dealing with surrounding hostile societies is under a centralized regulating system, to which all the parts are completely subject; just as in the individual organism the outer organs are completely subject to the chief nervous centre.

The traits of the industrial type have to be generalized from inadequate and entangled data. Antagonism more or less constant with other societies, having been almost everywhere and always the condition of each society, a social structure fitted for offence and defence exists in nearly all cases, and disguises the structure which social sustentation alone otherwise originates. Such conception as may be formed of it has to be formed from what we find in the few simple societies that have been habitually peaceful, and in the advanced compound societies which, though once habitually militant, have become gradually less so.

Already I have referred to the chiefless Arafuras, living in "peace and brotherly love with one another," of whom we are told that "they recognize the rights of property in the fullest sense of the word, without there being any authority among them than the decisions of their elders, according to the customs of their forefathers": that is, there has grown up a recognition of mutual claims and personal rights, with voluntary submission to a tacitly-elected representative government formed of the most experienced. Among the Todas who "lead a peaceful, tranquil life," disputes are "settled either by arbitration" or by "a council of five." The amiable Bodo and Dhimals, said to be wholly unmilitary, display an essentially-free social form. They have nothing but powerless head men, and

are without slaves or servants; but they give mutual assistance in clearing ground and house-building: there is voluntary exchange of services—giving of equivalents of labour. The Mishmis again, described as quiet, inoffensive, not warlike, and only occasionally uniting in self-defence, have scarcely any political organization. Their village communities under merely nominal chiefs acknowledge no common chief of the tribe, and the rule is democratic:

crimes are judged by an assembly.

Naturally few, if any, cases occur in which societies of this type have evolved into larger societies without passing into the militant type; for, as we have seen, the consolidation of simple aggregates into a compound aggregate habitually results from war, defensive or offensive, which, if continued, evolves a centralized authority with its coercive institutions. The Pueblos, however, industrious and peaceful agriculturists, who, building their unique villages, or compound houses containing 2,000 people, in such ways as to "wall out black barbarism." fight only when invaded, show us a democratic form of government: "the governor and his council are elected annually by the people." The case of Samoa, too, may be named as showing to some extent how, in one of these compound communities where the warlike activity is now not considerable, decline in the rigidity of political control has gone along with some evolution of the industrial type. Chiefs and minor heads, partly hereditary partly elective, are held responsible for the conduct of affairs; there are village-parliaments and district-parliaments. Along with this we find a considerably-developed sustaining organization separate from the political—masters who have apprentices. employ journeymen, and pay wages; and when payment for work is inadequate, there are even strikes upheld by a tacit tradesunionism

Passing to more evolved societies it must be observed, first, that the distinctive traits of the industrial type do not become marked, even where the industrial activity is considerable, so long as the industrial government remains identified with the political. In Phænicia, for example, "the foreign wholesale trade seems to have belonged mostly to the state, the kings, and the nobles. . . . Ezekiel describes the king of Tyrus as a prudent commercial

prince, who finds out the precious metals in their hidden seats, enriches himself by getting them, and increases these riches by further traffic." Clearly, where the political and military heads have thus themselves become the heads of the industrial organization, the traits distinctive of it are prevented from showing themselves. Of ancient societies to be named in connexion with the relation between industrial activities and free institutions. Athens will be at once thought of; and, by contrast with other Greek states, it showed this relation as clearly as can be expected. Up to the time of Solon all these communities were under either oligarchs or despots. The rest of them, in which war continued to be the honoured occupation while industry was despised, retained this political type; but in Athens, where industry was regarded with comparative respect, where it was encouraged by Solon, and where immigrant artizans found a home, there commenced an industrial organization which, gradually growing, distinguished the Athenian society from adjacent societies, as it was distinguished from them by those democratic institutions that simultaneously developed.

Turning to later times, the relation between a social régime predominantly industrial and a less coercive form of rule, is shown us by the Hanse Towns, by the towns of the Low Countries out of which the Dutch Republic arose, and in high degrees by ourselves, by the United States, and by our colonies. Along with wars less frequent and these carried on at a distance; and along with an accompanying growth of agriculture, manufactures, and commerce, beyond that of continental states more military in habit; there has gone in England a development of free institutions. As further implying that the two are related as cause and consequence, there may be noted the fact that the regions whence changes towards greater political liberty have come, are the leading industrial regions; and that rural districts, less characterized by constant trading transactions, have retained longer the earlier type with its appropriate sentiments and ideas.

In the form of ecclesiastical government we see parallel changes. Where the industrial activities and structures evolve, this branch of the regulating system, no longer as in the militant type a rigid hierarchy, little by little loses strength, while there grows up one of a different kind: sentiments and institutions both relaxing. Right of private judgment in religious matters gradually establishes itself along with establishment of political rights. In place of a uniform belief imperatively enforced, there come multiform beliefs voluntarily accepted; and the ever-multiplying bodies espousing these beliefs, instead of being governed despotically, govern themselves after a manner more or less representative. Military conformity coercively maintained gives place to a varied non-conformity maintained by willing union.

The industrial organization itself, which thus as it becomes predominant affects all the rest, of course shows us in an especial degree this change of structure. From the primitive predatory condition under which the master maintains slaves to work for him, there is a transition through stages of increasing freedom to a condition like our own, in which all who work and employ, buy and sell, are entirely independent; and in which there is an unchecked power of forming associations that rule themselves on democratic principles. Combinations of workmen and counter-combinations of employers, no less than political societies and leagues for carrying on this or that agitation, show us the representative mode of government; which characterizes also every joint-stock company for mining, banking, railway-making, or other commercial enterprise.

Further we see that as in the predatory type the military mode of regulation ramifies into all minor departments of social activity, so here does the industrial mode of regulation. Multitudinous objects are achieved by spontaneously-evolved combinations of citizens governed representatively. The tendency to this kind of organization is so ingrained that for every proposed end the proposed means is a society ruled by an elected committee headed by an elected chairman—philanthropic associations of multitudinous kinds, literary institutions, libraries, clubs, bodies for fostering the various sciences and arts, etc., etc.

Along with all which traits there go sentiments and ideas concerning the relation between the citizen and the State, opposite to those accompanying the militant type. In place of the doctrine that the duty of obedience to the governing agent is unqualified, there arises the doctrine that the will of the citizens is supreme and the 160

governing agent exists merely to carry out their will. Thus subordinated in authority, the regulating power is also restricted in range. Instead of having an authority extending over actions of all kinds, it is shut out from large classes of actions. Its control over ways of living in respect to food, clothing, amusements, is repudiated; it is not allowed to dictate modes of production nor to regulate trade.

Nor is this all. It becomes a duty to resist irresponsible government, and also to resist the excesses of responsible government. There arises a tendency in minorities to disobey even the legislature deputed by the majority, when it interferes in certain ways; and their oppositions to laws they condemn as inequitable, from time to time cause abolition of them. With which changes of political theory and accompanying sentiment, is joined a belief, implied or avowed, that the combined actions of the social aggregate have for their end to maintain the conditions under which individual lives may be satisfactorily carried on; in place of the old belief that individual lives have for their end the maintenance of this aggregate's combined actions.

These pervading traits in which the industrial type differs so widely from the militant type, originate in those relations of individuals implied by industrial activities, which are wholly unlike those implied by militant activities. All trading transactions, whether between masters and workmen, buyers and sellers of commodities, or professional men and those they aid, are effected by free exchange. For some benefit which A's occupation enables him to give, B willingly yields up an equivalent benefit: if not in the form of something he has produced, then in the form of money gained by his occupation. This relation, in which the mutual rendering of services is unforced and neither individual subordinated, becomes the predominant relation throughout society in proportion as the industrial activities predominate. Daily determining the thoughts and sentiments, daily disciplining all in asserting their own claims while forcing them to recognize the correlative claims of others, it produces social units whose mental structures and habits mould social arrangements into corresponding forms. There results this type characterized throughout by that same individual

freedom which every commercial transaction implies. The cooperation by which the multiform activities of the society are carried on, becomes a *voluntary* co-operation. And while the developed sustaining system which gives to a social organism the industrial type, acquires for itself, like the developed sustaining system of an animal, a regulating apparatus of a diffused or uncentralized kind; it tends also to decentralize the primary regulating apparatus, by making it derive from more numerous classes its deputed powers.

Necessarily the essential traits of these two social types are in most cases obscured, both by the antecedents and by the co-existing circumstances. Every society has been at each past period, and is at present, conditioned in a way more or less unlike the ways in which others have been and are conditioned. Hence the production of structures characterizing one or other of these opposed types, is, in every instance, furthered, or hindered, or modified, in a special manner. Observe the several kinds of causes.

There is, first, the deeply-organized character of the particular race, coming down from those pre-historic times during which the diffusion of mankind and differentiation of the varieties of man, took place. Very difficult to change, this must in every case qualify differently the tendency towards assumption of either type.

There is, next, the effect due to the immediately-preceding mode of life and social type. Nearly always the society we have to study contains decayed institutions and habits belonging to an ancestral society otherwise circumstanced; and these pervert more or less the effects of circumstances then existing.

Again, there are the peculiarities of the habitat in respect of contour, soil, climate, flora, fauna, severally affecting in one mode or other the activities, whether militant or industrial; and severally hindering or aiding, in some special way, the development of either type.

Yet further, there are the complications caused by the particular organizations and practices of surrounding societies. For, supposing the amount of offensive or defensive action to be the same, the nature of it depends in each case on the nature of the antagonist action; and hence its reactive effects on structure vary with the character of the antagonist. Add to this that direct imitation of adjacent societies is a factor of some moment.

There remains to be named an element of complication more potent perhaps than any of these—one which of itself often goes far to determine the type as militant, and which in every case profondly modifies the social arrangements. I refer to the mixture of races caused by conquest or otherwise. We may properly treat of it separately under the head of social constitution—not, of course, constitution politically understood, but constitution understood as referring to the relative homogeneity or heterogeneity of the units constituting the social aggregate.

Inevitably as the nature of the aggregate, partially determined by environing conditions, is in other respects determined by the natures of its units, where its units are of diverse natures the degrees of contrast between the two or more kinds of them, and the degrees of union between them, must greatly affect the results. Are they of unallied races or of races near akin; and do they remain separate or do they mix?

If units of two kinds are joined in the same society, their respective tendencies to evolve structures more or less unlike in character, must modify the product. And the special modification will in every case further or hinder the evolution of one or the other social type. Clearly where it has happened that a conquering race, continuing to govern a subject race, has developed the militant regulating system throughout the whole social structure, and for ages habituated its units to compulsory co-operation—where it has also happened that the correlative ecclesiastical system with its appropriate cult, has given to absolute subordination the religious sanction-and especially where, as in China, each individual is moulded by the governing power and stamped with the appropriate ideas of duty which it is heresy to question; it becomes impossible for any considerable change to be wrought in the social structure by other influences. It is the law of all organization that as it becomes complete it becomes rigid. Only where incompleteness implies a remaining plasticity, is it possible for the type to develop

from the original predatory form to the form which industrial activity generates.

Especially where the two races, contrasted in their natures, do not mix, social co-operation implies a compulsory regulating system: the military form of structure which the dominant impose, ramifies throughout. Ancient Peru furnished an extreme case; and the Ottoman empire may be instanced. Social constitutions of this kind, in which aptitudes for forming unlike structures co-exist, are manifestly in states of unstable equilibrium. Any considerable shock dissolves the organization; and in the absence of unity of tendency, re-establishment of it is difficult if not impossible.

In cases where the conquering and conquered, though widely unlike, intermarry extensively, a kindred effect is produced in another way. The conflicting tendencies towards different social types, instead of existing in separate individuals, now exist in the same individual. The half-caste, inheriting from one line of ancestry proclivities adapted to one set of institutions, and from the other line of ancestry proclivities adapted to another set of institutions, is not fitted for either. He is a unit whose nature has not been moulded by any social type, and therefore cannot, with others like himself, evolve any social type. Modern Mexico and the South American Republics, with their perpetual revolutions, show us the result.

It is observable, too, that where races of strongly-contrasted natures have mixed more or less, or, remaining but little mixed, occupy adjacent areas subject to the same government, the equilibrium maintained so long as that government keeps up the coercive form, shows itself to be unstable when the coercion relaxes. Spain with its diverse peoples, Basque, Celtic, Gothic, Moorish, Jewish, partially mingled and partially localized, shows us this result.

Small differences, however, seem advantageous. Sundry instances point to the conclusion that a society formed from nearly-allied peoples of which the conquering eventually mingles with the conquered, is relatively well fitted for progress. From their fusion results a community which, determined in its leading traits by the character common to the two, is prevented by their differences of

character from being determined in its minor traits—is left capable of taking on new arrangements determined by new influences: medium plasticity allows those changes of structure constituting advance in heterogeneity. One example is furnished us by the Hebrews; who, notwithstanding their boasted purity of blood, resulted from a mixing of many Semitic varieties in the country east of the Nile, and who, both in their wanderings and after the conquest of Palestine, went on amalgamating kindred tribes. Another is supplied by the Athenians, whose progress had for antecedent the mingling of numerous immigrants from other Greek states with the Greeks of the locality. The fusion by conquest of the Romans with other Aryan tribes, Sabini, Sabelli, and Samnites, preceded the first ascending stage of the Roman civilization. And our own country, peopled by different divisions of the Aryan race, and mainly by varieties of Scandinavians, again illustrates this effect produced by the mixture of units sufficiently alike to cooperate in the same social system, but sufficiently unlike to prevent that social system from becoming forthwith definite in structure.

Admitting that the evidence where so many causes are in operation cannot be satisfactorily disentangled, and claiming only probability for these inductions respecting social constitutions, it remains to point out their analogy to certain inductions respecting the constitutions of individual living things. Between organisms widely unlike in kind, no progeny can arise: the physiological units contributed by them respectively to form a fertilized germ, cannot work together so as to produce a new organism. Evidently as, while multiplying, the two classes of units tend to build themselves into two different structures, their conflict prevents the formation of any structure. If the two organisms are less unlike in kind-belonging, say, to the same genus though to different species-the two structures which their two groups of physiological units tend to build up, being tolerably similar, they can, and do, co-operate in making an organism that is intermediate. But this, though it will work, is imperfect in its latest-evolved parts: there results a mule incapable of propagating. If, instead of different species, remote varieties are united, the intermediate organism is not infertile; but many facts suggest the conclusion that infertility results in subsequent generations: the incongruous working of the united structures, though longer in showing itself, comes out ultimately. And then, finally, if instead of remote varieties, varieties nearly allied are united, a permanently-fertile breed results; and while the slight differences of the two kinds of physiological units are not such as to prevent harmonious co-operation, they are such as conduce to plasticity and unusually vigorous growth.

Here, then, seems a parallel to the conclusion indicated above, that hybrid societies are imperfectly organizable—cannot grow into forms completely stable; while societies that have been evolved from mixtures of nearly-allied varieties of man, can assume stable

structures, and have an advantageous modifiability. . . .

Were this the fit place, some pages might be added respecting a possible future social type, differing as much from the industrial as this does from the militant—a type which, having a sustaining system more fully developed than any we know at present, will use the products of industry neither for maintaining a militant organization nor exclusively for material aggrandizement; but will devote them to the carrying on of higher activities. As the contrast between the militant and the industrial types, is indicated by inverting the belief that individuals exist for the benefit of the State into the belief that the State exists for the benefit of individuals; so the contrast between the industrial type and the type likely to be evolved from it, is indicated by the inversion of the belief that life is for work into the belief that work is for life. But we are here concerned with inductions derived from societies that have been and are, and cannot enter upon speculations respecting societies that may be. Merely naming as a sign, the multiplication of institutions and appliances for intellectual and æsthetic culture and for kindred activities not of a directly life-sustaining kind, but of a kind having gratification for their immediate purpose, I can here say no more.

Returning from this parenthetical suggestion, there remains the remark that to the complications caused by the crossings of these two classifications, have to be added the complications caused by the unions of races widely unlike or little unlike; which here mix not at all, there partially, and in other cases wholly. Respecting these kinds of constitutions, we have considerable warrant for concluding that the hybrid kind, essentially unstable, admits of being organized only on the principle of compulsory co-operation; since units much opposed in their natures cannot work together spontaneously. While, conversely, the kind characterized by likeness in its units is relatively stable; and under fit conditions may evolve into the industrial type: especially if the likeness is qualified by slight differences.

## STRUGGLE IN EVOLUTION

ONE OF THE FACTS difficult to reconcile with current theories of the Universe, is that high organizations throughout the animal kingdom habitually serve to aid destruction or to aid escape from destruction. If we hold to the ancient view, we must say that high organization has been deliberately devised for such purposes. If we accept the modern view, we must say that high organization has been evolved by the exercise of destructive activities during immeasurable periods of the past. Here we choose the latter alternative. To the never-ceasing efforts to catch and eat, and the neverceasing endeavours to avoid being caught and eaten, is to be ascribed the development of the various senses and the various motor organs directed by them. The bird of prey with the keenest vision, has, other things equal, survived when members of its species that did not see so far, died from want of food; and by such survivals, keenness of vision has been made greater in course of generations. The fleetest members of a herbivorous herd, escaping when the slower fell victims to a carnivore, left posterity; among which, again, those with the most perfectly-adapted limbs survived: the carnivores themselves being at the same time similarly disciplined and their speed increased. So, too, with intelligence. Sagacity that detected a danger which stupidity did not perceive, lived and propagated; and the cunning which hit upon a new

From The Study of Sociology (London: Williams and Norgate, 1873), pp. 192-99; Life and Letters of Herbert Spencer, by D. Duncan (London: Williams and Norgate, 1908), p. 336.

deception, and so secured prey not otherwise to be caught, left posterity where a smaller endowment of cunning failed. This mutual perfecting of pursuer and pursued, acting upon their entire organizations, has been going on throughout all time; and human beings have been subject to it just as much as other beings. Warfare among men, like warfare among animals, has had a large share in raising their organizations to a higher stage. The following are some of the various ways in which it has worked.

In the first place, it has had the effect of continually extirpating races which, for some reason or other, were least fitted to cope with the conditions of existence they were subject to. The killing-off of relatively-feeble tribes, or tribes relatively wanting in edurance, or courage, or sagacity, or power of co-operation, must have tended ever to maintain, and occasionally to increase, the amounts of life-

preserving powers possessed by men.

Beyond this average advance caused by destruction of the leastdeveloped races and the least-developed individuals, there has been an average advance caused by inheritance of those further developments due to functional activity. Remember the skill of the Indian in following a trail, and remember that under kindred stimuli many of his perceptions and feelings and bodily powers have been habitually taxed to the uttermost, and it becomes clear that the struggle for existence between neighbouring tribes has had an important effect in cultivating faculties of various kinds. Just as, to take an illustration from among ourselves, the skill of the police cultivates cunning among burglars, which, again, leading to further precautions generates further devices to evade them; so, by the unceasing antagonisms between human societies, small and large, there has been a mutual culture of an adapted intelligence, a mutual culture of certain traits of character not to be undervalued, and a mutual culture of bodily powers.

A large effect, too, has been produced upon the development of the arts. In responding to the imperative demands of war, industry made important advances and gained much of its skill. Indeed, it may be questioned whether, in the absence of that exercise of manipulative faculty which the making of weapons originally gave, there would ever have been produced the tools re-

guired for developed industry. If we go back to the Stone-Age, we see that implements of the chase and implements of war are those showing most labour and dexterity. If we take still-existing human races which were without metals when we found them, we see in their skilfully-wrought stone clubs, as well as in their large warcanoes, that the needs of defence and attack were the chief stimuli to the cultivation of arts afterwards available for productive purposes. Passing over intermediate stages, we may note a comparatively-recent stages the same relation. Observe a coat of mail, or one of the more highly-finished suits of armour-compare it with articles of iron and steel of the same date; and there is evidence that these desires to kill enemies and escape being killed, more extreme than any other, have had great effects on those arts of working in metal to which most other arts owe their progress. The like relation is shown us in the uses made of gunpowder. At first a destructive agent, it has become an agent of immense service in quarrying, mining, railway-making, &c.

A no less important benefit bequeathed by war, has been the formation of large societies. By force alone were small nomadic hordes welded into large tribes; by force alone were large tribes welded into small nations; by force alone have small nations been welded into large nations. While the fighting of societies usually maintains separateness, or by conquest produces only temporary unions, it produces, from time to time, permanent unions; and as fast as there are formed permanent unions of small into large, and then of large into still larger, industrial progress is furthered in three ways. Hostilities, instead of being perpetual, are broken by intervals of peace. When they occur, hostilities do not so profoundly derange the industrial activities. And there arises the possibility of carrying out the division of labour much more effectually. War, in short, in the slow course of things, brings about a social aggregation which furthers that industrial state at variance with war; and yet nothing but war could bring about this social aggregation.

These truths, that without war large aggregates of men cannot be formed, and that without large aggregates of men there cannot be a developed industrial state, are illustrated in all places and times among existing uncivilized and semi-civilized races, we everywhere find that union of small societies by a conquering society is a step in civilization. The records of peoples now extinct show us this with equal clearness. On looking back into our own history, and into the histories of neighbouring nations, we similarly see that only by coercion were the smaller feudal governments so subordinated as to secure internal peace. And even lately, the long-desired consolidation of Germany, if not directly effected by "blood and iron," as Bismarck said it must be, has been indirectly effected by them.

The furtherance of industrial development by aggregation is no less manifest. If we compare a small society with a large one, we get clear proof that those processes of co-operation by which social life is made possible, assume high forms only when the numbers of the co-operating citizens are great. Ask of what use a cloth-factory, supposing they could have one, would be to the members of a small tribe, and it becomes manifest that, producing as it would in a single day a year's supply of cloth, the vast cost of making it and keeping it in order could never be compensated by the advantage gained. Ask what would happen were a shop like Shoolbred's, supplying all textile products, set up in a village, and you see that the absence of a sufficiently-extensive distributing function would negative its continuance. Ask what sphere a bank would have had in the Old-English period, when nearly all people grew their own food and spun their own wool, and it is at once seen that the various appliances for facilitating exchange can grow up only when a community becomes so large that the amount of exchange to be facilitated is great. Hence, unquestionably, that integration of societies effected by war, has been a needful preliminary to industrial development, and consequently to developments of other kinds-Science, the Fine Arts, &c.

Industrial habits too, and habits of subordination to social requirements, are indirectly brought about by the same cause. The truth that the power of working continuously, wanting in the aboriginal man, could be established only by that persistent coercion to which conquered and enslaved tribes are subject, has become trite. An allied truth is, that only by a discipline of submission, first to an

owner, then to a personal governor, presently to government less personal, then to the embodied law proceeding from government, could there eventually be reached submission to that code of moral law by which the civilized man is more and more restrained in his dealings with his fellows.

Such being some of the important truths usually ignored by men too exclusively influenced by the religion of amity, let us now glance at the no less important truths to which men are blinded by

the religion of enmity.

Though, during barbarism and the earlier stages of civilization, war has the effect of exterminating the weaker societies, and of weeding out the weaker members of the stronger societies, and thus in both ways furthering the development of those valuable powers, bodily and mental, which war brings into play; yet during the later stages of civilization, the second of these actions is reversed. So long as all adult males have to bear arms, the average result is that those of most strength and quickness survive, while the feebler and slower are slain; but when the industrial development has become such that only some of the adult males are drafted into the army, the tendency is to pick out and expose to slaughter the best-grown and healthiest: leaving behind the physically-inferior to propagate the race. The fact that among ourselves, though the number of soldiers raised is not relatively large, many recruits are rejected by the examining surgeons, shows that the process inevitably works towards deterioration. Where, as in France, conscriptions have gone on taking away the finest men, generation after generation, the needful lowering of the standard proves how disastrous is the effect on those animal qualities of a race which form a necessary basis for all higher qualities. If the depletion is indirect also-if there is such an overdraw on the energies of the industrial population that a large share of heavy labour is thrown on the women, whose systems are taxed simultaneously by hard work and child-bearing, a further cause of physical degeneracy comes into play: France again supplying an example. War, therefore, after a certain stage of progress, instead of furthering bodily development and the development of certain mental powers, becomes a cause of retrogression.

In like manner, though war, by bringing about social consolidations, indirectly favours industrial progress and all its civilizing consequences, yet the direct effect of war on industrial progress is repressive. It is repressive as necessitating the abstraction of men and materials that would otherwise go to industrial growth: it is repressive as deranging the complex inter-dependencies among the many productive and distributive agencies; it is repressive as drafting off much administrative and constructive ability, which would else have gone to improve the industrial arts and the industrial organization. And if we contrast the absolutely-military Spartans with the partially-military Athenians, in their respective attitudes towards culture of every kind, or call to mind the contempt shown for the pursuit of knowledge in purely-military times like those of feudalism; we cannot fail to see that persistent war is at variance not only with industrial development, but also with the higher intellectual developments that aid industry and are aided by it.

So, too, with the effects wrought on the moral nature. While war, by the discipline it gives soldiers, directly cultivates the habit of subordination, and does the like indirectly by establishing strong and permanent governments; and while in so far it cultivates attributes that are not only temporarily essential, but are steps towards attributes that are permanently essential; yet it does this at the cost of maintaining, and sometimes increasing, detrimental attributes—attributes intrinsically anti-social. The aggressions which selfishness prompts (aggressions which, in a society, have to be restrained by some power that is strong in proportion as the selfishness is intense) can diminish only as fast as selfishness is held in check by sympathy; and perpetual warlike activities repress sympathy: nay, they do worse—they cultivate aggressiveness to the extent of making it a pleasure to inflict injury. The citizen made callous by the killing and wounding of enemies, inevitably brings his callousness home with him. Fellow-feeling, habitually trampled down in military conflicts, cannot at the same time be active in the relations of civil life. In proportion as giving pain to others is made a habit during war, it will remain a habit during peace: inevitably producing in the behaviour of citizens to one another, antagonisms, crimes of violence, and multitudinous aggressions of minor kinds,

tending towards a disorder that calls for coercive government. Nothing like a high type of social life is possible without a type of human character in which the promptings of egoism are duly restrained by regard for others. The necessities of war imply absolute self-regard, and absolute disregard of certain others. Inevitably, therefore, the civilizing discipline of social life is antagonized by the uncivilizing discipline of the life war involves. So that beyond the direct mortality and miseries entailed by war, it entails other mortality and miseries by maintaining anti-social sentiments in citizens.

Taking the most general view of the matter, we may say that only when the sacred duty of blood-revenge, constituting the religion of the savage, decreases in sacredness, does there come a possibility of emergence from the deepest barbarism. Only as fast as retaliation, which for a murder on one side inflicts a murder or murders on the other, becomes less imperative, is it possible for larger aggregates of men to hold together and civilization to commence. And so, too, out of lower stages of civilization higher ones can emerge, only as there diminishes this pursuit of international revenge and re-revenge, which the code we inherit from the savage insists upon. Such advantages, bodily and mental, as the race derives from the discipline of war, are exceeded by the disadvantages, bodily and mental, but especially mental, which result after a certain stage of progress is reached. Severe and bloody as the process is, the killing-off of inferior races and inferior individuals, leaves a balance of benefit to mankind during phases of progress in which the moral development is low, and there are no quick sympathies to be continually seared by the infliction of pain and death. But as there arise higher societies, implying individual characters fitted for closer co-operation, the destructive activities exercised by such higher societies have injurious re-active effects on the moral natures of their members-injurious effects which outweigh the benefits resulting from extirpation of inferior races. After this stage has been reached, the purifying process, continuing still an important one, remains to be carried on by industrial war-by a competition of societies during which the best, physically, emotionally, and intellectually, spread most, and leave the least capable to

disappear gradually, from failing to leave a sufficiently-numerous posterity....

[What follows is a letter at the time of T. H. Huxley's oblique attack on Spencer and "social Darwinism" in Evolution and Ethics.] I am glad to hear that you think of taking up Huxlev's "Evolution and Ethics." . . . Practically his view is a surrender of the general doctrine of evolution in so far as its higher applications are concerned, and is pervaded by the ridiculous assumption that, in its application to the organic world, it is limited to the struggle for existence among individuals under its ferocious aspects, and has nothing to do with the development of social organization, or the modifications of the human mind that take place in the course of that organization. . . . The position he takes, that we have to struggle against or correct the cosmic process, involves the assumption that there exists something in us which is not a product of the cosmic process, and is practically a going back to the old theological notions, which put Man and Nature in antithesis. Any rational, comprehensive view of evolution involves that, in the course of social evolution, the human mind is disciplined into that form which itself puts a check upon that part of the cosmic process which consists in the unqualified struggle for existence.