SPENCER HERBERT

ILLUSTRATIONS OF UNIVERSAL PROGRESS: A SERIES OF DISCUSSIONS

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Spencer H.

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Содержание

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AMERICAN NOTICE

OF A

NEW SYSTEM OF PHILOSOPHY

BY

HERBERT SPENCER

The author of the following work, Mr. Herbert Spencer, of England, has entered upon the publication of a new philosophical system, so original and comprehensive as to deserve the attention of all earnest inquirers. He proposes nothing less than to unfold such a complete philosophy of Nature, physical, organic, mental and social, as Science has now for the first time made possible, and which, if successfully executed, will constitute a momentous step in the progress of thought.

His system is designed to embrace five works; each a distinct treatise, but all closely connected in plan, and treating of the following subjects in the order presented: 1st, First Principles; 2d, Principles of Biology; 3d, Principles of Psychology; 4th, Principles of Sociology; 5th, Principles of Morality. The opening work of the series —*First Principles*– though somewhat of an introductory character, is an independent and completed argument. It consists of two parts: first, "The Unknowable," and second, "The Laws of the Knowable." Unattractive as these titles may seem, they indicate a discussion of great originality and transcendent interest.

When public consideration is invited to a system of philosophy so extended as to comprehend the entire scheme of nature and humanity, and so bold as to deal with them in the ripest spirit of science, it is natural that many should ask at the outset how the author stands related to the problem of Religion. Mr. Spencer finds this the preliminary question of his philosophy, and engages with it at the threshold of his undertaking. Before attempting to work out a philosophical scheme, he sees that it is at first necessary to find how far Philosophy can go and where she must stop – the necessary limits of human knowledge, or the circle which bounds all rational and legitimate investigation; and this opens at once the profound and imminent question of the spheres and relation of Religion and Science.

Mr. Spencer is a leading representative of that school of thinkers which holds that, as man is finite, he can grasp and know only the finite; – that by the inexorable conditions of thought all real knowledge is relative and phenomenal, and hence that we cannot go behind phenomena to find the ultimate causes and solve the ultimate mystery of being. In such assertions as that "God cannot by any searching be found out;" that "a God understood would be no God at all;" and that "to think God *is* as we think Him to be is blasphemy," we see the recognition of this idea of the inscrutableness of the Absolute Cause. The doctrine itself is neither new nor limited to a few exceptional thinkers.

It is widely affirmed by enlightened science, and pervades nearly all the cultivated theology of the present day. Sir William Hamilton and Dr. Mansel are among its recent and ablest expounders. "With the exception," says Sir William Hamilton, "of a few late absolutist theorizers in Germany, this is perhaps the truth of all others most harmoniously reëchoed by every philosopher of every school;" and among these he names Protagoras, Aristotle, St. Augustine, Melanchthon, Scaliger, Bacon, Spinoza, Newton, and Kant.

But though Mr. Spencer accepts this doctrine, he has not left it where he found it. The world is indebted to him for having advanced the argument to a higher and grander conclusion – a conclusion which changes the philosophical aspect of the whole question, and involves the profoundest consequences. Hamilton and Mansel bring us, by their inexorable logic, to the result that we can neither know nor conceive the Infinite, and that every attempt to do so involves us in contradiction and absurdity; but having reached this vast negation, their logic and philosophy break down. Accepting their conclusions as far as they go, Mr. Spencer maintains the utter incompleteness of their reasoning, and, pushing the inquiry still farther, he demonstrates that though we cannot grasp the Infinite in *thought*, we can realize it in *consciousness*. He shows that though by the laws of thinking we are rigorously prevented from forming a *conception* of that Incomprehensible, Omnipotent Power by which we are acted upon in all phenomena, yet we are, by the laws of thought, equally prevented from ridding ourselves of the *consciousness* of this Power. He proves that this consciousness of a Supreme Cause is not *negative*, but *positive*– that it is indestructible, and has a higher certainty than any other belief whatever. The Unknowable, then, in the view of Mr. Spencer, is not a mere term of negation, nor a word employed only to express our ignorance, but it means that Infinite Reality, that Supreme but Inscrutable Cause, of which the universe is but a manifestation, and which has an ever-present disclosure in human consciousness.

Having thus found an indestructible basis in human nature for the religious sentiment, Mr. Spencer next shows that all religions rest upon this foundation, and contain a fundamental verity – a soul of truth, which remains when their conflicting doctrines and discordant peculiarities are mutually cancelled. In the lower and grosser forms of religion this truth is but dimly discerned, but becomes ever clearer the more highly the religion is developed, surviving every change, and remaining untouched by the severest criticism.

Mr. Spencer then proceeds to demonstrate that all science tends to precisely the same great conclusion; – in all directions investigation leads to insoluble mystery. Alike in the external and the internal worlds, the man of science sees himself in the midst of perpetual changes of which he can discover neither the beginning nor the end. If he looks inward, he perceives that both ends of the thread of consciousness are beyond his grasp. If he resolve the appearances, properties, and movements of surrounding things into manifestations of Force in Space and Time, he still finds that Force, Space, and Time pass all understanding. Thus do all lines of argument converge to the same conclusion. Whether we scrutinize internal consciousness or external phenomena, or trace to their root the faiths of mankind, we reach that common ground where all antagonisms disappear – that highest and most abstract of all truths, which is affirmed with equal certainty by both religion and science, and in which may be found their full and final reconciliation.

It is perhaps hardly just to Mr. Spencer to state his position upon this grave subject without giving also the accompanying reasoning; but so compressed and symmetrical is his argument that it cannot be put into narrower compass without mutilation. To those interested in the advance of thought in this direction, we may say that the discussion will be found unsurpassed in nobleness of aim, eloquence of statement, philosophic breadth, and depth and power of reasoning.

This portion of the work embraces five chapters, as follows: I. Religion and Science; II. Ultimate Religious Ideas; III. Ultimate Scientific Ideas; IV. The Relativity of all Knowledge; V. The Reconciliation.

The second and larger portion of *First Principles* Mr. Spencer designates "The Laws of the Knowable." By these he understands those fundamental and universal principles reached by scientific investigation, which underlie all phenomena, and are necessary to their explanation. Certain great laws have been established which are found equally true in all departments of nature, and these are made the foundation of his philosophy. The sublime idea of the Unity of the Universe, to which science has long been tending, Mr. Spencer has made peculiarly his own. Through the vast diversities of nature he discerns a oneness of order and method, which necessitates but one philosophy of being; the same principles being found to regulate the course of celestial movement, terrestrial changes, and the phenomena of life, mind, and society. These may all be comprehended in a single philosophical scheme, so that each shall throw light upon the other, and the mastery of one help to the comprehension of all.

To Mr. Spencer the one conception which spans the universe and solves the widest range of its problems – which reaches outward through boundless space and back through illimitable time, resolving the deepest questions of life, mind, society, history, and civilization, which predicts the glorious possibilities of the future, and reveals the august method by which the Divine Power works evermore, – this one, all-elucidating conception, is expressed by the term Evolution. To this great subject he has devoted his remarkable powers of thought for many years, and stands toward it not only in the relation of an expositor, but also in that of a discoverer.

The fact that all living beings are developed from a minute structureless germ has long been known, while the law which governs their evolution – that the change is ever from the homogeneous to the heterogeneous – has been arrived at within a generation. But this fact of growth is by no means limited to the physical history of plants and animals – it is exemplified upon a far more extended scale. Astronomers hold that the solar system has gone through such a process, and Geologists teach that the earth has had its career of evolution. Animals have a mental as well as a physical development, and there is also a progress of knowledge, of religion, of the arts and sciences, of institutions, manners, governments, and civilization itself. Mr. Spencer has the honour of having first established the universality of the principle by which all these changes are governed. The law of evolution, which has been hitherto limited to plants and animals, he demonstrates to be the law of *all* evolution. This doctrine is unfolded in the first Essay of the present volume, and is more or less fully illustrated in the others; but it will be found elaborately worked out in the second part of *First Principles*.

The course of the discussion in this part of the work will be best shown by enumerating the titles to the chapters, which are as follows: I. Laws in General; II. The Law of Evolution; III. The Same continued; IV. The Causes of Evolution; V. Space, Time, Matter, Motion, and Force; VI. The Indestructibility of Matter; VII. The Continuity of Motion; VIII. The Persistence of Force; IX. The Correlation and Equivalence of Forces; X. The Direction of Motion; XI. The Rhythm of Motion; XII. The Conditions Essential to Evolution; XIII. The Instability of the Homogeneous; XIV. The Multiplication of Effects; XV. Differentiation and Integration; XVI. Equilibration; XVII. Summary and Conclusion.

A most interesting and fruitful field of thought, it will be seen, is here traversed 7by our author, and the latest and highest questions of science are discussed under novel aspects and in new relations. Not only do the pages abound with acute suggestions and fresh views, but the entire argument, in its leading demonstrations, and the full breadth of its philosophic scope, is stamped with a high originality.

Having thus determined the sphere of philosophy and ascertained those fundamental principles governing all orders of phenomena which are to be subsequently used for guidance and verification, the author proceeds to the second work of the series, which is devoted to Biology, or the Science of Life. He regards life not as a foreign and unintelligible something, thrust into the scheme of nature, of which we can know nothing save its mystery, but as an essential part of the universal plan. The harmonies of life are regarded as but phases of the universal harmony, and Biology is studied by

the same methods as other departments of science. The great truths of Physics and Chemistry are applied to its elucidation; its facts are collected, its inductions established, and constantly verified by the first principles laid down at the outset. Apart from its connections with the philosophical system, of which it forms a part, this work will have great intrinsic interest. Nothing was more needed than a compact and well-digested statement of those general principles of life to which science has arrived, and Mr. Spencer's presentation is proving to be just what is required. Some idea of his mode of treating the subject may be formed by glancing over a few of his first chapter-headings. Part First: I. Organic Matter; II. The Actions of Forces on Organic Matter; III. The Reactions of Organic Matter on Forces; IV. Proximate Definition of Life; V. The Correspondence between Life and its Circumstances; VI. The Degree of Life Varies with the Degree of Correspondence; VII. Inductions of Biology. Part Second: I. Growth; II. Development; III. Function; IV. Waste and Repair; V. Adaptation; VI. Individuality; VII. Genesis; VIII. Heredity; IX. Variation; X. Genesis, Heredity and Variation; XI. Classification; XII. Distribution.

In the scheme of nature Mind is ever associated with Life. The third division of this philosophical system will therefore be Psychology, or the Science of Mind. This great subject will be considered, not by the narrow methods usual with metaphysicians, but in its broadest aspects as a phase of nature's order – to be studied by observation and induction through the whole range of psychical manifestation in animated beings. The subject of mind will be regarded in the light of the great truths of Biology previously established; the connections of mind and life will be traced; the progress of mentality as exhibited in the animal grades, and the evolution of the intellectual faculties in man will be delineated and the coöperation of mind and nature in the production of ideas and intelligence unfolded. We have no work upon mind of this comprehensive and thoroughly scientific character: the materials are abundant, and the necessity of their organization is widely recognized. That Mr. Spencer is eminently the man to perform this great task is proved by the fact that he is already the author of the most profound and able contribution to the advancement of psychological science that has appeared for many years.

In the true philosophic order, Biology and Psychology prepare the way for the study of social science, and hence the fourth part of Mr. Spencer's system will treat of Sociology, or the natural laws of society. As a knowledge of individuals must precede an understanding of their mutual relations, so an exposition of the laws of life and mind, which constitute the science of human nature, must precede the successful study of social phenomena. In this part will be considered the development of society, or that intellectual and moral progress which depends upon the growth of human ideas and feelings in their necessary order. The evolution of political, ecclesiastical, and industrial organizations will be traced, and a statement made of those principles underlying all social progress, without which there can be no successful regulation of the affairs of society. Mr. Spencer's mind has long been occupied with these important questions, as the reader will find by referring to his able work upon "Social Statics," published several years ago.

Lastly, in Part Fifth, Mr. Spencer proposes to consider the *Principles of Morality*, bringing to bear the truths furnished by Biology, Psychology, and Sociology, to determine the true theory of right living. He will show that the true moral ideal and limit of progress is the attainment of an equilibrium between constitution and conditions of existence, and trace those principles of private conduct, physical, intellectual, moral, and religious that follow from the conditions to complete individual life. Those rules of human action which all civilized nations have registered as essential laws – the inductions of morality – will be delineated, and also those mutual limitations of men's actions necessitated by their coexistence as units of society, which constitute the foundation of justice.

It cannot be doubted that the order here indicated, as it corresponds to the method of nature, is the one which Philosophy must pursue in the future. It combines the precision of science with the harmony and unity of universal truth. The time is past when Biology can be considered with no reference to the laws of Physics; Mind with no reference to the science of Life, and Sociology,

without having previously mastered the foregoing subjects. The progress of knowledge is now toward more definite, systematic, and comprehensive views, while it is the highest function of intellect to coördinate and bind together its isolated and fragmentary parts. In carrying out his great plan, therefore, Mr. Spencer is but embodying the large philosophical tendencies of the age. If it is urged that his scheme is too vast for any one man to accomplish, it may be replied: 1st. That it is not intended to treat the various subjects exhaustively, but only to state general principles with just sufficient details for their clear illustration. 2d. A considerable portion of the work is already issued, and much more is ready for publication, while the author is still in the prime of life. 3d. It must be remembered that intellects occasionally appear, endowed with that comprehensive grasp and high organizing power which fits them for vast undertakings. The reader will find at the close of the volume Mr. Spencer's Prospectus of his system. That he who has so clearly mapped out his work is the proper one to execute it, we think will be fully apparent to all who peruse the present volume.

An impression prevails with many that Mr. Spencer belongs to the positive school of M. Auguste Comte. This is an entire misapprehension; but the position having been assumed by several of his reviewers, he repels the charge in the following letter, which appeared in the *New Englander* for January, 1864.

To the Editor of the New Englander:

Sir: – While recognizing the appreciative tone and general candour of the article in your last number, entitled "Herbert Spencer on Ultimate Religious Ideas," allow me to point out one error which pervades it. The writer correctly represents the leading positions of my argument, but he inadvertently conveys a wrong impression respecting my tendencies and sympathies. He says of me, "the spirit of his philosophy is evidently that of the so-called positive method which has now many partial disciples, as well as many zealous adherents among the thinkers of England." Further on I am tacitly classed with "the English admirers and disciples of the great Positivist;" and it is presently added that "in Mr. Spencer we have an example of a positivist, who does not treat the subject of religion with supercilious neglect." Here and throughout, the implication is that I am a follower of Comte. This is a mistake. That M. Comte has given a general exposition of the doctrine and method elaborated by science, and has applied to it a name which has obtained a certain currency, is true. But it is not true that the holders of this doctrine and followers of this method are disciples of M. Comte. Neither their modes of inquiry nor their views concerning human knowledge in its nature and limits are appreciably different from what they were before. If they are Positivists it is in the sense that all men of science have been more or less consistently Positivists; and the applicability of M. Comte's title to them no more makes them his disciples than does its applicability to the men of science who lived and died before M. Comte wrote, make them his disciples.

My own attitude toward M. Comte and his partial adherents has been all along that of antagonism. In an essay on the "Genesis of Science," published in 1854, and republished with other essays in 1857, I have endeavoured to show that his theory of the logical dependence and historical development of the sciences is untrue. I have still among my papers the memoranda of a second review (for which I failed to obtain a place), the purpose of which was to show the untenableness of his theory of intellectual progress. The only doctrine of importance in which I agree with him – the relativity of all knowledge – is one common to him and sundry other thinkers of earlier date; and even this I hold in a different sense from that in which he held it. But on all points that are distinctive of his philosophy, I differ from him. I deny his Hierarchy of the Sciences. I regard his division of intellectual progress into the three phases, theological, metaphysical, and positive, as superficial. I reject

utterly his Religion of Humanity. And his ideal of society I hold in detestation. Some of his minor views I accept; some of his incidental remarks seem to me to be profound, but from everything which distinguishes Comteism as a system, I dissent entirely. The only influence on my own course of thought which I can trace to M. Comte's writings, is the influence that results from meeting with antagonistic opinions definitely expressed.

Such being my position, you will, I think, see that by classing me as a Positivist, and tacitly including me among the English admirers and disciples of Comte, your reviewer unintentionally misrepresents me. I am quite ready to bear the odium attaching to opinions which I do hold; but I object to have added the odium attaching to opinions which I *do not* hold. If, by publishing this letter in your forthcoming number, you will allow me to set myself right with the American public on this matter, you will greatly oblige me. I am, Sir, your obedient servant,
Herbert Spencer.

We take the liberty of making an extract from a private letter of Mr. Spencer, which contains some further observations in the same connection:

"There appears to have got abroad in the United States, a very erroneous impression respecting the influence of Comte's writings in England. I suppose that the currency obtained by the words 'Positivism' and 'Positivist,' is to blame for this. Comte having designated by the term Positive Philosophy all that body of definitely-established knowledge which men of science have been gradually organizing into a coherent body of doctrine, and having habitually placed this in opposition to the incoherent body of doctrine defended by theologians, it has become the habit of the theological party to think of the antagonist scientific party under this title of Positivists applied to them by Comte. And thus, from the habit of calling them Positivists there has grown up the assumption that they call themselves Positivists, and that they are the disciples of Comte. The truth is that Comte and his doctrines receive here scarcely any attention. I know something of the scientific world in England, and I cannot name a single man of science who acknowledges himself a follower of Comte, or accepts the title of Positivist. Lest, however, there should be some such who were unknown to me, I have recently made inquiries into the matter. To Professor Tyndall I put the question whether Comte had exerted any appreciable influence on his own course of thought: and he replied, 'So far as I know, my own course of thought would have been exactly the same had Comte never existed.' I then asked, 'Do you know any men of science whose views have been affected by Comte's writings?' and his answer was: 'His influence on scientific thought in England is absolutely *nil*.' To the same questions Prof. Huxley returned, in other words, the same answers. Professors Huxley and Tyndall, being leaders in their respective departments, and being also men of general culture and philosophic insight, I think that, joining their impressions with my own, I am justified in saying that the scientific world of England is wholly uninfluenced by Comte. Such small influence as he has had here has been on some literary men and historians – men who were attracted by the grand achievements of science, who were charmed by the plausible system of scientific generalizations put forth by Comte, with the usual French regard for symmetry and disregard for fact, and who were, from their want of scientific training, unable to detect the essential fallaciousness of his system. Of these the most notable example was the late Mr. Buckle. Besides him, I can name

but seven men who have been in any appreciable degree influenced by Comte; and of these, four, if not five, are scarcely known to the public."

Mr. Spencer's philosophical series is published by D. Appleton & Co., New York, in quarterly parts (80 to 100 pages each), by subscription, at two dollars a year. "*First Principles*" is issued in one volume, and four parts of Biology have appeared. We subjoin some notices of his philosophy from American and English reviews.

From the National Quarterly Review (American.)

Comte thus founded social science, and opened a path for future discoverers; but he did not perceive, any more than previous inquirers, the fundamental law of human evolution. It was reserved for Herbert Spencer to discover this all-comprehensive law which is found to explain alike all the phenomena of man's history and all those of external nature. This sublime discovery, that the universe is in a continuous process of evolution from the homogeneous to the heterogeneous, with which only Newton's law of gravitation is at all worthy to be compared, underlies not only physics, but also history. It reveals the law to which social changes conform.

From the Christian Examiner

Reverent and bold – reverent for truth, though not for the forms of truth, and not for much that we hold true – bold in the destruction of error, though without that joy in destruction which often claims the name of boldness; – these works are interesting in themselves and in their relation to the current thought of the time. They seem at first sight to form the turning point in the positive philosophy, but closer examination shows us that it is only a new and marked stage in a regular growth. It is the positive philosophy reaching the higher relations of our being, and establishing what before it ignored because it had not reached, and by ignoring seemed to deny. This system formerly excluded theology and psychology. In the works of Herbert Spencer we have the rudiments of a positive theology and an immense step toward the perfection of the science of psychology… Such is a brief and meagre sketch of a discussion which we would commend to be followed in detail by every mind interested in theological studies. Herbert Spencer comes in good faith from what has been so long a hostile camp, bringing a flag of truce and presenting terms of agreement meant to be honourable to both parties: let us give him a candid hearing… In conclusion, we would remark that the work of Herbert Spencer referred to (First Principles) is not mainly theological, but will present the latest and broadest generalizations of science, and we would commend to our readers this author, too little known among us, as at once one of the clearest of teachers and one of the wisest and most honourable of opponents.

From the New Englander

Though we find here some unwarranted assumptions, as well as some grave omissions, yet this part (Laws of the Knowable) may be considered, upon the whole, as a fine specimen of scientific reasoning. Considerable space is devoted

to the "Law of Evolution" the discovery of which is the author's chief claim to originality, and certainly evinces great power of generalization. To quote the abstract definition without a full statement of the inductions from which it is derived would convey no fair impression of the breadth and strength of the thought which it epitomizes. Of Mr. Spencer's general characteristics as a writer, we may observe that his style is marked by great purity, clearness, and force; though it is somewhat diffuse, and the abstract nature of some of his topics occasionally renders his thought difficult of apprehension. His treatment of his subjects is generally thorough and sometimes exhaustive; his arguments are always ingenious if not always convincing; his illustrations are drawn from almost every accessible field of human knowledge, and his method of "putting things" is such as to make the most of his materials. He is undoubtedly entitled to a high rank among the speculative and philosophic writers of the present day…

In Mr. Spencer we have the example of a positivist, who does not treat the subject of religion with supercilious neglect, and who illustrates by his own method of reasoning upon the highest objects of human thought, the value of those metaphysical studies which it is so much the fashion of his school to decry. For both these reasons the volume, which we now propose to examine, deserves the careful attention of the theologian who desires to know what one of the strongest thinkers of his school, commonly thought atheistic in its tendencies, can say in behalf of our ultimate religious ideas. For if we mistake not, in spite of the very negative character of his own results, he has furnished some strong arguments for the doctrine of a positive Christian theology. We shall be mistaken if we expect to find him carelessly passing these matters by (religious faith and theological science) as in all respects beyond knowledge and of no practical concern. On the contrary, he gives them profound attention, and arrives at conclusions in regard to them which even the Christian theologian must allow to contain a large measure of truth. While showing the *unsearchable nature* of the ultimate facts on which religion depends, he demonstrates their *real existence* and their great importance… In answering these questions Mr. Spencer has, we think, arrived nearer to a true philosophy than either Hamilton or Mansel. At least he has indicated in a more satisfactory manner than they have done, the positive datum of consciousness that the unconditioned, though inscrutable, *exists*. It may be said that Mr. Spencer is not chargeable with excluding God from the universe, or denying all revelation of Him in His works, since he earnestly defends the truth that an inscrutable power is shown to *exist*. We certainly would not charge him with theoretical atheism, holding as he does this ultimate religious idea.

From the North American Review

The law of organic development announced in the early part of the present century, by Goethe, Schelling, and Von Baer, and vaguely expressed in the formula, that "evolution is always from the homogenous to the heterogeneous, and from the simple to the complex," has recently been extended by Herbert Spencer so as to include all phenomena whatsoever. He has shown that this law of evolution is the law of *all* evolution. Whether it be in the development of the earth or of life upon its surface, in the development of Society, of government, of manufactures, of commerce, of language, literature, science and art, this same advance from the

simple to the complex, through successive differentiations, holds uniformly. The stupendous induction from all classes of phenomena by which Mr. Spencer proceeds to establish and illustrate his theorem cannot be given here.

From the Christian Spectator (English)

Mr. Spencer claims for his view that it is not only a religious position, but preëminently *the* religious position; and we are most thoroughly disposed to agree with him, though we think he does not appreciate the force of his own argument, nor fully understand his own words. For let us now attempt to realize the meaning of this fact, of which Mr. Spencer and his compeers have put us in possession; let us endeavour to see whether its bearings are really favorable or adverse to religion. They are put forward indeed avowedly as adverse to any other religion than a mere reverential acquiescence in ignorance concerning all that truly exists; but it appears to us that this supposed opposition to religion arises from the fact that the doctrine itself is so profoundly, so intensely, so overwhelmingly religious, nay, so utterly and entirely Christian, that its true meaning could not be seen for very glory. Like Moses, when he came down from the Mount, this positive philosophy comes with a veil over its face, that its too divine radiance may be hidden for a time. This is Science that has been conversing with God, and brings in her hand His law written on tables of stone.

From the Reader

To answer the question of the likelihood of the permanence of Mr. Mill's philosophic reign, … we should have to take account, among other things, of the differences from Mr. Mill already shown by the extraordinarily able and peculiarly original thinker whose name we have associated with Mr. Mill's at the head of this article. We may take occasion, at another time, to call attention to these speculations of Mr. Herbert Spencer, whose works in the meantime, and especially that new one whose title we have cited, we recommend to all those select readers whose appreciation of masterly exposition, and great reach and boldness of generalization, does not depend on their mere disposition to agree with the doctrines propounded.

From the British Quarterly Review

Complete in itself, it is at the same time but a part of a whole, which, if it should be constructed in proportion, will be ten times as great. For these First Principles are merely the foundation of a system of philosophy, bolder, more elaborate and comprehensive, perhaps, than any other which has been hitherto designed in England… Widely as it will be seen we differ from the author on some points, we very sincerely hope he may succeed in accomplishing the bold and magnificent project he has mapped out.

From the Cornhill Magazine

Our "Survey," superficial as it is, must include at least the mention of a work so lofty in aim, and so remarkable in execution as the system of Philosophy which Mr. Herbert Spencer is issuing to subscribers… In spite of all dissidence respecting the conclusions, the serious reader will applaud the profound earnestness and thoroughness with which these conclusions are advocated; the universal scientific knowledge brought to bear on them by way of illustration, and the acute and subtle thinking displayed in every chapter.

From the Parthenon

By these books he has wedged his way into fame in a manner distinctly original, and curiously marked… There is a peculiar charm in this author's style, in that it sacrifices to no common taste, while at the same time it makes the most abstruse questions intelligible… The book, if it is to be noticed with the slightest degree of fairness, requires to be read and re-read, to be studied apart from itself and with itself. For whatever may be its ultimate fate – although as the ages go on it shall become but as the lispings of a little child, a little more educated than other lisping children of the same time – this is certain, that, as a book addressed to the present, it lifts the mind far above the ordinary range of thought, suggests new associations, arranges chaotic pictures, strikes often a broad harmony, and even moves the heart by an intellectual struggle as passionless as fate, but as irresistible as time.

From the Critic

Mr. Spencer is the foremost mind of the only philosophical school in England which has arrived at a consistent scheme… Beyond this school we encounter an indolent chaotic eclecticism. Mr. Spencer claims the respect due to distinct and daring individuality; others are echoes or slaves. Mr. Spencer may be a usurper, but he has the voice and gesture of a king.

From the Medico-Chirurgical Review

Mr. Spencer is equally remarkable for his search after first principles; for his acute attempts to decompose mental phenomena into their primary elements; and for his broad generalizations of mental activity, viewed in connection with nature, instinct, and all the analogies presented by *life* in its universal aspects.

EDITOR'S PREFACE

The essays contained in the present volume were first published in the English periodicals – chiefly the Quarterly Reviews. They contain ideas of permanent interest, and display an amount of thought and labor evidently much greater than is usually bestowed on review articles. They were written with a view to ultimate republication in an enduring form, and were issued in London with several other papers, under the title of "Essays; Scientific, Political, and Speculative," first and second series; – the former appearing in 1857, and the latter in 1863.

The interest created in Mr. Spencer's writings by the publication in this country of his valuable work on "Education," and by criticisms of his other works, has created a demand for these discussions which can only be supplied by their republication. They are now, however, issued in a new form, and are more suited to develop the author's purpose in their preparation; for while each of these essays has its intrinsic and independent claims upon the reader's attention, they are all at the same time but parts of a connected and comprehensive argument. Nearly all of Mr. Spencer's essays have relations more or less direct to the general doctrine of Evolution – a doctrine which he has probably done more to unfold and illustrate than any other thinker. The papers comprised in the present volume are those which deal with the subject in its most obvious and prominent aspects.

Although the argument contained in the first essay on "Progress; its Law and Cause," has been published in an amplified form in the author's "First Principles," it has been thought best to prefix it to the present collection as a key to the full interpretation of the other essays.

To those who read this volume its commendation will be superfluous; we will only say that those who become interested in his course of thought will find it completely elaborated in his new System of Philosophy, now in course of publication.

The remaining articles of Mr. Spencer's first and second series will be shortly published, in a volume entitled "Essays; Moral, Political, and Æsthetic."

New York, *March*, 1864.

I.
PROGRESS: ITS LAW AND CAUSE

The current conception of Progress is somewhat shifting and indefinite. Sometimes it comprehends little more than simple growth – as of a nation in the number of its members and the extent of territory over which it has spread. Sometimes it has reference to quantity of material products – as when the advance of agriculture and manufactures is the topic. Sometimes the superior quality of these products is contemplated: and sometimes the new or improved appliances by which they are produced. When, again, we speak of moral or intellectual progress, we refer to the state of the individual or people exhibiting it; while, when the progress of Knowledge, of Science, of Art, is commented upon, we have in view certain abstract results of human thought and action. Not only, however, is the current conception of Progress more or less vague, but it is in great measure erroneous. It takes in not so much the reality of Progress as its accompaniments – not so much the substance as the shadow. That progress in intelligence seen during the growth of the child into the man, or the savage into the philosopher, is commonly regarded as consisting in the greater number of facts known and laws understood: whereas the actual progress consists in those internal modifications of which this increased knowledge is the expression. Social progress is supposed to consist in the produce of a greater quantity and variety of the articles required for satisfying men's wants; in the increasing security of person and property; in widening freedom of action: whereas, rightly understood, social progress consists in those changes of structure in the social organism which have entailed these consequences. The current conception is a teleological one. The phenomena are contemplated solely as bearing on human happiness. Only those changes are held to constitute progress which directly or indirectly tend to heighten human happiness. And they are thought to constitute progress simply *because* they tend to heighten human happiness. But rightly to understand progress, we must inquire what is the nature of these changes, considered apart from our interests. Ceasing, for example, to regard the successive geological modifications that have taken place in the Earth, as modifications that have gradually fitted it for the habitation of Man, and as *therefore* a geological progress, we must seek to determine the character common to these modifications – the law to which they all conform. And similarly in every other case. Leaving out of sight concomitants and beneficial consequences, let us ask what Progress is in itself.

In respect to that progress which individual organisms display in the course of their evolution, this question has been answered by the Germans. The investigations of Wolff, Goethe, and Von Baer, have established the truth that the series of changes gone through during the development of a seed into a tree, or an ovum into an animal, constitute an advance from homogeneity of structure to heterogeneity of structure. In its primary stage, every germ consists of a substance that is uniform throughout, both in texture and chemical composition. The first step is the appearance of a difference between two parts of this substance; or, as the phenomenon is called in physiological language, a differentiation. Each of these differentiated divisions presently begins itself to exhibit some contrast of parts; and by and by these secondary differentiations become as definite as the original one. This process is continuously repeated – is simultaneously going on in all parts of the growing embryo; and by endless such differentiations there is finally produced that complex combination of tissues and organs constituting the adult animal or plant. This is the history of all organisms whatever. It is settled beyond dispute that organic progress consists in a change from the homogeneous to the heterogeneous.

Now, we propose in the first place to show, that this law of organic progress is the law of all progress. Whether it be in the development of the Earth, in the development of Life upon its surface, in the development of Society, of Government, of Manufactures, of Commerce, of

Language, Literature, Science, Art, this same evolution of the simple into the complex, through successive differentiations, holds throughout. From the earliest traceable cosmical changes down to the latest results of civilization, we shall find that the transformation of the homogeneous into the heterogeneous, is that in which Progress essentially consists.

With the view of showing that *if* the Nebular Hypothesis be true, the genesis of the solar system supplies one illustration of this law, let us assume that the matter of which the sun and planets consist was once in a diffused form; and that from the gravitation of its atoms there resulted a gradual concentration. By the hypothesis, the solar system in its nascent state existed as an indefinitely extended and nearly homogeneous medium – a medium almost homogeneous in density, in temperature, and in other physical attributes. The first advance towards consolidation resulted in a differentiation between the occupied space which the nebulous mass still filled, and the unoccupied space which it previously filled. There simultaneously resulted a contrast in density and a contrast in temperature, between the interior and the exterior of this mass. And at the same time there arose throughout it rotatory movements, whose velocities varied according to their distances from its centre. These differentiations increased in number and degree until there was evolved the organized group of sun, planets, and satellites, which we now know – a group which presents numerous contrasts of structure and action among its members. There are the immense contrasts between the sun and planets, in bulk and in weight; as well as the subordinate contrasts between one planet and another, and between the planets and their satellites. There is the similarly marked contrast between the sun as almost stationary, and the planets as moving round him with great velocity; while there are the secondary contrasts between the velocities and periods of the several planets, and between their simple revolutions and the double ones of their satellites, which have to move round their primaries while moving round the sun. There is the yet further strong contrast between the sun and the planets in respect of temperature; and there is reason to suppose that the planets and satellites differ from each other in their proper heat, as well as in the heat they receive from the sun.

When we bear in mind that, in addition to these various contrasts, the planets and satellites also differ in respect to their distances from each other and their primary; in respect to the inclinations of their orbits, the inclinations of their axes, their times of rotation on their axes, their specific gravities, and their physical constitutions; we see what a high degree of heterogeneity the solar system exhibits, when compared with the almost complete homogeneity of the nebulous mass out of which it is supposed to have originated. Passing from this hypothetical illustration, which must be taken for what it is worth, without prejudice to the general argument, let us descend to a more certain order of evidence. It is now generally agreed among geologists that the Earth was at first a mass of molten matter; and that it is still fluid and incandescent at the distance of a few miles beneath its surface. Originally, then, it was homogeneous in consistence, and, in virtue of the circulation that takes place in heated fluids, must have been comparatively homogeneous in temperature; and it must have been surrounded by an atmosphere consisting partly of the elements of air and water, and partly of those various other elements which assume a gaseous form at high temperatures. That slow cooling by radiation which is still going on at an inappreciable rate, and which, though originally far more rapid than now, necessarily required an immense time to produce any decided change, must ultimately have resulted in the solidification of the portion most able to part with its heat – namely, the surface. In the thin crust thus formed we have the first marked differentiation. A still further cooling, a consequent thickening of this crust, and an accompanying deposition of all solidifiable elements contained in the atmosphere, must finally have been followed by the condensation of the water previously existing as vapour. A second marked differentiation must thus have arisen: and as the condensation must have taken place on the coolest parts of the surface – namely, about the poles – there must thus have resulted the first geographical distinction of parts. To these illustrations of growing heterogeneity, which, though deduced from the known laws of matter, may be regarded as more or less hypothetical, Geology adds an extensive series that have been inductively established.

Its investigations show that the Earth has been continually becoming more heterogeneous in virtue of the multiplication of the strata which form its crust; further, that it has been becoming more heterogeneous in respect of the composition of these strata, the latter of which, being made from the detritus of the older ones, are many of them rendered highly complex by the mixture of materials they contain; and that this heterogeneity has been vastly increased by the action of the Earth's still molten nucleus upon its envelope, whence have resulted not only a great variety of igneous rocks, but the tilting up of sedimentary strata at all angles, the formation of faults and metallic veins, the production of endless dislocations and irregularities. Yet again, geologists teach us that the Earth's surface has been growing more varied in elevation – that the most ancient mountain systems are the smallest, and the Andes and Himalayas the most modern; while in all probability there have been corresponding changes in the bed of the ocean. As a consequence of these ceaseless differentiations, we now find that no considerable portion of the Earth's exposed surface is like any other portion, either in contour, in geologic structure, or in chemical composition; and that in most parts it changes from mile to mile in all these characteristics.

Moreover, it must not be forgotten that there has been simultaneously going on a gradual differentiation of climates. As fast as the Earth cooled and its crust solidified, there arose appreciable differences in temperature between those parts of its surface most exposed to the sun and those less exposed. Gradually, as the cooling progressed, these differences became more pronounced; until there finally resulted those marked contrasts between regions of perpetual ice and snow, regions where winter and summer alternately reign for periods varying according to the latitude, and regions where summer follows summer with scarcely an appreciable variation. At the same time the successive elevations and subsidences of different portions of the Earth's crust, tending as they have done to the present irregular distribution of land and sea, have entailed various modifications of climate beyond those dependent on latitude; while a yet further series of such modifications have been produced by increasing differences of elevation in the land, which have in sundry places brought arctic, temperate, and tropical climates to within a few miles of each other. And the general result of these changes is, that not only has every extensive region its own meteorologic conditions, but that every locality in each region differs more or less from others in those conditions, as in its structure, its contour, its soil. Thus, between our existing Earth, the phenomena of whose varied crust neither geographers, geologists, mineralogists, nor meteorologists have yet enumerated, and the molten globe out of which it was evolved, the contrast in heterogeneity is sufficiently striking.

When from the Earth itself we turn to the plants and animals that have lived, or still live, upon its surface, we find ourselves in some difficulty from lack of facts. That every existing organism has been developed out of the simple into the complex, is indeed the first established truth of all; and that every organism that has existed was similarly developed, is an inference which no physiologist will hesitate to draw. But when we pass from individual forms of life to Life in general, and inquire whether the same law is seen in the *ensemble* of its manifestations, – whether modern plants and animals are of more heterogeneous structure than ancient ones, and whether the Earth's present Flora and Fauna are more heterogeneous than the Flora and Fauna of the past, – we find the evidence so fragmentary, that every conclusion is open to dispute. Two-thirds of the Earth's surface being covered by water; a great part of the exposed land being inaccessible to, or untravelled by, the geologist; the greater part of the remainder having been scarcely more than glanced at; and even the most familiar portions, as England, having been so imperfectly explored that a new series of strata has been added within these four years, – it is manifestly impossible for us to say with any certainty what creatures have, and what have not, existed at any particular period. Considering the perishable nature of many of the lower organic forms, the metamorphosis of many sedimentary strata, and the gaps that occur among the rest, we shall see further reason for distrusting our deductions. On the one hand, the repeated discovery of vertebrate remains in strata previously supposed to contain none, – of reptiles where

only fish were thought to exist, – of mammals where it was believed there were no creatures higher than reptiles, – renders it daily more manifest how small is the value of negative evidence.

On the other hand, the worthlessness of the assumption that we have discovered the earliest, or anything like the earliest, organic remains, is becoming equally clear. That the oldest known sedimentary rocks have been greatly changed by igneous action, and that still older ones have been totally transformed by it, is becoming undeniable. And the fact that sedimentary strata earlier than any we know, have been melted up, being admitted, it must also be admitted that we cannot say how far back in time this destruction of sedimentary strata has been going on. Thus it is manifest that the title, *Palæozoic*, as applied to the earliest known fossiliferous strata, involves a *petitio principii*; and that, for aught we know to the contrary, only the last few chapters of the Earth's biological history may have come down to us. On neither side, therefore, is the evidence conclusive. Nevertheless we cannot but think that, scanty as they are, the facts, taken altogether, tend to show both that the more heterogeneous organisms have been evolved in the later geologic periods, and that Life in general has been more heterogeneously manifested as time has advanced. Let us cite, in illustration, the one case of the *vertebrata*. The earliest known vertebrate remains are those of Fishes; and Fishes are the most homogeneous of the vertebrata. Later and more heterogeneous are Reptiles. Later still, and more heterogeneous still, are Mammals and Birds. If it be said, as it may fairly be said, that the Palæozoic deposits, not being estuary deposits, are not likely to contain the remains of terrestrial vertebrata, which may nevertheless have existed at that era, we reply that we are merely pointing to the leading facts, *such as they are*.

But to avoid any such criticism, let us take the mammalian subdivision only. The earliest known remains of mammals are those of small marsupials, which are the lowest of the mammalian type; while, conversely, the highest of the mammalian type – Man – is the most recent. The evidence that the vertebrate fauna, as a whole, has become more heterogeneous, is considerably stronger. To the argument that the vertebrate fauna of the Palæozoic period, consisting, so far as we know, entirely of Fishes, was less heterogeneous than the modern vertebrate fauna, which includes Reptiles, Birds, and Mammals, of multitudinous genera, it may be replied, as before, that estuary deposits of the Palæozoic period, could we find them, might contain other orders of vertebrata. But no such reply can be made to the argument that whereas the marine vertebrata of the Palæozoic period consisted entirely of cartilaginous fishes, the marine vertebrata of later periods include numerous genera of osseous fishes; and that, therefore, the later marine vertebrate faunas are more heterogeneous than the oldest known one. Nor, again, can any such reply be made to the fact that there are far more numerous orders and genera of mammalian remains in the tertiary formations than in the secondary formations. Did we wish merely to make out the best case, we might dwell upon the opinion of Dr. Carpenter, who says that "the general facts of Palæontology appear to sanction the belief, that *the same plan* may be traced out in what may be called *the general life of the globe*, as in *the individual life* of every one of the forms of organized being which now people it." Or we might quote, as decisive, the judgment of Professor Owen, who holds that the earlier examples of each group of creatures severally departed less widely from archetypal generality than the later ones – were severally less unlike the fundamental form common to the group as a whole; that is to say – constituted a less heterogeneous group of creatures; and who further upholds the doctrine of a biological progression. But in deference to an authority for whom we have the highest respect, who considers that the evidence at present obtained does not justify a verdict either way, we are content to leave the question open.

Whether an advance from the homogeneous to the heterogeneous is or is not displayed in the biological history of the globe, it is clearly enough displayed in the progress of the latest and most heterogeneous creature – Man. It is alike true that, during the period in which the Earth has been peopled, the human organism has grown more heterogeneous among the civilized divisions of the species; and that the species, as a whole, has been growing more heterogeneous in virtue of the multiplication of races and the differentiation of these races from each other.

In proof of the first of these positions, we may cite the fact that, in the relative development of the limbs, the civilized man departs more widely from the general type of the placental mammalia than do the lower human races. While often possessing well-developed body and arms, the Papuan has extremely small legs: thus reminding us of the quadrumana, in which there is no great contrast in size between the hind and fore limbs. But in the European, the greater length and massiveness of the legs has become very marked – the fore and hind limbs are relatively more heterogeneous. Again, the greater ratio which the cranial bones bear to the facial bones illustrates the same truth. Among the vertebrata in general, progress is marked by an increasing heterogeneity in the vertebral column, and more especially in the vertebræ constituting the skull: the higher forms being distinguished by the relatively larger size of the bones which cover the brain, and the relatively smaller size of those which form the jaw, &c. Now, this characteristic, which is stronger in Man than in any other creature, is stronger in the European than in the savage. Moreover, judging from the greater extent and variety of faculty he exhibits, we may infer that the civilized man has also a more complex or heterogeneous nervous system than the uncivilized man: and indeed the fact is in part visible in the increased ratio which his cerebrum bears to the subjacent ganglia.

If further elucidation be needed, we may find it in every nursery. The infant European has sundry marked points of resemblance to the lower human races; as in the flatness of the alæ of the nose, the depression of its bridge, the divergence and forward opening of the nostrils, the form of the lips, the absence of a frontal sinus, the width between the eyes, the smallness of the legs. Now, as the developmental process by which these traits are turned into those of the adult European, is a continuation of that change from the homogeneous to the heterogeneous displayed during the previous evolution of the embryo, which every physiologist will admit; it follows that the parallel developmental process by which the like traits of the barbarous races have been turned into those of the civilized races, has also been a continuation of the change from the homogeneous to the heterogeneous. The truth of the second position – that Mankind, as a whole, have become more heterogeneous – is so obvious as scarcely to need illustration. Every work on Ethnology, by its divisions and subdivisions of races, bears testimony to it. Even were we to admit the hypothesis that Mankind originated from several separate stocks, it would still remain true, that as, from each of these stocks, there have sprung many now widely different tribes, which are proved by philological evidence to have had a common origin, the race as a whole is far less homogeneous than it once was. Add to which, that we have, in the Anglo-Americans, an example of a new variety arising within these few generations; and that, if we may trust to the description of observers, we are likely soon to have another such example in Australia.

On passing from Humanity under its individual form, to Humanity as socially embodied, we find the general law still more variously exemplified. The change from the homogeneous to the heterogeneous is displayed equally in the progress of civilization as a whole, and in the progress of every tribe or nation; and is still going on with increasing rapidity. As we see in existing barbarous tribes, society in its first and lowest form is a homogeneous aggregation of individuals having like powers and like functions: the only marked difference of function being that which accompanies difference of sex. Every man is warrior, hunter, fisherman, tool-maker, builder; every woman performs the same drudgeries; every family is self-sufficing, and save for purposes of aggression and defence, might as well live apart from the rest. Very early, however, in the process of social evolution, we find an incipient differentiation between the governing and the governed. Some kind of chieftainship seems coeval with the first advance from the state of separate wandering families to that of a nomadic tribe. The authority of the strongest makes itself felt among a body of savages as in a herd of animals, or a posse of schoolboys. At first, however, it is indefinite, uncertain; is shared by others of scarcely inferior power; and is unaccompanied by any difference in occupation or style of living: the first ruler kills his own game, makes his own weapons, builds his own hut, and economically considered, does not differ from others of his tribe. Gradually, as the tribe progresses,

the contrast between the governing and the governed grows more decided. Supreme power becomes hereditary in one family; the head of that family, ceasing to provide for his own wants, is served by others; and he begins to assume the sole office of ruling.

At the same time there has been arising a co-ordinate species of government – that of Religion. As all ancient records and traditions prove, the earliest rulers are regarded as divine personages. The maxims and commands they uttered during their lives are held sacred after their deaths, and are enforced by their divinely-descended successors; who in their turns are promoted to the pantheon of the race, there to be worshipped and propitiated along with their predecessors: the most ancient of whom is the supreme god, and the rest subordinate gods. For a long time these connate forms of government – civil and religious – continue closely associated. For many generations the king continues to be the chief priest, and the priesthood to be members of the royal race. For many ages religious law continues to contain more or less of civil regulation, and civil law to possess more or less of religious sanction; and even among the most advanced nations these two controlling agencies are by no means completely differentiated from each other.

Having a common root with these, and gradually diverging from them, we find yet another controlling agency – that of Manners or ceremonial usages. All titles of honour are originally the names of the god-king; afterwards of God and the king; still later of persons of high rank; and finally come, some of them, to be used between man and man. All forms of complimentary address were at first the expressions of submission from prisoners to their conqueror, or from subjects to their ruler, either human or divine – expressions that were afterwards used to propitiate subordinate authorities, and slowly descended into ordinary intercourse. All modes of salutation were once obeisances made before the monarch and used in worship of him after his death. Presently others of the god-descended race were similarly saluted; and by degrees some of the salutations have become the due of all.[1] Thus, no sooner does the originally homogeneous social mass differentiate into the governed and the governing parts, than this last exhibits an incipient differentiation into religious and secular – Church and State; while at the same time there begins to be differentiated from both, that less definite species of government which rules our daily intercourse – a species of government which, as we may see in heralds' colleges, in books of the peerage, in masters of ceremonies, is not without a certain embodiment of its own. Each of these is itself subject to successive differentiations. In the course of ages, there arises, as among ourselves, a highly complex political organization of monarch, ministers, lords and commons, with their subordinate administrative departments, courts of justice, revenue offices, &c., supplemented in the provinces by municipal governments, county governments, parish or union governments – all of them more or less elaborated. By its side there grows up a highly complex religious organization, with its various grades of officials, from archbishops down to sextons, its colleges, convocations, ecclesiastical courts, &c.; to all which must be added the ever multiplying independent sects, each with its general and local authorities. And at the same time there is developed a highly complex aggregation of customs, manners, and temporary fashions, enforced by society at large, and serving to control those minor transactions between man and man which are not regulated by civil and religious law. Moreover it is to be observed that this ever increasing heterogeneity in the governmental appliances of each nation, has been accompanied by an increasing heterogeneity in the governmental appliances of different nations; all of which are more or less unlike in their political systems and legislation, in their creeds and religious institutions, in their customs and ceremonial usages.

Simultaneously there has been going on a second differentiation of a more familiar kind; that, namely, by which the mass of the community has been segregated into distinct classes and orders of workers. While the governing part has undergone the complex development above detailed, the governed part has undergone an equally complex development, which has resulted in that minute

[1] For detailed proof of these assertions see essay on *Manners and Fashion*.

division of labour characterizing advanced nations. It is needless to trace out this progress from its first stages, up through the caste divisions of the East and the incorporated guilds of Europe, to the elaborate producing and distributing organization existing among ourselves. Political economists have long since described the evolution which, beginning with a tribe whose members severally perform the same actions each for himself, ends with a civilized community whose members severally perform different actions for each other; and they have further pointed out the changes through which the solitary producer of any one commodity is transformed into a combination of producers who, united under a master, take separate parts in the manufacture of such commodity. But there are yet other and higher phases of this advance from the homogeneous to the heterogeneous in the industrial organization of society.

Long after considerable progress has been made in the division of labour among different classes of workers, there is still little or no division of labour among the widely separated parts of the community; the nation continues comparatively homogeneous in the respect that in each district the same occupations are pursued. But when roads and other means of transit become numerous and good, the different districts begin to assume different functions, and to become mutually dependent. The calico manufacture locates itself in this county, the woollen-cloth manufacture in that; silks are produced here, lace there; stockings in one place, shoes in another; pottery, hardware, cutlery, come to have their special towns; and ultimately every locality becomes more or less distinguished from the rest by the leading occupation carried on in it. Nay, more, this subdivision of functions shows itself not only among the different parts of the same nation, but among different nations. That exchange of commodities which free-trade promises so greatly to increase, will ultimately have the effect of specializing, in a greater or less degree, the industry of each people. So that beginning with a barbarous tribe, almost if not quite homogeneous in the functions of its members, the progress has been, and still is, towards an economic aggregation of the whole human race; growing ever more heterogeneous in respect of the separate functions assumed by separate nations, the separate functions assumed by the local sections of each nation, the separate functions assumed by the many kinds of makers and traders in each town, and the separate functions assumed by the workers united in producing each commodity.

Not only is the law thus clearly exemplified in the evolution of the social organism, but it is exemplified with equal clearness in the evolution of all products of human thought and action, whether concrete or abstract, real or ideal. Let us take Language as our first illustration.

The lowest form of language is the exclamation, by which an entire idea is vaguely conveyed through a single sound; as among the lower animals. That human language ever consisted solely of exclamations, and so was strictly homogeneous in respect of its parts of speech, we have no evidence. But that language can be traced down to a form in which nouns and verbs are its only elements, is an established fact. In the gradual multiplication of parts of speech out of these primary ones – in the differentiation of verbs into active and passive, of nouns into abstract and concrete – in the rise of distinctions of mood, tense, person, of number and case – in the formation of auxiliary verbs, of adjectives, adverbs, pronouns, prepositions, articles – in the divergence of those orders, genera, species, and varieties of parts of speech by which civilized races express minute modifications of meaning – we see a change from the homogeneous to the heterogeneous. And it may be remarked, in passing, that it is more especially in virtue of having carried this subdivision of function to a greater extent and completeness, that the English language is superior to all others.

Another aspect under which we may trace the development of language is the differentiation of words of allied meanings. Philology early disclosed the truth that in all languages words may be grouped into families having a common ancestry. An aboriginal name applied indiscriminately to each of an extensive and ill-defined class of things or actions, presently undergoes modifications by which the chief divisions of the class are expressed. These several names springing from the primitive root, themselves become the parents of other names still further modified. And by the aid

of those systematic modes which presently arise, of making derivations and forming compound terms expressing still smaller distinctions, there is finally developed a tribe of words so heterogeneous in sound and meaning, that to the uninitiated it seems incredible that they should have had a common origin. Meanwhile from other roots there are being evolved other such tribes, until there results a language of some sixty thousand or more unlike words, signifying as many unlike objects, qualities, acts.

Yet another way in which language in general advances from the homogeneous to the heterogeneous, is in the multiplication of languages. Whether as Max Müller and Bunsen think, all languages have grown from one stock, or whether, as some philologists say, they have grown from two or more stocks, it is clear that since large families of languages, as the Indo-European, are of one parentage, they have become distinct through a process of continuous divergence. The same diffusion over the Earth's surface which has led to the differentiation of the race, has simultaneously led to a differentiation of their speech: a truth which we see further illustrated in each nation by the peculiarities of dialect found in several districts. Thus the progress of Language conforms to the general law, alike in the evolution of languages, in the evolution of families of words, and in the evolution of parts of speech.

On passing from spoken to written language, we come upon several classes of facts, all having similar implications. Written language is connate with Painting and Sculpture; and at first all three are appendages of Architecture, and have a direct connection with the primary form of all Government – the theocratic. Merely noting by the way the fact that sundry wild races, as for example the Australians and the tribes of South Africa, are given to depicting personages and events upon the walls of caves, which are probably regarded as sacred places, let us pass to the case of the Egyptians. Among them, as also among the Assyrians, we find mural paintings used to decorate the temple of the god and the palace of the king (which were, indeed, originally identical); and as such they were governmental appliances in the same sense that state-pageants and religious feasts were. Further, they were governmental appliances in virtue of representing the worship of the god, the triumphs of the god-king, the submission of his subjects, and the punishment of the rebellious. And yet again they were governmental, as being the products of an art reverenced by the people as a sacred mystery. From the habitual use of this pictorial representation there naturally grew up the but slightly-modified practice of picture-writing – a practice which was found still extant among the Mexicans at the time they were discovered. By abbreviations analogous to those still going on in our own written and spoken language, the most familiar of these pictured figures were successively simplified; and ultimately there grew up a system of symbols, most of which had but a distant resemblance to the things for which they stood. The inference that the hieroglyphics of the Egyptians were thus produced, is confirmed by the fact that the picture-writing of the Mexicans was found to have given birth to a like family of ideographic forms; and, among them, as among the Egyptians, these had been partially differentiated into the *kuriological* or imitative, and the *tropical* or symbolic: which were, however, used together in the same record. In Egypt, written language underwent a further differentiation: whence resulted the *hieratic* and the *epistolographic* or *enchorial*: both of which are derived from the original hieroglyphic. At the same time we find that for the expression of proper names which could not be otherwise conveyed, phonetic symbols were employed; and though it is alleged that the Egyptians never actually achieved complete alphabetic writing, yet it can scarcely be doubted that these phonetic symbols occasionally used in aid of their ideographic ones, were the germs out of which alphabetic writing grew. Once having become separate from hieroglyphics, alphabetic writing itself underwent numerous differentiations – multiplied alphabets were produced; between most of which, however, more or less connection can still be traced. And in each civilized nation there has now grown up, for the representation of one set of sounds, several sets of written signs used for distinct purposes. Finally, through a yet more important differentiation came printing; which, uniform in kind as it was at first, has since become multiform.

While written language was passing through its earlier stages of development, the mural decoration which formed its root was being differentiated into Painting and Sculpture. The gods, kings, men, and animals represented, were originally marked by indented outlines and coloured. In most cases these outlines were of such depth, and the object they circumscribed so far rounded and marked out in its leading parts, as to form a species of work intermediate between intaglio and bas-relief. In other cases we see an advance upon this: the raised spaces between the figures being chiselled off, and the figures themselves appropriately tinted, a painted bas-relief was produced. The restored Assyrian architecture at Sydenham exhibits this style of art carried to greater perfection – the persons and things represented, though still barbarously coloured, are carved out with more truth and in greater detail: and in the winged lions and bulls used for the angles of gateways, we may see a considerable advance towards a completely sculptured figure; which, nevertheless, is still coloured, and still forms part of the building. But while in Assyria the production of a statue proper seems to have been little, if at all, attempted, we may trace in Egyptian art the gradual separation of the sculptured figure from the wall. A walk through the collection in the British Museum will clearly show this; while it will at the same time afford an opportunity of observing the evident traces which the independent statues bear of their derivation from bas-relief: seeing that nearly all of them not only display that union of the limbs with the body which is the characteristic of bas-relief, but have the back of the statue united from head to foot with a block which stands in place of the original wall. Greece repeated the leading stages of this progress. As in Egypt and Assyria, these twin arts were at first united with each other and with their parent, Architecture, and were the aids of Religion and Government. On the friezes of Greek temples, we see coloured bas-reliefs representing sacrifices, battles, processions, games – all in some sort religious. On the pediments we see painted sculptures more or less united with the tympanum, and having for subjects the triumphs of gods or heroes. Even when we come to statues that are definitely separated from the buildings to which they pertain, we still find them coloured; and only in the later periods of Greek civilization does the differentiation of sculpture from painting appear to have become complete.

In Christian art we may clearly trace a parallel re-genesis. All early paintings and sculptures throughout Europe were religious in subject – represented Christs, crucifixions, virgins, holy families, apostles, saints. They formed integral parts of church architecture, and were among the means of exciting worship; as in Roman Catholic countries they still are. Moreover, the early sculptures of Christ on the cross, of virgins, of saints, were coloured: and it needs but to call to mind the painted madonnas and crucifixes still abundant in continental churches and highways, to perceive the significant fact that painting and sculpture continue in closest connection with each other where they continue in closest connection with their parent. Even when Christian sculpture was pretty clearly differentiated from painting, it was still religious and governmental in its subjects – was used for tombs in churches and statues of kings: while, at the same time, painting, where not purely ecclesiastical, was applied to the decoration of palaces, and besides representing royal personages, was almost wholly devoted to sacred legends. Only in quite recent times have painting and sculpture become entirely secular arts. Only within these few centuries has painting been divided into historical, landscape, marine, architectural, genre, animal, still-life, &c., and sculpture grown heterogeneous in respect of the variety of real and ideal subjects with which it occupies itself.

Strange as it seems then, we find it no less true, that all forms of written language, of painting, and of sculpture, have a common root in the politico-religious decorations of ancient temples and palaces. Little resemblance as they now have, the bust that stands on the console, the landscape that hangs against the wall, and the copy of the *Times* lying upon the table, are remotely akin; not only in nature, but by extraction. The brazen face of the knocker which the postman has just lifted, is related not only to the woodcuts of the *Illustrated London News* which he is delivering, but to the characters of the *billet-doux* which accompanies it. Between the painted window, the prayer-book on which its light falls, and the adjacent monument, there is consanguinity. The effigies on our

coins, the signs over shops, the figures that fill every ledger, the coats of arms outside the carriage panel, and the placards inside the omnibus, are, in common with dolls, blue-books, paper-hangings, lineally descended from the rude sculpture-paintings in which the Egyptians represented the triumphs and worship of their god-kings. Perhaps no example can be given which more vividly illustrates the multiplicity and heterogeneity of the products that in course of time may arise by successive differentiations from a common stock.

Before passing to other classes of facts, it should be observed that the evolution of the homogeneous into the heterogeneous is displayed not only in the separation of Painting and Sculpture from Architecture and from each other, and in the greater variety of subjects they embody, but it is further shown in the structure of each work. A modern picture or statue is of far more heterogeneous nature than an ancient one. An Egyptian sculpture-fresco represents all its figures as on one plane – that is, at the same distance from the eye; and so is less heterogeneous than a painting that represents them as at various distances from the eye. It exhibits all objects as exposed to the same degree of light; and so is less heterogeneous than a painting which exhibits different objects and different parts of each object as in different degrees of light. It uses scarcely any but the primary colours, and these in their full intensity; and so is less heterogeneous than a painting which, introducing the primary colours but sparingly, employs an endless variety of intermediate tints, each of heterogeneous composition, and differing from the rest not only in quality but in intensity. Moreover, we see in these earliest works a great uniformity of conception. The same arrangement of figures is perpetually reproduced – the same actions, attitudes, faces, dresses. In Egypt the modes of representation were so fixed that it was sacrilege to introduce a novelty; and indeed it could have been only in consequence of a fixed mode of representation that a system of hieroglyphics became possible. The Assyrian bas-reliefs display parallel characters. Deities, kings, attendants, winged figures and animals, are severally depicted in like positions, holding like implements, doing like things, and with like expression or non-expression of face. If a palm-grove is introduced, all the trees are of the same height, have the same number of leaves, and are equidistant. When water is imitated, each wave is a counterpart of the rest; and the fish, almost always of one kind, are evenly distributed over the surface. The beards of the kings, the gods, and the winged figures, are everywhere similar: as are the manes of the lions, and equally so those of the horses. Hair is represented throughout by one form of curl. The king's beard is quite architecturally built up of compound tiers of uniform curls, alternating with twisted tiers placed in a transverse direction, and arranged with perfect regularity; and the terminal tufts of the bulls' tails are represented in exactly the same manner. Without tracing out analogous facts in early Christian art, in which, though less striking, they are still visible, the advance in heterogeneity will be sufficiently manifest on remembering that in the pictures of our own day the composition is endlessly varied; the attitudes, faces, expressions, unlike; the subordinate objects different in size, form, position, texture; and more or less of contrast even in the smallest details. Or, if we compare an Egyptian statue, seated bolt upright on a block, with hands on knees, fingers outspread and parallel, eyes looking straight forward, and the two sides perfectly symmetrical in every particular, with a statue of the advanced Greek or the modern school, which is asymmetrical in respect of the position of the head, the body, the limbs, the arrangement of the hair, dress, appendages, and in its relations to neighbouring objects, we shall see the change from the homogeneous to the heterogeneous clearly manifested.

In the co-ordinate origin and gradual differentiation of Poetry, Music and Dancing, we have another series of illustrations. Rhythm in speech, rhythm in sound, and rhythm in motion, were in the beginning parts of the same thing, and have only in process of time become separate things. Among various existing barbarous tribes we find them still united. The dances of savages are accompanied by some kind of monotonous chant, the clapping of hands, the striking of rude instruments: there are measured movements, measured words, and measured tones; and the whole ceremony, usually having reference to war or sacrifice, is of governmental character. In the early records of the historic races we similarly find these three forms of metrical action united in religious festivals. In the Hebrew

writings we read that the triumphal ode composed by Moses on the defeat of the Egyptians, was sung to an accompaniment of dancing and timbrels. The Israelites danced and sang "at the inauguration of the golden calf. And as it is generally agreed that this representation of the Deity was borrowed from the mysteries of Apis, it is probable that the dancing was copied from that of the Egyptians on those occasions." There was an annual dance in Shiloh on the sacred festival; and David danced before the ark. Again, in Greece the like relation is everywhere seen: the original type being there, as probably in other cases, a simultaneous chanting and mimetic representation of the life and adventures of the god. The Spartan dances were accompanied by hymns and songs; and in general the Greeks had "no festivals or religious assemblies but what were accompanied with songs and dances" – both of them being forms of worship used before altars. Among the Romans, too, there were sacred dances: the Salian and Lupercalian being named as of that kind. And even in Christian countries, as at Limoges, in comparatively recent times, the people have danced in the choir in honour of a saint. The incipient separation of these once united arts from each other and from religion, was early visible in Greece. Probably diverging from dances partly religious, partly warlike, as the Corybantian, came the war dances proper, of which there were various kinds; and from these resulted secular dances. Meanwhile Music and Poetry, though still united, came to have an existence separate from dancing. The aboriginal Greek poems, religious in subject, were not recited, but chanted; and though at first the chant of the poet was accompanied by the dance of the chorus, it ultimately grew into independence. Later still, when the poem had been differentiated into epic and lyric – when it became the custom to sing the lyric and recite the epic – poetry proper was born. As during the same period musical instruments were being multiplied, we may presume that music came to have an existence apart from words. And both of them were beginning to assume other forms besides the religious. Facts, having like implications might be cited from the histories of later times and peoples: as the practices of our own early minstrels, who sang to the harp heroic narratives versified by themselves to music of their own composition: thus uniting the now separate offices of poet, composer, vocalist, and instrumentalist. But, without further illustration, the common origin and gradual differentiation of Dancing, Poetry, and Music will be sufficiently manifest.

The advance from the homogeneous to the heterogeneous is displayed not only in the separation of these arts from each other and from religion, but also in the multiplied differentiations which each of them afterwards undergoes. Not to dwell upon the numberless kinds of dancing that have, in course of time, come into use; and not to occupy space in detailing the progress of poetry, as seen in the development of the various forms of metre, of rhyme, and of general organization; let us confine our attention to music as a type of the group. As argued by Dr. Burney, and as implied by the customs of still extant barbarous races, the first musical instruments were, without doubt, percussive – sticks, calabashes, tom-toms – and were used simply to mark the time of the dance; and in this constant repetition of the same sound, we see music in its most homogeneous form.

The Egyptians had a lyre with three strings. The early lyre of the Greeks had four, constituting their tetrachord. In course of some centuries lyres of seven and eight strings were employed. And, by the expiration of a thousand years, they had advanced to their "great system" of the double octave. Through all which changes there of course arose a greater heterogeneity of melody. Simultaneously there came into use the different modes – Dorian, Ionian, Phrygian, Æolian, and Lydian – answering to our keys; and of these there were ultimately fifteen. As yet, however, there was but little heterogeneity in the time of their music.

Instrumental music during this period being merely the accompaniment of vocal music, and vocal music being completely subordinated to words, the singer being also the poet, chanting his own compositions and making the lengths of his notes agree with the feet of his verses, – there unavoidably arose a tiresome uniformity of measure, which, as Dr. Burney says, "no resources of melody could disguise." Lacking the complex rhythm obtained by our equal bars and unequal notes the only rhythm was that produced by the quantity of the syllables and was of necessity comparatively monotonous.

And further, it may be observed that the chant thus resulting, being like recitative, was much less clearly differentiated from ordinary speech than is our modern song.

Nevertheless, in virtue of the extended range of notes in use, the variety of modes, the occasional variations of time consequent on changes of metre, and the multiplication of instruments, music had, towards the close of Greek civilization, attained to considerable heterogeneity – not indeed as compared with our music, but as compared with that which preceded it. As yet, however, there existed nothing but melody: harmony was unknown. It was not until Christian church-music had reached some development, that music in parts was evolved; and then it came into existence through a very unobtrusive differentiation. Difficult as it may be to conceive *à priori* how the advance from melody to harmony could take place without a sudden leap, it is none the less true that it did so. The circumstance which prepared the way for it was the employment of two choirs singing alternately the same air. Afterwards it became the practice – very possibly first suggested by a mistake – for the second choir to commence before the first had ceased; thus producing a fugue.

With the simple airs then in use, a partially harmonious fugue might not improbably thus result: and a very partially harmonious fugue satisfied the ears of that age, as we know from still preserved examples. The idea having once been given, the composing of airs productive of fugal harmony would naturally grow up; as in some way it *did* grow up out of this alternate choir-singing. And from the fugue to concerted music of two, three, four, and more parts, the transition was easy. Without pointing out in detail the increasing complexity that resulted from introducing notes of various lengths, from the multiplication of keys, from the use of accidentals, from varieties of time, and so forth, it needs but to contrast music as it is, with music as it was, to see how immense is the increase of heterogeneity. We see this if, looking at music in its *ensemble*, we enumerate its many different genera and species – if we consider the divisions into vocal, instrumental, and mixed; and their subdivisions into music for different voices and different instruments – if we observe the many forms of sacred music, from the simple hymn, the chant, the canon, motet, anthem, &c., up to the oratorio; and the still more numerous forms of secular music, from the ballad up to the serenata, from the instrumental solo up to the symphony.

Again, the same truth is seen on comparing any one sample of aboriginal music with a sample of modern music – even an ordinary song for the piano; which we find to be relatively highly heterogeneous, not only in respect of the varieties in the pitch and in the length of the notes, the number of different notes sounding at the same instant in company with the voice, and the variations of strength with which they are sounded and sung, but in respect of the changes of key, the changes of time, the changes of *timbre* of the voice, and the many other modifications of expression. While between the old monotonous dance-chant and a grand opera of our own day, with its endless orchestral complexities and vocal combinations, the contrast in heterogeneity is so extreme that it seems scarcely credible that the one should have been the ancestor of the other.

Were they needed, many further illustrations might be cited. Going back to the early time when the deeds of the god-king, chanted and mimetically represented in dances round his altar, were further narrated in picture-writings on the walls of temples and palaces, and so constituted a rude literature, we might trace the development of Literature through phases in which, as in the Hebrew Scriptures, it presents in one work theology, cosmogony, history, biography, civil law, ethics, poetry; through other phases in which, as in the Iliad, the religious, martial, historical, the epic, dramatic, and lyric elements are similarly commingled; down to its present heterogeneous development, in which its divisions and subdivisions are so numerous and varied as to defy complete classification. Or we might trace out the evolution of Science; beginning with the era in which it was not yet differentiated from Art, and was, in union with Art, the handmaid of Religion; passing through the era in which the sciences were so few and rudimentary, as to be simultaneously cultivated by the same philosophers; and ending with the era in which the genera and species are so numerous that few can enumerate

them, and no one can adequately grasp even one genus. Or we might do the like with Architecture, with the Drama, with Dress.

But doubtless the reader is already weary of illustrations; and our promise has been amply fulfilled. We believe we have shown beyond question, that that which the German physiologists have found to be the law of organic development, is the law of all development. The advance from the simple to the complex, through a process of successive differentiations, is seen alike in the earliest changes of the Universe to which we can reason our way back; and in the earliest changes which we can inductively establish; it is seen in the geologic and climatic evolution of the Earth, and of every single organism on its surface; it is seen in the evolution of Humanity, whether contemplated in the civilized individual, or in the aggregation of races; it is seen in the evolution of Society in respect alike of its political, its religious, and its economical organization; and it is seen in the evolution of all those endless concrete and abstract products of human activity which constitute the environment of our daily life. From the remotest past which Science can fathom, up to the novelties of yesterday, that in which Progress essentially consists, is the transformation of the homogeneous into the heterogeneous.

And now, from this uniformity of procedure, may we not infer some fundamental necessity whence it results? May we not rationally seek for some all-pervading principle which determines this all-pervading process of things? Does not the universality of the *law* imply a universal *cause*?

That we can fathom such cause, noumenally considered, is not to be supposed. To do this would be to solve that ultimate mystery which must ever transcend human intelligence. But it still may be possible for us to reduce the law of all Progress, above established, from the condition of an empirical generalization, to the condition of a rational generalization. Just as it was possible to interpret Kepler's laws as necessary consequences of the law of gravitation; so it may be possible to interpret this law of Progress, in its multiform manifestations, as the necessary consequence of some similarly universal principle. As gravitation was assignable as the *cause* of each of the groups of phenomena which Kepler formulated; so may some equally simple attribute of things be assignable as the cause of each of the groups of phenomena formulated in the foregoing pages. We may be able to affiliate all these varied and complex evolutions of the homogeneous into the heterogeneous, upon certain simple facts of immediate experience, which, in virtue of endless repetition, we regard as necessary.

The probability of a common cause, and the possibility of formulating it, being granted, it will be well, before going further, to consider what must be the general characteristics of such cause, and in what direction we ought to look for it. We can with certainty predict that it has a high degree of generality; seeing that it is common to such infinitely varied phenomena: just in proportion to the universality of its application must be the abstractness of its character. We need not expect to see in it an obvious solution of this or that form of Progress; because it equally refers to forms of Progress bearing little apparent resemblance to them: its association with multiform orders of facts, involves its dissociation from any particular order of facts. Being that which determines Progress of every kind – astronomic, geologic, organic, ethnologic, social, economic, artistic, &c. – it must be concerned with some fundamental attribute possessed in common by these; and must be expressible in terms of this fundamental attribute. The only obvious respect in which all kinds of Progress are alike, is, that they are modes of *change*; and hence, in some characteristic of changes in general, the desired solution will probably be found. We may suspect *à priori* that in some law of change lies the explanation of this universal transformation of the homogeneous into the heterogeneous. Thus much premised, we pass at once to the statement of the law, which is this: —*Every active force produces more than one change – every cause produces more than one effect.*

Before this law can be duly comprehended, a few examples must be looked at. When one body is struck against another, that which we usually regard as the effect, is a change of position or motion in one or both bodies. But a moment's thought shows us that this is a careless and very incomplete view of the matter. Besides the visible mechanical result, sound is produced; or, to speak accurately, a vibration in one or both bodies, and in the surrounding air: and under some circumstances we call this

the effect. Moreover, the air has not only been made to vibrate, but has had sundry currents caused in it by the transit of the bodies. Further, there is a disarrangement of the particles of the two bodies in the neighbourhood of their point of collision; amounting in some cases to a visible condensation. Yet more, this condensation is accompanied by the disengagement of heat. In some cases a spark – that is, light – results, from the incandescence of a portion struck off; and sometimes this incandescence is associated with chemical combination.

Thus, by the original mechanical force expended in the collision, at least five, and often more, different kinds of changes have been produced. Take, again, the lighting of a candle. Primarily this is a chemical change consequent on a rise of temperature. The process of combination having once been set going by extraneous heat, there is a continued formation of carbonic acid, water, &c. – in itself a result more complex than the extraneous heat that first caused it. But accompanying this process of combination there is a production of heat; there is a production of light; there is an ascending column of hot gases generated; there are currents established in the surrounding air. Moreover, the decomposition of one force into many forces does not end here: each of the several changes produced becomes the parent of further changes. The carbonic acid given off will by and by combine with some base; or under the influence of sunshine give up its carbon to the leaf of a plant. The water will modify the hygrometric state of the air around; or, if the current of hot gases containing it come against a cold body, will be condensed: altering the temperature, and perhaps the chemical state, of the surface it covers. The heat given out melts the subjacent tallow, and expands whatever it warms. The light, falling on various substances, calls forth from them reactions by which it is modified; and so divers colours are produced. Similarly even with these secondary actions, which may be traced out into ever-multiplying ramifications, until they become too minute to be appreciated. And thus it is with all changes whatever. No case can be named in which an active force does not evolve forces of several kinds, and each of these, other groups of forces. Universally the effect is more complex than the cause.

Doubtless the reader already foresees the course of our argument. This multiplication of results, which is displayed in every event of to-day, has been going on from the beginning; and is true of the grandest phenomena of the universe as of the most insignificant. From the law that every active force produces more than one change, it is an inevitable corollary that through all time there has been an ever-growing complication of things. Starting with the ultimate fact that every cause produces more than one effect, we may readily see that throughout creation there must have gone on, and must still go on, a never-ceasing transformation of the homogeneous into the heterogeneous. But let us trace out this truth in detail.[2]

Without committing ourselves to it as more than a speculation, though a highly probable one, let us again commence with the evolution of the solar system out of a nebulous medium.[3] From the mutual attraction of the atoms of a diffused mass whose form is unsymmetrical, there results not only condensation but rotation: gravitation simultaneously generates both the centripetal and the centrifugal forces. While the condensation and the rate of rotation are progressively increasing, the approach of the atoms necessarily generates a progressively increasing temperature. As this temperature rises, light begins to be evolved; and ultimately there results a revolving sphere of fluid matter radiating intense heat and light – a sun.

There are good reasons for believing that, in consequence of the high tangential velocity, and consequent centrifugal force, acquired by the outer parts of the condensing nebulous mass, there must

[2] A correlative truth which ought also to be taken into account (that the state of homogeneity is one of unstable equilibrium), but which it would greatly encumber the argument to exemplify in connection with the above, will be found developed in the essay on *Transcendental Physiology*.

[3] The idea that the Nebular Hypothesis has been disproved because what were thought to be existing nebulæ have been resolved into clusters of stars is almost beneath notice. *A priori* it was highly improbable, if not impossible, that nebulous masses should still remain uncondensed, while others have been condensed millions of years ago.

be a periodical detachment of rotating rings; and that, from the breaking up of these nebulous rings, there must arise masses which in the course of their condensation repeat the actions of the parent mass, and so produce planets and their satellites – an inference strongly supported by the still extant rings of Saturn.

Should it hereafter be satisfactorily shown that planets and satellites were thus generated, a striking illustration will be afforded of the highly heterogeneous effects produced by the primary homogeneous cause; but it will serve our present purpose to point to the fact that from the mutual attraction of the particles of an irregular nebulous mass there result condensation, rotation, heat, and light.

It follows as a corollary from the Nebular Hypothesis, that the Earth must at first have been incandescent; and whether the Nebular Hypothesis be true or not, this original incandescence of the Earth is now inductively established – or, if not established, at least rendered so highly probable that it is a generally admitted geological doctrine. Let us look first at the astronomical attributes of this once molten globe. From its rotation there result the oblateness of its form, the alternations of day and night, and (under the influence of the moon) the tides, aqueous and atmospheric. From the inclination of its axis, there result the precession of the equinoxes and the many differences of the seasons, both simultaneous and successive, that pervade its surface. Thus the multiplication of effects is obvious. Several of the differentiations due to the gradual cooling of the Earth have been already noticed – as the formation of a crust, the solidification of sublimed elements, the precipitation of water, &c., – and we here again refer to them merely to point out that they are simultaneous effects of the one cause, diminishing heat.

Let us now, however, observe the multiplied changes afterwards arising from the continuance of this one cause. The cooling of the Earth involves its contraction. Hence the solid crust first formed is presently too large for the shrinking nucleus; and as it cannot support itself, inevitably follows the nucleus. But a spheroidal envelope cannot sink down into contact with a smaller internal spheroid, without disruption; it must run into wrinkles as the rind of an apple does when the bulk of its interior decreases from evaporation. As the cooling progresses and the envelope thickens, the ridges consequent on these contractions must become greater, rising ultimately into hills and mountains; and the later systems of mountains thus produced must not only be higher, as we find them to be, but they must be longer, as we also find them to be. Thus, leaving out of view other modifying forces, we see what immense heterogeneity of surface has arisen from the one cause, loss of heat – a heterogeneity which the telescope shows us to be paralleled on the face of the moon, where aqueous and atmospheric agencies have been absent.

But we have yet to notice another kind of heterogeneity of surface similarly and simultaneously caused. While the Earth's crust was still thin, the ridges produced by its contraction must not only have been small, but the spaces between these ridges must have rested with great evenness upon the subjacent liquid spheroid; and the water in those arctic and antarctic regions in which it first condensed, must have been evenly distributed. But as fast as the crust grew thicker and gained corresponding strength, the lines of fracture from time to time caused in it, must have occurred at greater distances apart; the intermediate surfaces must have followed the contracting nucleus with less uniformity; and there must have resulted larger areas of land and water. If any one, after wrapping up an orange in wet tissue paper, and observing not only how small are the wrinkles, but how evenly the intervening spaces lie upon the surface of the orange, will then wrap it up in thick cartridge-paper, and note both the greater height of the ridges and the much larger spaces throughout which the paper does not touch the orange, he will realize the fact, that as the Earth's solid envelope grew thicker, the areas of elevation and depression must have become greater. In place of islands more or less homogeneously scattered over an all-embracing sea, there must have gradually arisen heterogeneous arrangements of continent and ocean, such as we now know.

Once more, this double change in the extent and in the elevation of the lands, involved yet another species of heterogeneity, that of coast-line. A tolerably even surface raised out of the ocean, must have a simple, regular sea-margin; but a surface varied by table-lands and intersected by mountain-chains must, when raised out of the ocean, have an outline extremely irregular both in its leading features and in its details. Thus endless is the accumulation of geological and geographical results slowly brought about by this one cause – the contraction of the Earth.

When we pass from the agency which geologists term igneous, to aqueous and atmospheric agencies, we see the like ever-growing complications of effects. The denuding actions of air and water have, from the beginning, been modifying every exposed surface; everywhere causing many different changes. Oxidation, heat, wind, frost, rain, glaciers, rivers, tides, waves, have been unceasingly producing disintegration; varying in kind and amount according to local circumstances. Acting upon a tract of granite, they here work scarcely an appreciable effect; there cause exfoliations of the surface, and a resulting heap of *débris* and boulders; and elsewhere, after decomposing the feldspar into a white clay, carry away this and the accompanying quartz and mica, and deposits them in separate beds, fluviatile and marine. When the exposed land consists of several unlike formations, sedimentary and igneous, the denudation produces changes proportionably more heterogeneous. The formations being disintegrable in different degrees, there follows an increased irregularity of surface. The areas drained by different rivers being differently constituted, these rivers carry down to the sea different combinations of ingredients; and so sundry new strata of distinct composition are formed.

And here indeed we may see very simply illustrated, the truth, which we shall presently have to trace out in more involved cases, that in proportion to the heterogeneity of the object or objects on which any force expends itself, is the heterogeneity of the results. A continent of complex structure, exposing many strata irregularly distributed, raised to various levels, tilted up at all angles, must, under the same denuding agencies, give origin to immensely multiplied results; each district must be differently modified; each river must carry down a different kind of detritus; each deposit must be differently distributed by the entangled currents, tidal and other, which wash the contorted shores; and this multiplication of results must manifestly be greatest where the complexity of the surface is greatest.

It is out of the question here to trace in detail the genesis of those endless complications described by Geology and Physical Geography: else we might show how the general truth, that every active force produces more than one change, is exemplified in the highly involved flow of the tides, in the ocean currents, in the winds, in the distribution of rain, in the distribution of heat, and so forth. But not to dwell upon these, let us, for the fuller elucidation of this truth in relation to the inorganic world, consider what would be the consequences of some extensive cosmical revolution – say the subsidence of Central America.

The immediate results of the disturbance would themselves be sufficiently complex. Besides the numberless dislocations of strata, the ejections of igneous matter, the propagation of earthquake vibrations thousands of miles around, the loud explosions, and the escape of gases; there would be the rush of the Atlantic and Pacific Oceans to supply the vacant space, the subsequent recoil of enormous waves, which would traverse both these oceans and produce myriads of changes along their shores, the corresponding atmospheric waves complicated by the currents surrounding each volcanic vent, and the electrical discharges with which such disturbances are accompanied. But these temporary effects would be insignificant compared with the permanent ones. The complex currents of the Atlantic and Pacific would be altered in direction and amount. The distribution of heat achieved by these ocean currents would be different from what it is. The arrangement of the isothermal lines, not even on the neighbouring continents, but even throughout Europe, would be changed. The tides would flow differently from what they do now. There would be more or less modification of the winds in their periods, strengths, directions, qualities. Rain would fall scarcely anywhere at the same times and in

the same quantities as at present. In short, the meteorological conditions thousands of miles off, on all sides, would be more or less revolutionized.

Thus, without taking into account the infinitude of modifications which these changes of climate would produce upon the flora and fauna, both of land and sea, the reader will see the immense heterogeneity of the results wrought out by one force, when that force expends itself upon a previously complicated area; and he will readily draw the corollary that from the beginning the complication has advanced at an increasing rate.

Before going on to show how organic progress also depends upon the universal law that every force produces more than one change, we have to notice the manifestation of this law in yet another species of inorganic progress – namely, chemical. The same general causes that have wrought out the heterogeneity of the Earth, physically considered, have simultaneously wrought out its chemical heterogeneity. Without dwelling upon the general fact that the forces which have been increasing the variety and complexity of geological formations, have, at the same time, been bringing into contact elements not previously exposed to each other under conditions favourable to union, and so have been adding to the number of chemical compounds, let us pass to the more important complications that have resulted from the cooling of the Earth. There is every reason to believe that at an extreme heat the elements cannot combine. Even under such heat as can be artificially produced, some very strong affinities yield, as for instance, that of oxygen for hydrogen; and the great majority of chemical compounds are decomposed at much lower temperatures. But without insisting upon the highly probable inference, that when the Earth was in its first state of incandescence there were no chemical combinations at all, it will suffice our purpose to point to the unquestionable fact that the compounds that can exist at the highest temperatures, and which must, therefore, have been the first that were formed as the Earth cooled, are those of the simplest constitutions. The protoxides – including under that head the alkalies, earths, &c. – are, as a class, the most stable compounds we know: most of them resisting decomposition by any heat we can generate. These, consisting severally of one atom of each component element, are combinations of the simplest order – are but one degree less homogeneous than the elements themselves. More heterogeneous than these, less stable, and therefore later in the Earth's history, are the deutoxides, tritoxides, peroxides, &c.; in which two, three, four, or more atoms of oxygen are united with one atom of metal or other element. Higher than these in heterogeneity are the hydrates; in which an oxide of hydrogen, united with an oxide of some other element, forms a substance whose atoms severally contain at least four ultimate atoms of three different kinds. Yet more heterogeneous and less stable still are the salts; which present us with compound atoms each made up of five, six, seven, eight, ten, twelve, or more atoms, of three, if not more, kinds. Then there are the hydrated salts, of a yet greater heterogeneity, which undergo partial decomposition at much lower temperatures. After them come the further-complicated supersalts and double salts, having a stability again decreased; and so throughout. Without entering into qualifications for which we lack space, we believe no chemist will deny it to be a general law of these inorganic combinations that, *other things equal*, the stability decreases as the complexity increases.

And then when we pass to the compounds of organic chemistry, we find this general law still further exemplified: we find much greater complexity and much less stability. An atom of albumen, for instance, consists of 482 ultimate atoms of five different kinds. Fibrine, still more intricate in constitution, contains in each atom, 298 atoms of carbon, 40 of nitrogen, 2 of sulphur, 228 of hydrogen, and 92 of oxygen – in all, 660 atoms; or, more strictly speaking – equivalents. And these two substances are so unstable as to decompose at quite ordinary temperatures; as that to which the outside of a joint of roast meat is exposed. Thus it is manifest that the present chemical heterogeneity of the Earth's surface has arisen by degrees, as the decrease of heat has permitted; and that it has shown itself in three forms – first, in the multiplication of chemical compounds; second, in the greater number of different elements contained in the more modern of these compounds: and third, in the higher and more varied multiples in which these more numerous elements combine.

To say that this advance in chemical heterogeneity is due to the one cause, diminution of the Earth's temperature, would be to say too much; for it is clear that aqueous and atmospheric agencies have been concerned; and, further, that the affinities of the elements themselves are implied. The cause has all along been a composite one: the cooling of the Earth having been simply the most general of the concurrent causes, or assemblage of conditions. And here, indeed, it may be remarked that in the several classes of facts already dealt with (excepting, perhaps, the first), and still more in those with which we shall presently deal, the causes are more or less compound; as indeed are nearly all causes with which we are acquainted. Scarcely any change can with logical accuracy be wholly ascribed to one agency, to the neglect of the permanent or temporary conditions under which only this agency produces the change. But as it does not materially affect our argument, we prefer, for simplicity's sake, to use throughout the popular mode of expression.

Perhaps it will be further objected, that to assign loss of heat as the cause of any changes, is to attribute these changes not to a force, but to the absence of a force. And this is true. Strictly speaking, the changes should be attributed to those forces which come into action when the antagonist force is withdrawn. But though there is an inaccuracy in saying that the freezing of water is due to the loss of its heat, no practical error arises from it; nor will a parallel laxity of expression vitiate our statements respecting the multiplication of effects. Indeed, the objection serves but to draw attention to the fact, that not only does the exertion of a force produce more than one change, but the withdrawal of a force produces more than one change. And this suggests that perhaps the most correct statement of our general principle would be its most abstract statement – every change is followed by more than one other change.

Returning to the thread of our exposition, we have next to trace out, in organic progress, this same all-pervading principle. And here, where the evolution of the homogeneous into the heterogeneous was first observed, the production of many changes by one cause is least easy to demonstrate. The development of a seed into a plant, or an ovum into an animal, is so gradual, while the forces which determine it are so involved, and at the same time so unobtrusive, that it is difficult to detect the multiplication of effects which is elsewhere so obvious. Nevertheless, guided by indirect evidence, we may pretty safely reach the conclusion that here too the law holds.

Observe, first, how numerous are the effects which any marked change works upon an adult organism – a human being, for instance. An alarming sound or sight, besides the impressions on the organs of sense and the nerves, may produce a start, a scream, a distortion of the face, a trembling consequent upon a general muscular relaxation, a burst of perspiration, an excited action of the heart, a rush of blood to the brain, followed possibly by arrest of the heart's action and by syncope: and if the system be feeble, an indisposition with its long train of complicated symptoms may set in. Similarly in cases of disease. A minute portion of the small-pox virus introduced into the system, will, in a severe case, cause, during the first stage, rigors, heat of skin, accelerated pulse, furred tongue, loss of appetite, thirst, epigastric uneasiness, vomiting, headache, pains in the back and limbs, muscular weakness, convulsions, delirium, &c.; in the second stage, cutaneous eruption, itching, tingling, sore throat, swelled fauces, salivation, cough, hoarseness, dyspnœa, &c.; and in the third stage, œdematous inflammations, pneumonia, pleurisy, diarrhœa, inflammation of the brain, ophthalmia, erysipelas, &c.: each of which enumerated symptoms is itself more or less complex. Medicines, special foods, better air, might in like manner be instanced as producing multiplied results.

Now it needs only to consider that the many changes thus wrought by one force upon an adult organism, will be in part paralleled in an embryo organism, to understand how here also, the evolution of the homogeneous into the heterogeneous may be due to the production of many effects by one cause. The external heat and other agencies which determine the first complications of the germ, may, by acting upon these, superinduce further complications; upon these still higher and more numerous ones; and so on continually: each organ as it is developed serving, by its actions and reactions upon the rest, to initiate new complexities. The first pulsations of the fœtal heart must simultaneously aid the

unfolding of every part. The growth of each tissue, by taking from the blood special proportions of elements, must modify the constitution of the blood; and so must modify the nutrition of all the other tissues. The heart's action, implying as it does a certain waste, necessitates an addition to the blood of effete matters, which must influence the rest of the system, and perhaps, as some think, cause the formation of excretory organs. The nervous connections established among the viscera must further multiply their mutual influences: and so continually.

Still stronger becomes the probability of this view when we call to mind the fact, that the same germ may be evolved into different forms according to circumstances. Thus, during its earlier stages, every embryo is sexless – becomes either male or female as the balance of forces acting upon it determines. Again, it is a well-established fact that the larva of a working-bee will develop into a queen-bee, if, before it is too late, its food be changed to that on which the larvæ of queen-bees are fed. Even more remarkable is the case of certain entozoa. The ovum of a tape-worm, getting into its natural habitat, the intestine, unfolds into the well-known form of its parent; but if carried, as it frequently is, into other parts of the system, it becomes a sac-like creature, called by naturalists the *Echinococcus*– a creature so extremely different from the tape-worm in aspect and structure, that only after careful investigations has it been proved to have the same origin. All which instances imply that each advance in embryonic complication results from the action of incident forces upon the complication previously existing.

Indeed, we may find *à priori* reason to think that the evolution proceeds after this manner. For since it is now known that no germ, animal or vegetable, contains the slightest rudiment, trace, or indication of the future organism – now that the microscope has shown us that the first process set up in every fertilized germ, is a process of repeated spontaneous fissions ending in the production of a mass of cells, not one of which exhibits any special character: there seems no alternative but to suppose that the partial organization at any moment subsisting in a growing embryo, is transformed by the agencies acting upon it into the succeeding phase of organization, and this into the next, until, through ever-increasing complexities, the ultimate form is reached. Thus, though the subtilty of the forces and the slowness of the results, prevent us from *directly* showing that the stages of increasing heterogeneity through which every embryo passes, severally arise from the production of many changes by one force, yet, *indirectly*, we have strong evidence that they do so.

We have marked how multitudinous are the effects which one cause may generate in an adult organism; that a like multiplication of effects must happen in the unfolding organism, we have observed in sundry illustrative cases; further, it has been pointed out that the ability which like germs have to originate unlike forms, implies that the successive transformations result from the new changes superinduced on previous changes; and we have seen that structureless as every germ originally is, the development of an organism out of it is otherwise incomprehensible. Not indeed that we can thus really explain the production of any plant or animal. We are still in the dark respecting those mysterious properties in virtue of which the germ, when subject to fit influences, undergoes the special changes that begin the series of transformations. All we aim to show, is, that given a germ possessing these mysterious properties, the evolution of an organism from it, probably depends upon that multiplication of effects which we have seen to be the cause of progress in general, so far as we have yet traced it.

When, leaving the development of single plants and animals, we pass to that of the Earth's flora and fauna, the course of our argument again becomes clear and simple. Though, as was admitted in the first part of this article, the fragmentary facts Palæontology has accumulated, do not clearly warrant us in saying that, in the lapse of geologic time, there have been evolved more heterogeneous organisms, and more heterogeneous assemblages of organisms, yet we shall now see that there *must* ever have been a tendency towards these results. We shall find that the production of many effects by one cause, which, as already shown, has been all along increasing the physical heterogeneity of

the Earth, has further involved an increasing heterogeneity in its flora and fauna, individually and collectively. An illustration will make this clear.

Suppose that by a series of upheavals, occurring, as they are now known to do, at long intervals, the East Indian Archipelago were to be, step by step, raised into a continent, and a chain of mountains formed along the axis of elevation. By the first of these upheavals, the plants and animals inhabiting Borneo, Sumatra, New Guinea, and the rest, would be subjected to slightly modified sets of conditions. The climate in general would be altered in temperature, in humidity, and in its periodical variations; while the local differences would be multiplied. These modifications would affect, perhaps inappreciably, the entire flora and fauna of the region. The change of level would produce additional modifications: varying in different species, and also in different members of the same species, according to their distance from the axis of elevation. Plants, growing only on the sea-shore in special localities, might become extinct. Others, living only in swamps of a certain humidity, would, if they survived at all, probably undergo visible changes of appearance. While still greater alterations would occur in the plants gradually spreading over the lands newly raised above the sea. The animals and insects living on these modified plants, would themselves be in some degree modified by change of food, as well as by change of climate; and the modification would be more marked where, from the dwindling or disappearance of one kind of plant, an allied kind was eaten. In the lapse of the many generations arising before the next upheaval, the sensible or insensible alterations thus produced in each species would become organized – there would be a more or less complete adaptation to the new conditions. The next upheaval would superinduce further organic changes, implying wider divergences from the primary forms; and so repeatedly.

But now let it be observed that the revolution thus resulting would not be a substitution of a thousand more or less modified species for the thousand original species; but in place of the thousand original species there would arise several thousand species, or varieties, or changed forms. Each species being distributed over an area of some extent, and tending continually to colonize the new area exposed, its different members would be subject to different sets of changes. Plants and animals spreading towards the equator would not be affected in the same way with others spreading from it. Those spreading towards the new shores would undergo changes unlike the changes undergone by those spreading into the mountains. Thus, each original race of organisms, would become the root from which diverged several races differing more or less from it and from each other; and while some of these might subsequently disappear, probably more than one would survive in the next geologic period: the very dispersion itself increasing the chances of survival. Not only would there be certain modifications thus caused by change of physical conditions and food, but also in some cases other modifications caused by change of habit. The fauna of each island, peopling, step by step, the newly-raised tracts, would eventually come in contact with the faunas of other islands; and some members of these other faunas would be unlike any creatures before seen. Herbivores meeting with new beasts of prey, would, in some cases, be led into modes of defence or escape differing from those previously used; and simultaneously the beasts of prey would modify their modes of pursuit and attack. We know that when circumstances demand it, such changes of habit *do* take place in animals; and we know that if the new habits become the dominant ones, they must eventually in some degree alter the organization.

Observe, now, however, a further consequence. There must arise not simply a tendency towards the differentiation of each race of organisms into several races; but also a tendency to the occasional production of a somewhat higher organism. Taken in the mass these divergent varieties which have been caused by fresh physical conditions and habits of life, will exhibit changes quite indefinite in kind and degree; and changes that do not necessarily constitute an advance. Probably in most cases the modified type will be neither more nor less heterogeneous than the original one. In some cases the habits of life adopted being simpler than before, a less heterogeneous structure will result: there will be a retrogradation. But it *must* now and then occur, that some division of a species, falling into

circumstances which give it rather more complex experiences, and demand actions somewhat more involved, will have certain of its organs further differentiated in proportionately small degrees, – will become slightly more heterogeneous.

Thus, in the natural course of things, there will from time to time arise an increased heterogeneity both of the Earth's flora and fauna, and of individual races included in them. Omitting detailed explanations, and allowing for the qualifications which cannot here be specified, we think it is clear that geological mutations have all along tended to complicate the forms of life, whether regarded separately or collectively. The same causes which have led to the evolution of the Earth's crust from the simple into the complex, have simultaneously led to a parallel evolution of the Life upon its surface. In this case, as in previous ones, we see that the transformation of the homogeneous into the heterogeneous is consequent upon the universal principle, that every active force produces more than one change.

The deduction here drawn from the established truths of geology and the general laws of life, gains immensely in weight on finding it to be in harmony with an induction drawn from direct experience. Just that divergence of many races from one race, which we inferred must have been continually occurring during geologic time, we know to have occurred during the pre-historic and historic periods, in man and domestic animals. And just that multiplication of effects which we concluded must have produced the first, we see has produced the last. Single causes, as famine, pressure of population, war, have periodically led to further dispersions of mankind and of dependent creatures: each such dispersion initiating new modifications, new varieties of type. Whether all the human races be or be not derived from one stock, philology makes it clear that whole groups of races now easily distinguishable from each other, were originally one race, – that the diffusion of one race into different climates and conditions of existence, has produced many modified forms of it.

Similarly with domestic animals. Though in some cases – as that of dogs – community of origin will perhaps be disputed, yet in other cases – as that of the sheep or the cattle of our own country – it will not be questioned that local differences of climate, food, and treatment, have transformed one original breed into numerous breeds now become so far distinct as to produce unstable hybrids. Moreover, through the complications of effects flowing from single causes, we here find, what we before inferred, not only an increase of general heterogeneity, but also of special heterogeneity. While of the divergent divisions and subdivisions of the human race, many have undergone changes not constituting an advance; while in some the type may have degraded; in others it has become decidedly more heterogeneous. The civilized European departs more widely from the vertebrate archetype than does the savage. Thus, both the law and the cause of progress, which, from lack of evidence, can be but hypothetically substantiated in respect of the earlier forms of life on our globe, can be actually substantiated in respect of the latest forms.

If the advance of Man towards greater heterogeneity is traceable to the production of many effects by one cause still more clearly may the advance of Society towards greater heterogeneity be so explained. Consider the growth of an industrial organization. When, as must occasionally happen, some individual of a tribe displays unusual aptitude for making an article of general use – a weapon, for instance – which was before made by each man for himself, there arises a tendency towards the differentiation of that individual into a maker of such weapon. His companions – warriors and hunters all of them, – severally feel the importance of having the best weapons that can be made; and are therefore certain to offer strong inducements to this skilled individual to make weapons for them. He, on the other hand, having not only an unusual faculty, but an unusual liking, for making such weapons (the talent and the desire for any occupation being commonly associated), is predisposed to fulfil these commissions on the offer of an adequate reward: especially as his love of distinction is also gratified. This first specialization of function, once commenced, tends ever to become more decided. On the side of the weapon-maker continued practice gives increased skill – increased superiority to his products: on the side of his clients, cessation of practice entails decreased skill. Thus the influences

that determine this division of labour grow stronger in both ways; and the incipient heterogeneity is, on the average of cases, likely to become permanent for that generation, if no longer.

Observe now, however, that this process not only differentiates the social mass into two parts, the one monopolizing, or almost monopolizing, the performance of a certain function, and the other having lost the habit, and in some measure the power, of performing that function; but it tends to imitate other differentiations. The advance we have described implies the introduction of barter, – the maker of weapons has, on each occasion, to be paid in such other articles as he agrees to take in exchange. But he will not habitually take in exchange one kind of article, but many kinds. He does not want mats only, or skins, or fishing gear, but he wants all these; and on each occasion will bargain for the particular things he most needs. What follows? If among the members of the tribe there exist any slight differences of skill in the manufacture of these various things, as there are almost sure to do, the weapon-maker will take from each one the thing which that one excels in making: he will exchange for mats with him whose mats are superior, and will bargain for the fishing gear of whoever has the best. But he who has bartered away his mats or his fishing gear, must make other mats or fishing gear for himself; and in so doing must, in some degree, further develop his aptitude. Thus it results that the small specialities of faculty possessed by various members of the tribe, will tend to grow more decided. If such transactions are from time repeated, these specializations may become appreciable. And whether or not there ensue distinct differentiations of other individuals into makers of particular articles, it is clear that incipient differentiations take place throughout the tribe: the one original cause produces not only the first dual effect, but a number of secondary dual effects, like in kind, but minor in degree. This process, of which traces may be seen among groups of schoolboys, cannot well produce any lasting effects in an unsettled tribe; but where there grows up a fixed and multiplying community, these differentiations become permanent, and increase with each generation. A larger population, involving a greater demand for every commodity, intensifies the functional activity of each specialized person or class; and this renders the specialization more definite where it already exists, and establishes it where it is nascent. By increasing the pressure on the means of subsistence, a larger population again augments these results; seeing that each person is forced more and more to confine himself to that which he can do best, and by which he can gain most. This industrial progress, by aiding future production, opens the way for a further growth of population, which reacts as before: in all which the multiplication of effects is manifest. Presently, under these same stimuli, new occupations arise. Competing workers, ever aiming to produce improved articles, occasionally discover better processes or raw materials. In weapons and cutting tools, the substitution of bronze for stone entails upon him who first makes it a great increase of demand – so great an increase that he presently finds all his time occupied in making the bronze for the articles he sells, and is obliged to depute the fashioning of these to others: and, eventually, the making of bronze, thus gradually differentiated from a pre-existing occupation, becomes an occupation by itself.

But now mark the ramified changes which follow this change. Bronze soon replaces stone, not only in the articles it was first used for, but in many others – in arms, tools, and utensils of various kinds; and so affects the manufacture of these things. Further, it affects the processes which these utensils subserve, and the resulting products – modifies buildings, carvings, dress, personal decorations. Yet again, it sets going sundry manufactures which were before impossible, from lack of a material fit for the requisite tools. And all these changes react on the people – increase their manipulative skill, their intelligence, their comfort, – refine their habits and tastes. Thus the evolution of a homogeneous society into a heterogeneous one, is clearly consequent on the general principle, that many effects are produced by one cause.

Our limits will not allow us to follow out this process in its higher complications: else might we show how the localization of special industries in special parts of a kingdom, as well as the minute subdivision of labour in the making of each commodity, are similarly determined. Or, turning to a somewhat different order of illustrations, we might dwell on the multitudinous changes – material,

intellectual, moral, – caused by printing; or the further extensive series of changes wrought by gunpowder. But leaving the intermediate phases of social development, let us take a few illustrations from its most recent and its passing phases. To trace the effects of steam-power, in its manifold applications to mining, navigation, and manufactures of all kinds, would carry us into unmanageable detail. Let us confine ourselves to the latest embodiment of steam-power – the locomotive engine.

This, as the proximate cause of our railway system, has changed the face of the country, the course of trade, and the habits of the people. Consider, first, the complicated sets of changes that precede the making of every railway – the provisional arrangements, the meetings, the registration, the trial section, the parliamentary survey, the lithographed plans, the books of reference, the local deposits and notices, the application to Parliament, the passing Standing-Orders Committee, the first, second, and third readings: each of which brief heads indicates a multiplicity of transactions, and the development of sundry occupations – as those of engineers, surveyors, lithographers, parliamentary agents, share-brokers; and the creation of sundry others – as those of traffic-takers, reference-takers. Consider, next, the yet more marked changes implied in railway construction – the cuttings, embankings, tunnellings, diversions of roads; the building of bridges and stations; the laying down of ballast, sleepers, and rails; the making of engines, tenders, carriages and waggons: which processes, acting upon numerous trades, increase the importation of timber, the quarrying of stone, the manufacture of iron, the mining of coal, the burning of bricks: institute a variety of special manufactures weekly advertised in the *Railway Times*; and, finally, open the way to sundry new occupations, as those of drivers, stokers, cleaners, plate-layers, &c., &c. And then consider the changes, more numerous and involved still, which railways in action produce on the community at large. The organization of every business is more or less modified: ease of communication makes it better to do directly what was before done by proxy; agencies are established where previously they would not have paid; goods are obtained from remote wholesale houses instead of near retail ones; and commodities are used which distance once rendered inaccessible. Again, the rapidity and small cost of carriage tend to specialize more than ever the industries of different districts – to confine each manufacture to the parts in which, from local advantages, it can be best carried on. Further, the diminished cost of carriage, facilitating distribution, equalizes prices, and also, on the average, lowers prices: thus bringing divers articles within the means of those before unable to buy them, and so increasing their comforts and improving their habits. At the same time the practice of travelling is immensely extended. Classes who never before thought of it, take annual trips to the sea; visit their distant relations; make tours; and so we are benefited in body, feelings, and intellect. Moreover, the more prompt transmission of letters and of news produces further changes – makes the pulse of the nation faster. Yet more, there arises a wide dissemination of cheap literature through railway book-stalls, and of advertisements in railway carriages: both of them aiding ulterior progress.

And all the innumerable changes here briefly indicated are consequent on the invention of the locomotive engine. The social organism has been rendered more heterogeneous in virtue of the many new occupations introduced, and the many old ones further specialized; prices in every place have been altered; each trader has, more or less, modified his way of doing business; and almost every person has been affected in his actions, thoughts, emotions.

Illustrations to the same effect might be indefinitely accumulated. That every influence brought to bear upon society works multiplied effects; and that increase of heterogeneity is due to this multiplication of effects; may be seen in the history of every trade, every custom, every belief. But it is needless to give additional evidence of this. The only further fact demanding notice, is, that we here see still more clearly than ever, the truth before pointed out, that in proportion as the area on which any force expends itself becomes heterogeneous, the results are in a yet higher degree multiplied in number and kind. While among the primitive tribes to whom it was first known, caoutchouc caused but a few changes, among ourselves the changes have been so many and varied that the history of

them occupies a volume.[4] Upon the small, homogeneous community inhabiting one of the Hebrides, the electric telegraph would produce, were it used, scarcely any results; but in England the results it produces are multitudinous. The comparatively simple organization under which our ancestors lived five centuries ago, could have undergone but few modifications from an event like the recent one at Canton; but now the legislative decision respecting it sets up many hundreds of complex modifications, each of which will be the parent of numerous future ones.

Space permitting, we could willingly have pursued the argument in relation to all the subtler results of civilization. As before, we showed that the law of Progress to which the organic and inorganic worlds conform, is also conformed to by Language, Sculpture, Music, &c.; so might we here show that the cause which we have hitherto found to determine Progress holds in these cases also. We might demonstrate in detail how, in Science, an advance of one division presently advances other divisions – how Astronomy has been immensely forwarded by discoveries in Optics, while other optical discoveries have initiated Microscopic Anatomy, and greatly aided the growth of Physiology – how Chemistry has indirectly increased our knowledge of Electricity, Magnetism, Biology, Geology – how Electricity has reacted on Chemistry and Magnetism, developed our views of Light and Heat, and disclosed sundry laws of nervous action.

In Literature the same truth might be exhibited in the manifold effects of the primitive mystery-play, not only as originating the modern drama, but as affecting through it other kinds of poetry and fiction; or in the still multiplying forms of periodical literature that have descended from the first newspaper, and which have severally acted and reacted on other forms of literature and on each other. The influence which a new school of Painting – as that of the pre-Raffaelites – exercises upon other schools; the hints which all kinds of pictorial art are deriving from Photography; the complex results of new critical doctrines, as those of Mr. Ruskin, might severally be dwelt upon as displaying the like multiplication of effects. But it would needlessly tax the reader's patience to pursue, in their many ramifications, these various changes: here become so involved and subtle as to be followed with some difficulty.

Without further evidence, we venture to think our case is made out. The imperfections of statement which brevity has necessitated, do not, we believe, militate against the propositions laid down. The qualifications here and there demanded would not, if made, affect the inferences. Though in one instance, where sufficient evidence is not attainable, we have been unable to show that the law of Progress applies; yet there is high probability that the same generalization holds which holds throughout the rest of creation. Though, in tracing the genesis of Progress, we have frequently spoken of complex causes as if they were simple ones; it still remains true that such causes are far less complex than their results. Detailed criticisms cannot affect our main position. Endless facts go to show that every kind of progress is from the homogeneous to the heterogeneous; and that it is so because each change is followed by many changes. And it is significant that where the facts are most accessible and abundant, there are these truths most manifest.

However, to avoid committing ourselves to more than is yet proved, we must be content with saying that such are the law and the cause of all progress that is known to us. Should the Nebular Hypothesis ever be established, then it will become manifest that the Universe at large, like every organism, was once homogeneous; that as a whole, and in every detail, it has unceasingly advanced towards greater heterogeneity; and that its heterogeneity is still increasing. It will be seen that as in each event of to-day, so from the beginning, the decomposition of every expended force into several forces has been perpetually producing a higher complication; that the increase of heterogeneity so brought about is still going on, and must continue to go on; and that thus Progress is not an accident, not a thing within human control, but a beneficent necessity.

[4] "Personal Narrative of the Origin of the Caoutchouc, or India-Rubber Manufacture in England." By Thomas Hancock.

A few words must be added on the ontological bearings of our argument. Probably not a few will conclude that here is an attempted solution of the great questions with which Philosophy in all ages has perplexed itself. Let none thus deceive themselves. Only such as know not the scope and the limits of Science can fall into so grave an error. The foregoing generalizations apply, not to the genesis of things in themselves, but to their genesis as manifested to the human consciousness. After all that has been said, the ultimate mystery remains just as it was. The explanation of that which is explicable, does but bring out into greater clearness the inexplicableness of that which remains behind. However we may succeed in reducing the equation to its lowest terms, we are not thereby enabled to determine the unknown quantity: on the contrary, it only becomes more manifest that the unknown quantity can never be found.

Little as it seems to do so, fearless inquiry tends continually to give a firmer basis to all true Religion. The timid sectarian, alarmed at the progress of knowledge, obliged to abandon one by one the superstitions of his ancestors, and daily finding his cherished beliefs more and more shaken, secretly fears that all things may some day be explained; and has a corresponding dread of Science: thus evincing the profoundest of all infidelity – the fear lest the truth be bad. On the other hand, the sincere man of science, content to follow wherever the evidence leads him, becomes by each new inquiry more profoundly convinced that the Universe is an insoluble problem. Alike in the external and the internal worlds, he sees himself in the midst of perpetual changes, of which he can discover neither the beginning nor the end. If, tracing back the evolution of things, he allows himself to entertain the hypothesis that all matter once existed in a diffused form, he finds it utterly impossible to conceive how this came to be so; and equally, if he speculates on the future, he can assign no limit to the grand succession of phenomena ever unfolding themselves before him. On the other hand, if he looks inward, he perceives that both terminations of the thread of consciousness are beyond his grasp: he cannot remember when or how consciousness commenced, and he cannot examine the consciousness that at any moment exists; for only a state of consciousness that is already past can become the object of thought, and never one which is passing.

When, again, he turns from the succession of phenomena, external or internal, to their essential nature, he is equally at fault. Though he may succeed in resolving all properties of objects into manifestations of force, he is not thereby enabled to realize what force is; but finds, on the contrary, that the more he thinks about it, the more he is baffled. Similarly, though analysis of mental actions may finally bring him down to sensations as the original materials out of which all thought is woven, he is none the forwarder; for he cannot in the least comprehend sensation – cannot even conceive how sensation is possible. Inward and outward things he thus discovers to be alike inscrutable in their ultimate genesis and nature. He sees that the Materialist and Spiritualist controversy is a mere war of words; the disputants being equally absurd – each believing he understands that which it is impossible for any man to understand. In all directions his investigations eventually bring him face to face with the unknowable; and he ever more clearly perceives it to be the unknowable. He learns at once the greatness and the littleness of human intellect – its power in dealing with all that comes within the range of experience; its impotence in dealing with all that transcends experience. He feels, with a vividness which no others can, the utter incomprehensibleness of the simplest fact, considered in itself. He alone truly *sees* that absolute knowledge is impossible. He alone *knows* that under all things there lies an impenetrable mystery.

II.
MANNERS AND FASHION

Whoever has studied the physiognomy of political meetings, cannot fail to have remarked a connection between democratic opinions and peculiarities of costume. At a Chartist demonstration, a lecture on Socialism, or a *soirée* of the Friends of Italy, there will be seen many among the audience, and a still larger ratio among the speakers, who get themselves up in a style more or less unusual. One gentleman on the platform divides his hair down the centre, instead of on one side; another brushes it back off the forehead, in the fashion known as "bringing out the intellect;" a third has so long forsworn the scissors, that his locks sweep his shoulders. A considerable sprinkling of moustaches may be observed; here and there an imperial; and occasionally some courageous breaker of conventions exhibits a full-grown beard.[5] This nonconformity in hair is countenanced by various nonconformities in dress, shown by others of the assemblage. Bare necks, shirt-collars *à la* Byron, waistcoats cut Quaker fashion, wonderfully shaggy great coats, numerous oddities in form and colour, destroy the monotony usual in crowds. Even those exhibiting no conspicuous peculiarity, frequently indicate by something in the pattern or make-up of their clothes, that they pay small regard to what their tailors tell them about the prevailing taste. And when the gathering breaks up, the varieties of head gear displayed – the number of caps, and the abundance of felt hats – suffice to prove that were the world at large like-minded, the black cylinders which tyrannize over us would soon be deposed.

The foreign correspondence of our daily press shows that this relationship between political discontent and the disregard of customs exists on the Continent also. Red republicanism has always been distinguished by its hirsuteness. The authorities of Prussia, Austria, and Italy, alike recognize certain forms of hat as indicative of disaffection, and fulminate against them accordingly. In some places the wearer of a blouse runs a risk of being classed among the *suspects*; and in others, he who would avoid the bureau of police, must beware how he goes out in any but the ordinary colours. Thus, democracy abroad, as at home, tends towards personal singularity.

Nor is this association of characteristics peculiar to modern times, or to reformers of the State. It has always existed; and it has been manifested as much in religious agitations as in political ones. Along with dissent from the chief established opinions and arrangements, there has ever been some dissent from the customary social practices. The Puritans, disapproving of the long curls of the Cavaliers, as of their principles, cut their own hair short, and so gained the name of "Roundheads." The marked religious nonconformity of the Quakers was accompanied by an equally-marked nonconformity of manners – in attire, in speech, in salutation. The early Moravians not only believed differently, but at the same time dressed differently, and lived differently, from their fellow Christians.

That the association between political independence and independence of personal conduct, is not a phenomenon of to-day only, we may see alike in the appearance of Franklin at the French court in plain clothes, and in the white hats worn by the last generation of radicals. Originality of nature is sure to show itself in more ways than one. The mention of George Fox's suit of leather, or Pestalozzi's school name, "Harry Oddity," will at once suggest the remembrance that men who have in great things diverged from the beaten track, have frequently done so in small things likewise. Minor illustrations of this truth may be gathered in almost every circle. We believe that whoever will number up his reforming and rationalist acquaintances, will find among them more than the usual proportion of those who in dress or behaviour exhibit some degree of what the world calls eccentricity.

[5] This was written before moustaches and beards had become common.

If it be a fact that men of revolutionary aims in politics or religion, are commonly revolutionists in custom also, it is not less a fact that those whose office it is to uphold established arrangements in State and Church, are also those who most adhere to the social forms and observances bequeathed to us by past generations. Practices elsewhere extinct still linger about the headquarters of government. The monarch still gives assent to Acts of Parliament in the old French of the Normans; and Norman French terms are still used in law. Wigs, such as those we see depicted in old portraits, may yet be found on the heads of judges and barristers. The Beefeaters at the Tower wear the costume of Henry VIIth's body-guard. The University dress of the present year varies but little from that worn soon after the Reformation. The claret-coloured coat, knee-breeches, lace shirt frills, ruffles, white silk stockings, and buckled shoes, which once formed the usual attire of a gentleman, still survive as the court-dress. And it need scarcely be said that at *levées* and drawing-rooms, the ceremonies are prescribed with an exactness, and enforced with a rigour, not elsewhere to be found.

Can we consider these two series of coincidences as accidental and unmeaning? Must we not rather conclude that some necessary relationship obtains between them? Are there not such things as a constitutional conservatism, and a constitutional tendency to change? Is there not a class which clings to the old in all things; and another class so in love with progress as often to mistake novelty for improvement? Do we not find some men ready to bow to established authority of whatever kind; while others demand of every such authority its reason, and reject it if it fails to justify itself? And must not the minds thus contrasted tend to become respectively conformist and nonconformist, not only in politics and religion, but in other things? Submission, whether to a government, to the dogmas of ecclesiastics, or to that code of behaviour which society at large has set up, is essentially of the same nature; and the sentiment which induces resistance to the despotism of rulers, civil or spiritual, likewise induces resistance to the despotism of the world's opinion. Look at them fundamentally, and all enactments, alike of the legislature, the consistory, and the saloon – all regulations, formal or virtual, have a common character: they are all limitations of men's freedom. "Do this – Refrain from that," are the blank formulas into which they may all be written: and in each case the understanding is that obedience will bring approbation here and paradise hereafter; while disobedience will entail imprisonment, or sending to Coventry, or eternal torments, as the case may be. And if restraints, however named, and through whatever apparatus of means exercised, are one in their action upon men, it must happen that those who are patient under one kind of restraint, are likely to be patient under another; and conversely, that those impatient of restraint in general, will, on the average, tend to show their impatience in all directions.

That Law, Religion, and Manners are thus related – that their respective kinds of operation come under one generalization – that they have in certain contrasted characteristics of men a common support and a common danger – will, however, be most clearly seen on discovering that they have a common origin. Little as from present appearances we should suppose it, we shall yet find that at first, the control of religion, the control of laws, and the control of manners, were all one control. However incredible it may now seem, we believe it to be demonstrable that the rules of etiquette, the provisions of the statute-book, and the commands of the decalogue, have grown from the same root. If we go far enough back into the ages of primeval Fetishism, it becomes manifest that originally Deity, Chief, and Master of the ceremonies were identical. To make good these positions, and to show their bearing on what is to follow, it will be necessary here to traverse ground that is in part somewhat beaten, and at first sight irrelevant to our topic. We will pass over it as quickly as consists with the exigencies of the argument.

That the earliest social aggregations were ruled solely by the will of the strong man, few dispute. That from the strong man proceeded not only Monarchy, but the conception of a God, few admit: much as Carlyle and others have said in evidence of it. If, however, those who are unable to believe this, will lay aside the ideas of God and man in which they have been educated, and study the aboriginal ideas of them, they will at least see some probability in the hypothesis. Let them remember

that before experience had yet taught men to distinguish between the possible and the impossible; and while they were ready on the slightest suggestion to ascribe unknown powers to any object and make a fetish of it; their conceptions of humanity and its capacities were necessarily vague, and without specific limits. The man who by unusual strength, or cunning, achieved something that others had failed to achieve, or something which they did not understand, was considered by them as differing from themselves; and, as we see in the belief of some Polynesians that only their chiefs have souls, or in that of the ancient Peruvians that their nobles were divine by birth, the ascribed difference was apt to be not one of degree only, but one of kind.

Let them remember next, how gross were the notions of God, or rather of gods, prevalent during the same era and afterwards – how concretely gods were conceived as men of specific aspects dressed in specific ways – how their names were literally "the strong," "the destroyer," "the powerful one," – how, according to the Scandinavian mythology, the "sacred duty of blood-revenge" was acted on by the gods themselves, – and how they were not only human in their vindictiveness, their cruelty, and their quarrels with each other, but were supposed to have amours on earth, and to consume the viands placed on their altars. Add to which, that in various mythologies, Greek, Scandinavian, and others, the oldest beings are giants; that according to a traditional genealogy the gods, demi-gods, and in some cases men, are descended from these after the human fashion; and that while in the East we hear of sons of God who saw the daughters of men that they were fair, the Teutonic myths tell of unions between the sons of men and the daughters of the gods.

Let them remember, too, that at first the idea of death differed widely from that which we have; that there are still tribes who, on the decease of one of their number, attempt to make the corpse stand, and put food into his mouth; that the Peruvians had feasts at which the mummies of their dead Incas presided, when, as Prescott says, they paid attention "to these insensible remains as if they were instinct with life;" that among the Feejees it is believed that every enemy has to be killed twice; that the Eastern Pagans give extension and figure to the soul, and attribute to it all the same substances, both solid and liquid, of which our bodies are composed; and that it is the custom among most barbarous races to bury food, weapons, and trinkets along with the dead body, under the manifest belief that it will presently need them.

Lastly, let them remember that the other world, as originally conceived, is simply some distant part of this world – some Elysian fields, some happy hunting-ground, accessible even to the living, and to which, after death, men travel in anticipation of a life analogous in general character to that which they led before. Then, co-ordinating these general facts – the ascription of unknown powers to chiefs and medicine men; the belief in deities having human forms, passions, and behaviour; the imperfect comprehension of death as distinguished from life; and the proximity of the future abode to the present, both in position and character – let them reflect whether they do not almost unavoidably suggest the conclusion that the aboriginal god is the dead chief: the chief not dead in our sense, but gone away carrying with him food and weapons to some rumoured region of plenty, some promised land, whither he had long intended to lead his followers, and whence he will presently return to fetch them.

This hypothesis once entertained, is seen to harmonize with all primitive ideas and practices. The sons of the deified chief reigning after him, it necessarily happens that all early kings are held descendants of the gods; and the fact that alike in Assyria, Egypt, among the Jews, Phœnicians, and ancient Britons, kings' names were formed out of the names of the gods, is fully explained. The genesis of Polytheism out of Fetishism, by the successive migrations of the race of god-kings to the other world – a genesis illustrated in the Greek mythology, alike by the precise genealogy of the deities, and by the specifically asserted apotheosis of the later ones – tends further to bear it out. It explains the fact that in the old creeds, as in the still extant creed of the Otaheitans, every family has its guardian spirit, who is supposed to be one of their departed relatives; and that they sacrifice to these as minor gods – a practice still pursued by the Chinese and even by the Russians. It is perfectly

congruous with the Grecian myths concerning the wars of the Gods with the Titans and their final usurpation; and it similarly agrees with the fact that among the Teutonic gods proper was one Freir who came among them by adoption, "but was born among the *Vanes*, a somewhat mysterious *other* dynasty of gods, who had been conquered and superseded by the stronger and more warlike Odin dynasty." It harmonizes, too, with the belief that there are different gods to different territories and nations, as there were different chiefs; that these gods contend for supremacy as chiefs do; and it gives meaning to the boast of neighbouring tribes – "Our god is greater than your god." It is confirmed by the notion universally current in early times, that the gods come from this other abode, in which they commonly live, and appear among men – speak to them, help them, punish them. And remembering this, it becomes manifest that the prayers put up by primitive peoples to their gods for aid in battle, are meant literally – that their gods are expected to come back from the other kingdom they are reigning over, and once more fight the old enemies they had before warred against so implacably; and it needs but to name the Iliad, to remind every one how thoroughly they believed the expectation fulfilled.

All government, then, being originally that of the strong man who has become a fetish by some manifestation of superiority, there arises, at his death – his supposed departure on a long projected expedition, in which he is accompanied by his slaves and concubines sacrificed at his tomb – there arises, then, the incipient division of religious from political control, of civil rule from spiritual. His son becomes deputed chief during his absence; his authority is cited as that by which his son acts; his vengeance is invoked on all who disobey his son; and his commands, as previously known or as asserted by his son, become the germ of a moral code: a fact we shall the more clearly perceive if we remember, that early moral codes inculcate mainly the virtues of the warrior, and the duty of exterminating some neighbouring tribe whose existence is an offence to the deity.

From this point onwards, these two kinds of authority, at first complicated together as those of principal and agent, become slowly more and more distinct. As experience accumulates, and ideas of causation grow more precise, kings lose their supernatural attributes; and, instead of God-king, become God-descended king, God-appointed king, the Lord's anointed, the viceregent of heaven, ruler reigning by Divine right. The old theory, however, long clings to men in feeling, after it has disappeared in name; and "such divinity doth hedge a king," that even now, many, on first seeing one, feel a secret surprise at finding him an ordinary sample of humanity. The sacredness attaching to royalty attaches afterwards to its appended institutions – to legislatures, to laws. Legal and illegal are synonymous with right and wrong; the authority of Parliament is held unlimited; and a lingering faith in governmental power continually generates unfounded hopes from its enactments. Political scepticism, however, having destroyed the divine *prestige* of royalty, goes on ever increasing, and promises ultimately to reduce the State to a purely secular institution, whose regulations are limited in their sphere, and have no other authority than the general will. Meanwhile, the religious control has been little by little separating itself from the civil, both in its essence and in its forms. While from the God-king of the savage have arisen in one direction, secular rulers who, age by age, have been losing the sacred attributes men ascribed to them; there has arisen in another direction, the conception of a deity, who, at first human in all things, has been gradually losing human materiality, human form, human passions, human modes of action: until now, anthropomorphism has become a reproach.

Along with this wide divergence in men's ideas of the divine and civil ruler has been taking place a corresponding divergence in the codes of conduct respectively proceeding from them. While the king was a deputy-god – a governor such as the Jews looked for in the Messiah – a governor considered, as the Czar still is, "our God upon Earth," – it, of course, followed that his commands were the supreme rules. But as men ceased to believe in his supernatural origin and nature, his commands ceased to be the highest; and there arose a distinction between the regulations made by him, and the regulations handed down from the old god-kings, who were rendered ever more sacred by time and the accumulation of myths. Hence came respectively, Law and Morality: the one growing ever more

concrete, the other more abstract; the authority of the one ever on the decrease, that of the other ever on the increase; originally the same, but now placed daily in more marked antagonism.

Simultaneously there has been going on a separation of the institutions administering these two codes of conduct. While they were yet one, of course Church and State were one: the king was arch-priest, not nominally, but really – alike the giver of new commands and the chief interpreter of the old commands; and the deputy-priests coming out of his family were thus simply expounders of the dictates of their ancestry: at first as recollected, and afterwards as ascertained by professed interviews with them. This union – which still existed practically during the middle ages, when the authority of kings was mixed up with the authority of the pope, when there were bishop-rulers having all the powers of feudal lords, and when priests punished by penances – has been, step by step, becoming less close. Though monarchs are still "defenders of the faith," and ecclesiastical chiefs, they are but nominally such. Though bishops still have civil power, it is not what they once had. Protestantism shook loose the bonds of union; Dissent has long been busy in organizing a mechanism for the exercise of religious control, wholly independent of law; in America, a separate organization for that purpose already exists; and if anything is to be hoped from the Anti-State-Church Association – or, as it has been newly named, "The Society for the Liberation of Religion from State Patronage and Control" – we shall presently have a separate organization here also.

Thus alike in authority, in essence, and in form, political and spiritual rule have been ever more widely diverging from the same root. That increasing division of labour which marks the progress of society in other things, marks it also in this separation of government into civil and religious; and if we observe how the morality which forms the substance of religions in general, is beginning to be purified from the associated creeds, we may anticipate that this division will be ultimately carried much further.

Passing now to the third species of control – that of Manners – we shall find that this, too, while it had a common genesis with the others, has gradually come to have a distinct sphere and a special embodiment. Among early aggregations of men before yet social observances existed, the sole forms of courtesy known were the signs of submission to the strong man; as the sole law was his will, and the sole religion the awe of his supposed supernaturalness. Originally, ceremonies were modes of behaviour to the god-king. Our commonest titles have been derived from his names. And all salutations were primarily worship paid to him. Let us trace out these truths in detail, beginning with titles.

The fact already noticed, that the names of early kings among divers races are formed by the addition of certain syllables to the names of their gods – which certain syllables, like our *Mac* and *Fitz*, probably mean "son of," or "descended from" – at once gives meaning to the term *Father* as a divine title. And when we read, in Selden, that "the composition out of these names of Deities was not only proper to Kings: their Grandes and more honorable Subjects" (no doubt members of the royal race) "had sometimes the like;" we see how the term *Father*, properly used by these also, and by their multiplying descendants, came to be a title used by the people in general. And it is significant as bearing on this point, that among the most barbarous nation in Europe, where belief in the divine nature of the ruler still lingers, *Father* in this higher sense is still a regal distinction. When, again, we remember how the divinity at first ascribed to kings was not a complimentary fiction but a supposed fact; and how, further, under the Fetish philosophy the celestial bodies are believed to be personages who once lived among men; we see that the appellations of oriental rulers, "Brother to the Sun," &c., were probably once expressive of a genuine belief; and have simply, like many other things, continued in use after all meaning has gone out of them. We may infer, too, that the titles God, Lord, Divinity, were given to primitive rulers literally – that the *nostra divinitas* applied to the Roman emperors, and the various sacred designations that have been borne by monarchs, down to the still extant phrase, "Our Lord the King," are the dead and dying forms of what were once living facts. From these names,

God, Father, Lord, Divinity, originally belonging to the God-king, and afterwards to God and the king, the derivation of our commonest titles of respect is clearly traceable.

There is reason to think that these titles were originally proper names. Not only do we see among the Egyptians, where Pharaoh was synonymous with king, and among the Romans, where to be Cæsar, meant to be Emperor, that the proper names of the greatest men were transferred to their successors, and so became class names; but in the Scandinavian mythology we may trace a human title of honour up to the proper name of a divine personage. In Anglo-Saxon *bealdor*, or *baldor*, means *Lord*; and Balder is the name of the favourite of Odin's sons – the gods who with him constitute the Teutonic Pantheon. How these names of honour became general is easily understood. The relatives of the primitive kings – the grandees described by Selden as having names formed on those of the gods, and shown by this to be members of the divine race – necessarily shared in the epithets, such as *Lord*, descriptive of superhuman relationships and nature. Their ever-multiplying offspring inheriting these, gradually rendered them comparatively common. And then they came to be applied to every man of power: partly from the fact that, in these early days when men conceived divinity simply as a stronger kind of humanity, great persons could be called by divine epithets with but little exaggeration; partly from the fact that the unusually potent were apt to be considered as unrecognized or illegitimate descendants of "the strong, the destroyer, the powerful one;" and partly, also, from compliment and the desire to propitiate.

Progressively as superstition diminished, this last became the sole cause. And if we remember that it is the nature of compliment, as we daily hear it, to attribute more than is due – that in the constantly widening application of "esquire," in the perpetual repetition of "your honour" by the fawning Irishman, and in the use of the name "gentleman" to any coalheaver or dustman by the lower classes of London, we have current examples of the depreciation of titles consequent on compliment – and that in barbarous times, when the wish to propitiate was stronger than now, this effect must have been greater; we shall see that there naturally arose an extensive misuse of all early distinctions. Hence the facts, that the Jews called Herod a god; that *Father*, in its higher sense, was a term used among them by servants to masters; that *Lord* was applicable to any person of worth and power. Hence, too, the fact that, in the later periods of the Roman Empire, every _ man saluted his neighbour as *Dominus* and *Rex*.

But it is in the titles of the middle ages, and in the growth of our modern ones out of them, that the process is most clearly seen. *Herr*, *Don*, *Signior*, *Seigneur*, *Sennor*, were all originally names of rulers – of feudal lords. By the complimentary use of these names to all who could, on any pretence, be supposed to merit them, and by successive degradations of them from each step in the descent to a still lower one, they have come to be common forms of address. At first the phrase in which a serf accosted his despotic chief, *mein herr* is now familiarly applied in Germany to ordinary people. The Spanish title *Don*, once proper to noblemen and gentlemen only, is now accorded to all classes. So, too, is it with *Signior* in Italy. *Seigneur*, and *Monseigneur*, by contraction in *Sieur* and *Monsieur*, have produced the term of respect claimed by every Frenchman. And whether *Sire* be or be not a like contraction of *Signior*, it is clear that, as it was borne by sundry of the ancient feudal lords of France, who, as Selden says, "affected rather to bee stiled by the name of *Sire* than Baron, as *Le Sire de Montmorencie*, *Le Sire de Beaulieu*, and the like," and as it has been commonly used to monarchs, our word *Sir*, which is derived from it, originally meant lord or king. Thus, too, is it with feminine titles. *Lady*, which, according to Horne Tooke, means *exalted*, and was at first given only to the few, is now given to all women of education. *Dame*, once an honourable name to which, in old books, we find the epithets of "highborn" and "stately" affixed, has now, by repeated widenings of its application, become relatively a term of contempt. And if we trace the compound of this, *ma Dame*, through its contractions —*Madam*, *ma'am*, *mam*, *mum*, we find that the "Yes'm" of Sally to her mistress is originally equivalent to "Yes, my exalted," or "Yes, your highness." Throughout, therefore, the genesis of words of honour has been the same. Just as with the Jews and with the Romans, has it

been with the modern Europeans. Tracing these everyday names to their primitive significations of *lord* and *king*, and remembering that in aboriginal societies these were applied only to the gods and their descendants, we arrive at the conclusion that our familiar *Sir* and *Monsieur* are, in their primary and expanded meanings, terms of adoration.

Further to illustrate this gradual depreciation of titles, and to confirm the inference drawn, it may be well to notice in passing, that the oldest of them have, as might be expected, been depreciated to the greatest extent. Thus, *Master*– a word proved by its derivation and by the similarity of the connate words in other languages (Fr., *maître* for *master*; Russ., *master*; Dan., *meester*; Ger., *meister*) to have been one of the earliest in use for expressing lordship – has now become applicable to children only, and under the modification of "Mister," to persons next above the labourer. Again, knighthood, the oldest kind of dignity, is also the lowest; and Knight Bachelor, which is the lowest order of knighthood, is more ancient than any other of the orders. Similarly, too, with the peerage: Baron is alike the earliest and least elevated of its divisions. This continual degradation of all names of honor has, from time to time, made it requisite to introduce new ones having that distinguishing effect which the originals had lost by generality of use; just as our habit of misapplying superlatives has, by gradually destroying their force, entailed the need for fresh ones. And if, within the last thousand years, this process has produced effects thus marked, we may readily conceive how, during previous thousands, the titles of gods and demi-gods came to be used to all persons exercising power; as they have since come to be used to persons of respectability.

If from names of honour we turn to phrases of honour, we find similar facts. The Oriental styles of address, applied to ordinary people – "I am your slave," "All I have is yours," "I am your sacrifice" – attribute to the individual spoken to the same greatness that *Monsieur* and *My Lord* do: they ascribe to him the character of an all-powerful ruler, so immeasurably superior to the speaker as to be his owner. So, likewise, with the Polish expressions of respect – "I throw myself under your feet," "I kiss your feet." In our now meaningless subscription to a formal letter – "Your most obedient servant," – the same thing is visible. Nay, even in the familiar signature "Yours faithfully," the "yours," if interpreted as originally meant, is the expression of a slave to his master.

All these dead forms were once living embodiments of fact – were primarily the genuine indications of that submission to authority which they verbally assert; were afterwards naturally used by the weak and cowardly to propitiate those above them; gradually grew to be considered the due of such; and, by a continually wider misuse, have lost their meanings, as *Sir* and *Master* have done. That, like titles, they were in the beginning used only to the God-king, is indicated by the fact that, like titles, they were subsequently used in common to God and the king. Religious worship has ever largely consisted of professions of obedience, of being God's servants, of belonging to him to do what he will with. Like titles, therefore, these common phrases of honour had a devotional origin.

Perhaps, however, it is in the use of the word *you* as a singular pronoun that the popularizing of what were once supreme distinctions is most markedly illustrated. This speaking of a single individual in the plural, was originally an honour given only to the highest – was the reciprocal of the imperial "we" assumed by such. Yet now, by being applied to successively lower and lower classes, it has become all but universal. Only by one sect of Christians, and in a few secluded districts, is the primitive *thou* still used. And the *you*, in becoming common to all ranks has simultaneously lost every vestige of the honour once attaching to it.

But the genesis of Manners out of forms of allegiance and worship, is above all shown in men's modes of salutation. Note first the significance of the word. Among the Romans, the *salutatio* was a daily homage paid by clients and inferiors to superiors. This was alike the case with civilians and in the army. The very derivation of our word, therefore, is suggestive of submission. Passing to particular forms of obeisance (mark the word again), let us begin with the Eastern one of baring the feet. This was, primarily, a mark of reverence, alike to a god and a king. The act of Moses before the burning bush, and the practice of Mahometans, who are sworn on the Koran with their shoes off,

exemplify the one employment of it; the custom of the Persians, who remove their shoes on entering the presence of their monarch, exemplifies the other. As usual, however, this homage, paid next to inferior rulers, has descended from grade to grade. In India, it is a common mark of respect; a polite man in Turkey always leaves his shoes at the door, while the lower orders of Turks never enter the presence of their superiors but in their stockings; and in Japan, this baring of the feet is an ordinary salutation of man to man.

Take another case. Selden, describing the ceremonies of the Romans, says: – "For whereas it was usual either to kiss the Images of their Gods, or adoring them, to stand somewhat off before them, solemnly moving the right hand to the lips, and then, casting it as if they had cast kisses, to turne the body on the same hand (which was the right forme of Adoration), it grew also by custom, first that the emperors, being next to Deities, and by some accounted as Deities, had the like done to them in acknowledgment of their Greatness." If, now, we call to mind the awkward salute of a village school-boy, made by putting his open hand up to his face and describing a semicircle with his forearm; and if we remember that the salute thus used as a form of reverence in country districts, is most likely a remnant of the feudal times; we shall see reason for thinking that our common wave of the hand to a friend across the street, represents what was primarily a devotional act.

Similarly have originated all forms of respect depending upon inclinations of the body. Entire prostration is the aboriginal sign of submission. The passage of Scripture, "Thou hast put all under his feet," and that other one, so suggestive in its anthropomorphism, "The Lord said unto my Lord, sit thou at my right hand, until I make thine enemies thy footstool," imply, what the Assyrian sculptures fully bear out, that it was the practice of the ancient god-kings of the East to trample upon the conquered. And when we bear in mind that there are existing savages who signify submission by placing the neck under the foot of the person submitted to, it becomes obvious that all prostration, especially when accompanied by kissing the foot, expressed a willingness to be trodden upon – was an attempt to mitigate wrath by saying, in signs, "Tread on me if you will." Remembering, further, that kissing the foot, as of the Pope and of a saint's statue, still continues in Europe to be a mark of extreme reverence; that prostration to feudal lords was once general; and that its disappearance must have taken place, not abruptly, but by gradual modification into something else; we have ground for deriving from these deepest of humiliations all inclinations of respect; especially as the transition is traceable. The reverence of a Russian serf, who bends his head to the ground, and the salaam of the Hindoo, are abridged prostrations; a bow is a short salaam; a nod is a short bow.

Should any hesitate to admit this conclusion, then perhaps, on being reminded that the lowest of these obeisances are common where the submission is most abject; that among ourselves the profundity of the bow marks the amount of respect; and lastly, that the bow is even now used devotionally in our churches – by Catholics to their altars, and by Protestants at the name of Christ – they will see sufficient evidence for thinking that this salutation also was originally worship.

The same may be said, too, of the curtsy, or courtesy, as it is otherwise written. Its derivation from *courtoisie*, courteousness, that is, behaviour like that at court, at once shows that it was primarily the reverence paid to a monarch. And if we call to mind that falling upon the knees, or upon one knee, has been a common obeisance of subjects to rulers; that in ancient manuscripts and tapestries, servants are depicted as assuming this attitude while offering the dishes to their masters at table; and that this same attitude is assumed towards our own queen at every presentation; we may infer, what the character of the curtsy itself suggests, that it is an abridged act of kneeling. As the word has been contracted from *courtoisie* into curtsy; so the motion has been contracted from a placing of the knee on the floor, to a lowering of the knee towards the floor. Moreover, when we compare the curtsy of a lady with the awkward one a peasant girl makes, which, if continued, would bring her down on both knees, we may see in this last a remnant of that greater reverence required of serfs. And when, from considering that simple kneeling of the West, still represented by the curtsy, we pass Eastward,

and note the attitude of the Mahomedan worshipper, who not only kneels but bows his head to the ground, we may infer that the curtsy also, is an evanescent form of the aboriginal prostration.

In further evidence of this it may be remarked, that there has but recently disappeared from the salutations of men, an action having the same proximate derivation with the curtsy. That backward sweep of the foot with which the conventional stage-sailor accompanies his bow – a movement which prevailed generally in past generations, when "a bow and a scrape" went together, and which, within the memory of living persons, was made by boys to their schoolmaster with the effect of wearing a hole in the floor – is pretty clearly a preliminary to going on one knee. A motion so ungainly could never have been intentionally introduced; even if the artificial introduction of obeisances were possible. Hence we must regard it as the remnant of something antecedent: and that this something antecedent was humiliating maybe inferred from the phrase, "scraping an acquaintance;" which, being used to denote the gaining of favour by obsequiousness, implies that the scrape was considered a mark of servility – that is, of *serf*-ility.

Consider, again, the uncovering of the head. Almost everywhere this has been a sign of reverence, alike in temples and before potentates; and it yet preserves among us some of its original meaning. Whether it rains, hails, or shines, you must keep your head bare while speaking to the monarch; and on no plea may you remain covered in a place of worship. As usual, however, this ceremony, at first a submission to gods and kings, has become in process of time a common civility. Once an acknowledgment of another's unlimited supremacy, the removal of the hat is now a salute accorded to very ordinary persons, and that uncovering, originally reserved for entrance into "the house of God," good manners now dictates on entrance into the house of a common labourer.

Standing, too, as a mark of respect, has undergone like extensions in its application. Shown, by the practice in our churches, to be intermediate between the humiliation signified by kneeling and the self-respect which sitting implies, and used at courts as a form of homage when more active demonstrations of it have been made, this posture is now employed in daily life to show consideration; as seen alike in the attitude of a servant before a master, and in that rising which politeness prescribes on the entrance of a visitor.

Many other threads of evidence might have been woven into our argument. As, for example, the significant fact, that if we trace back our still existing law of primogeniture – if we consider it as displayed by Scottish clans, in which not only ownership but government devolved from the beginning on the eldest son of the eldest – if we look further back, and observe that the old titles of lordship, *Signor*, *Seigneur*, *Sennor*, *Sire*, *Sieur*, all originally mean, senior, or elder – if we go Eastward, and find that *Sheick* has a like derivation, and that the Oriental names for priests, as *Pir*, for instance, are literally interpreted *old man*– if we note in Hebrew records how primeval is the ascribed superiority of the first-born, how great the authority of elders, and how sacred the memory of patriarchs – and if, then, we remember that among divine titles are "Ancient of Days," and "Father of Gods and men;" – we see how completely these facts harmonize with the hypothesis, that the aboriginal god is the first man sufficiently great to become a tradition, the earliest whose power and deeds made him remembered; that hence antiquity unavoidably became associated with superiority, and age with nearness in blood to "the powerful one;" that so there naturally arose that domination of the eldest which characterizes all history, and that theory of human degeneracy which even yet survives.

We might further dwell on the facts, that *Lord* signifies high-born, or, as the same root gives a word meaning heaven, possibly heaven-born; that, before it became common, *Sir* or *Sire*, as well as *Father*, was the distinction of a priest; that *worship*, originally worth-ship – a term of respect that has been used commonly, as well as to magistrates – is also our term for the act of attributing greatness or worth to the Deity; so that to ascribe worth-ship to a man is to worship him. We might make much of the evidence that all early governments are more or less distinctly theocratic; and that among ancient Eastern nations even the commonest forms and customs appear to have been influenced by religion. We might enforce our argument respecting the derivation of ceremonies, by tracing out the aboriginal

obeisance made by putting dust on the head, which probably symbolizes putting the head in the dust: by affiliating the practice prevailing among certain tribes, of doing another honour by presenting him with a portion of hair torn from the head – an act which seems tantamount to saying, "I am your slave;" by investigating the Oriental custom of giving to a visitor any object he speaks of admiringly, which is pretty clearly a carrying out the compliment, "All I have is yours."

Without enlarging, however, on these and many minor facts, we venture to think that the evidence already assigned is sufficient to justify our position. Had the proofs been few or of one kind, little faith could have been placed in the inference. But numerous as they are, alike in the case of titles, in that of complimentary phrases, and in that of salutes – similar and simultaneous, too, as the process of depreciation has been in all of these; the evidences become strong by mutual confirmation. And when we recollect, also, that not only have the results of this process been visible in various nations and in all times, but that they are occurring among ourselves at the present moment, and that the causes assigned for previous depreciations may be seen daily working out other ones – when we recollect this, it becomes scarcely possible to doubt that the process has been as alleged; and that our ordinary words, acts, and phrases of civility were originally acknowledgments of submission to another's omnipotence.

Thus the general doctrine, that all kinds of government exercised over men were at first one government – that the political, the religious, and the ceremonial forms of control are divergent branches of a general and once indivisible control – begins to look tenable. When, with the above facts fresh in mind, we read primitive records, and find that "there were giants in those days" – when we remember that in Eastern traditions Nimrod, among others, figures in all the characters of giant, king, and divinity – when we turn to the sculptures exhumed by Mr. Layard, and contemplating in them the effigies of kings driving over enemies, trampling on prisoners, and adored by prostrate slaves, then observe how their actions correspond to the primitive names for the divinity, "the strong," "the destroyer," "the powerful one" – when we find that the earliest temples were also the residences of the kings – and when, lastly, we discover that among races of men still living, there are current superstitions analogous to those which old records and old buildings indicate; we begin to realize the probability of the hypothesis that has been set forth. Going back, in imagination, to the remote era when men's theories of things were yet unformed; and conceiving to ourselves the conquering chief as dimly figured in ancient myths, and poems, and ruins; we may see that all rules of conduct whatever spring from his will. Alike legislator and judge, all quarrels among his subjects are decided by him; and his words become the Law. Awe of him is the incipient Religion; and his maxims furnish its first precepts. Submission is made to him in the forms he prescribes; and these give birth to Manners. From the first, time develops political allegiance and the administration of justice; from the second, the worship of a being whose personality becomes ever more vague, and the inculcation of precepts ever more abstract; from the third, forms of honour and the rules of etiquette.

In conformity with the law of evolution of all organized bodies, that general functions are gradually separated into the special functions constituting them, there have grown up in the social organism for the better performance of the governmental office, an apparatus of law-courts, judges, and barristers; a national church, with its bishops and priests; and a system of caste, titles, and ceremonies, administered by society at large. By the first, overt aggressions are cognized and punished; by the second, the disposition to commit such aggressions is in some degree checked; by the third, those minor breaches of good conduct, which the others do not notice, are denounced and chastised. Law and Religion control behaviour in its essentials: Manners control it in its details. For regulating those daily actions which are too numerous and too unimportant to be officially directed, there comes into play this subtler set of restraints. And when we consider what these restraints are – when we analyze the words, and phrases, and salutes employed, we see that in origin as in effect, the system is a setting up of temporary governments between all men who come in contact, for the purpose of better managing the intercourse between them.

From the proposition, that these several kinds of government are essentially one, both in genesis and function, may be deduced several important corollaries, directly bearing on our special topic.

Let us first notice, that there is not only a common origin and office for all forms of rule, but a common necessity for them. The aboriginal man, coming fresh from the killing of bears and from lying in ambush for his enemy, has, by the necessities of his condition, a nature requiring to be curbed in its every impulse. Alike in war and in the chase, his daily discipline has been that of sacrificing other creatures to his own needs and passions. His character, bequeathed to him by ancestors who led similar lives, is moulded by this discipline – is fitted to this existence. The unlimited selfishness, the love of inflicting pain, the bloodthirstiness, thus kept active, he brings with him into the social state. These dispositions put him in constant danger of conflict with his equally savage neighbour. In small things as in great, in words as in deeds, he is aggressive; and is hourly liable to the aggressions of others like natured. Only, therefore, by the most rigorous control exercised over all actions, can the primitive unions of men be maintained. There must be a ruler strong, remorseless, and of indomitable will; there must be a creed terrible in its threats to the disobedient; and there must be the most servile submission of all inferiors to superiors. The law must be cruel; the religion must be stern; the ceremonies must be strict.

The co-ordinate necessity for these several kinds of restraint might be largely illustrated from history were there space. Suffice it to point out, that where the civil power has been weak, the multiplication of thieves, assassins, and banditti, has indicated the approach of social dissolution; that when, from the corruptness of its ministry, religion has lost its influence, as it did just before the Flagellants appeared, the State has been endangered; and that the disregard of established social observances has ever been an accompaniment of political revolutions. Whoever doubts the necessity for a government of manners proportionate in strength to the co-existing political and religious governments, will be convinced on calling to mind that until recently even elaborate codes of behaviour failed to keep gentlemen from quarrelling in the streets and fighting duels in taverns; and on remembering further, that even now people exhibit at the doors of a theatre, where there is no ceremonial law to rule them, a degree of aggressiveness which would produce confusion if carried into social intercourse.

As might be expected, we find that, having a common origin and like general functions, these several controlling agencies act during each era with similar degrees of vigour. Under the Chinese despotism, stringent and multitudinous in its edicts and harsh in the enforcement of them, and associated with which there is an equally stern domestic despotism exercised by the eldest surviving male of the family, there exists a system of observances alike complicated and rigid. There is a tribunal of ceremonies. Previous to presentation at court, ambassadors pass many days in practising the required forms. Social intercourse is cumbered by endless compliments and obeisances. Class distinctions are strongly marked by badges. The chief regret on losing an only son is, that there will be no one to perform the sepulchral rites. And if there wants a definite measure of the respect paid to social ordinances, we have it in the torture to which ladies submit in having their feet crushed. In India, and indeed throughout the East, there exists a like connection between the pitiless tyranny of rulers, the dread terrors of immemorial creeds, and the rigid restraint of unchangeable customs: the caste regulations continue still unalterable; the fashions of clothes and furniture have remained the same for ages; suttees are so ancient as to be mentioned by Strabo and Diodorus Siculus; justice is still administered at the palace-gates as of old; in short, "every usage is a precept of religion and a maxim of jurisprudence."

A similar relationship of phenomena was exhibited in Europe during the Middle Ages. While all its governments were autocratic, while feudalism held sway, while the Church was unshorn of its power, while the criminal code was full of horrors and the hell of the popular creed full of terrors, the rules of behaviour were both more numerous and more carefully conformed to than now. Differences of dress marked divisions of rank. Men were limited by law to a certain width of shoe-toes; and

no one below a specified degree might wear a cloak less than so many inches long. The symbols on banners and shields were carefully attended to. Heraldry was an important branch of knowledge. Precedence was strictly insisted on. And those various salutes of which we now use the abridgments were gone through in full. Even during our own last century, with its corrupt House of Commons and little-curbed monarchs, we may mark a correspondence of social formalities. Gentlemen were still distinguished from lower classes by dress; people sacrificed themselves to inconvenient requirements – as powder, hooped petticoats, and towering head-dresses; and children addressed their parents as *Sir* and *Madam*.

A further corollary naturally following this last, and almost, indeed, forming part of it, is, that these several kinds of government decrease in stringency at the same rate. Simultaneously with the decline in the influence of priesthoods, and in the fear of eternal torments – simultaneously with the mitigation of political tyranny, the growth of popular power, and the amelioration of criminal codes; has taken place that diminution of formalities and that fading of distinctive marks, now so observable. Looking at home, we may note that there is less attention to precedence than there used to be. No one in our day ends an interview with the phrase "your humble servant." The employment of the word *Sir*, once general in social intercourse, is at present considered bad breeding; and on the occasions calling for them, it is held vulgar to use the words "Your Majesty," or "Your Royal Highness," more than once in a conversation. People no longer formally drink each other's healths; and even the taking wine with each other at dinner has ceased to be fashionable. The taking-off of hats between gentlemen has been gradually falling into disuse. Even when the hat is removed, it is no longer swept out at arm's length, but is simply lifted. Hence the remark made upon us by foreigners, that we take off our hats less than any other nation in Europe – a remark that should be coupled with the other, that we are the freest nation in Europe.

As already implied, this association of facts is not accidental. These titles of address and modes of salutation, bearing about them, as they all do, something of that servility which marks their origin, become distasteful in proportion as men become more independent themselves, and sympathise more with the independence of others. The feeling which makes the modern gentleman tell the labourer standing bareheaded before him to put on his hat – the feeling which gives us a dislike to those who cringe and fawn – the feeling which makes us alike assert our own dignity and respect that of others – the feeling which thus leads us more and more to discountenance all forms and names which confess inferiority and submission; is the same feeling which resists despotic power and inaugurates popular government, denies the authority of the Church and establishes the right of private judgment.

A fourth fact, akin to the foregoing, is, that these several kinds of government not only decline together, but corrupt together. By the same process that a Court of Chancery becomes a place not for the administration of justice, but for the withholding of it – by the same process that a national church, from being an agency for moral control, comes to be merely a thing of formulas and tithes and bishoprics – by this same process do titles and ceremonies that once had a meaning and a power become empty forms.

Coats of arms which served to distinguish men in battle, now figure on the carriage panels of retired grocers. Once a badge of high military rank, the shoulder-knot has become, on the modern footman, a mark of servitude. The name Banneret, which once marked a partially-created Baron – a Baron who had passed his military "little go" – is now, under the modification of Baronet, applicable to any one favoured by wealth or interest or party feeling. Knighthood has so far ceased to be an honour, that men now honour themselves by declining it. The military dignity *Escuyer* has, in the modern Esquire, become a wholly unmilitary affix. Not only do titles, and phrases, and salutes cease to fulfil their original functions, but the whole apparatus of social forms tends to become useless for its original purpose – the facilitation of social intercourse. Those most learned in ceremonies, and most precise in the observance of them, are not always the best behaved; as those deepest read in creeds and scriptures are not therefore the most religious; nor those who have the clearest notions of

legality and illegality, the most honest. Just as lawyers are of all men the least noted for probity; as cathedral towns have a lower moral character than most others; so, if Swift is to be believed, courtiers are "the most insignificant race of people that the island can afford, and with the smallest tincture of good manners."

But perhaps it is in that class of social observances comprehended under the term Fashion, which we must here discuss parenthetically, that this process of corruption is seen with the greatest distinctness. As contrasted with Manners, which dictate our minor acts in relation to other persons, Fashion dictates our minor acts in relation to ourselves. While the one prescribes that part of our deportment which directly affects our neighbours; the other prescribes that part of our deportment which is primarily personal, and in which our neighbours are concerned only as spectators. Thus distinguished as they are, however, the two have a common source. For while, as we have shown, Manners originate by imitation of the behaviour pursued *towards* the great; Fashion originates by imitation *of* the behaviour of the great. While the one has its derivation in the titles, phrases, and salutes used *to* those in power; the other is derived from the habits and appearances exhibited *by* those in power.

The Carib mother who squeezes her child's head into a shape like that of the chief; the young savage who makes marks on himself similar to the scars carried by the warriors of his tribe (which is probably the origin of tattooing); the Highlander who adopts the plaid worn by the head of his clan; the courtiers who affect greyness, or limp, or cover their necks, in imitation of their king; and the people who ape the courtiers; are alike acting under a kind of government connate with that of Manners, and, like it too, primarily beneficial. For notwithstanding the numberless absurdities into which this copyism has led the people, from nose-rings to ear-rings, from painted faces to beauty-spots, from shaven heads to powdered wigs, from filed teeth and stained nails to bell-girdles, peaked shoes, and breeches stuffed with bran, – it must yet be concluded, that as the strong men, the successful men, the men of will, intelligence, and originality, who have got to the top, are, on the average, more likely to show judgment in their habits and tastes than the mass, the imitation of such is advantageous.

By and by, however, Fashion, corrupting like these other forms of rule, almost wholly ceases to be an imitation of the best, and becomes an imitation of quite other than the best. As those who take orders are not those having a special fitness for the priestly office, but those who see their way to a living by it; as legislators and public functionaries do not become such by virtue of their political insight and power to rule, but by virtue of birth, acreage, and class influence; so, the self-elected clique who set the fashion, gain this prerogative, not by their force of nature, their intellect, their higher worth or better taste, but gain it solely by their unchecked assumption. Among the initiated are to be found neither the noblest in rank, the chief in power, the best cultured, the most refined, nor those of greatest genius, wit, or beauty; and their reunions, so far from being superior to others, are noted for their inanity. Yet, by the example of these sham great, and not by that of the truly great, does society at large now regulate its goings and comings, its hours, its dress, its small usages. As a natural consequence, these have generally little or none of that suitableness which the theory of fashion implies they should have. But instead of a continual progress towards greater elegance and convenience, which might be expected to occur did people copy the ways of the really best, or follow their own ideas of propriety, we have a reign of mere whim, of unreason, of change for the sake of change, of wanton oscillations from either extreme to the other – a reign of usages without meaning, times without fitness, dress without taste. And thus life *à la mode*, instead of being life conducted in the most rational manner, is life regulated by spendthrifts and idlers, milliners and tailors, dandies and silly women.

To these several corollaries – that the various orders of control exercised over men have a common origin and a common function, are called out by co-ordinate necessities and co-exist in like stringency, decline together and corrupt together – it now only remains to add that they become needless together. Consequent as all kinds of government are upon the unfitness of the aboriginal

man for social life; and diminishing in coerciveness as they all do in proportion as this unfitness diminishes; they must one and all come to an end as humanity acquires complete adaptation to its new conditions. That discipline of circumstances which has already wrought out such great changes in us, must go on eventually to work out yet greater ones. That daily curbing of the lower nature and culture of the higher, which out of cannibals and devil worshippers has evolved philanthropists, lovers of peace, and haters of superstition, cannot fail to evolve out of these, men as much superior to them as they are to their progenitors. The causes that have produced past modifications are still in action; must continue in action as long as there exists any incongruity between man's desires and the requirements of the social state; and must eventually make him organically fit for the social state. As it is now needless to forbid man-eating and Fetishism, so will it ultimately become needless to forbid murder, theft, and the minor offences of our criminal code. When human nature has grown into conformity with the moral law, there will need no judges and statute-books; when it spontaneously takes the right course in all things, as in some things it does already, prospects of future reward or punishment will not be wanted as incentives; and when fit behaviour has become instinctive, there will need no code of ceremonies to say how behaviour shall be regulated. Thus, then, may be recognised the meaning, the naturalness, the necessity of those various eccentricities of reformers which we set out by describing. They are not accidental; they are not mere personal caprices, as people are apt to suppose. On the contrary, they are inevitable results of the law of relationship above illustrated. That community of genesis, function, and decay which all forms of restraint exhibit, is simply the obverse of the fact at first pointed out, that they have in two sentiments of human nature a common preserver and a common destroyer. Awe of power originates and cherishes them all: love of freedom undermines and periodically weakens them all. The one defends despotism and asserts the supremacy of laws, adheres to old creeds and supports ecclesiastical authority, pays respect to titles and conserves forms; the other, putting rectitude above legality, achieves periodical instalments of political liberty, inaugurates Protestantism and works out its consequences, ignores the senseless dictates of Fashion and emancipates men from dead customs.

Конец ознакомительного фрагмента.