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XII. *Observations on a new System of Phrenology, or the Anatomy and Physiology of the Brain, of Drs. GALL and SPURZHEIM.*

THESE are two fundamental errors into which people endowed with different proportions of certain mental faculties commonly fall, whenever they consider any new doctrine—1st, that of believing it before they have examined the evidence in its favour; and, secondly, that of condemning it anterior to investigation. These two states of mind are equally injurious to the advancement of science: they are opposed to each other, but are equally hurtful to the progress of truth—just as the rage for novelty, as well as the outcry against innovation, are both prejudicial to real improvement. New discoveries too suffer from a variety of other reasons—the jealousy of the selfish and covetous, who envy their contemporaries the merit of invention, and the bigotry of ignorant persons, who imagine that some mischief will arise to their favourite creeds, as well as the great mass of imbecility and ignorance which pervades mankind, are stumbling blocks in the path of science, which nothing but steadiness and perseverance will overcome. There is, too, another and a very rational motive for persons to feel at first a prejudice against a new science, namely, that there have been such a number of impostors in the world from time to time, and the public have been so often duped by pretenders to philosophy, that cautiousness in admitting any thing new seems the natural and necessary consequence. This latter consideration operated powerfully on myself when first I heard of the discoveries of Gall and Spurzheim respecting the functions of the organs of the brain; but I was determined to investigate for myself the facts whereon the apparently new and peculiar notions entertained by those anatomists were founded.

During my studies of comparative anatomy, and while dissecting different animals when a boy, I was much struck with the generic forms of the crania of animals, and have often felt surprised that among the many boasted comparative anatomists whose volumes fill our shelves, none had made out any relation between the brain and the character of animals: they described minutely enough the number of vertebræ—they named with precision the bones of limbs—they measured the intestines to feet and inches: others counted the articulations on the backs of insects, the rings of the caterpillar, and the legs of the scolopendræ; but no one made accurate researches into the most important of organs. The difficulty attending these investigations of the brain, the laziness of individuals, and, above all, that execrable plan of yielding to authority, whereby people

cease

cease to inquire into that which some great name had pompously declared to be unattainable, are the reasons why this interesting science had not been more successfully studied before the present day. These ideas frequently passed in my mind, but I was unacquainted with any mode of investigating minutely the brain and nerves. Constant presentiment, however, that in them would be found the material principles of our actions and character, prepared me, as it were, for the reception of the facts which came in a loose sort of form from Germany several years ago. I had always considered too, that the nature of man was never properly studied, and that a host of prejudices had deterred philosophers from the task. There were several other facts which occurred to me, by which I anticipated, something like what Dr. Gall afterwards promulgated. These subjects became additionally interesting from a curious observation I had made, namely, that the exercise of particular faculties violently and continuedly appeared to produce sensations in particular parts of the head. The violent action into which any organ may be called, frequently produces, I am persuaded, a sensation in the part, as Dr. Spurzheim has recently shown in his lecture on the physiognomical expression of the organs of the mind, and which is a very interesting fact, as it tends to establish the locality of action of the different parts of the brain. From these circumstances, and from many curious facts I noticed in diseases, I was then just in a state to be interested by the discoveries of Gall; and the meeting with his learned colleague in London, and hearing so many of my own crude notions detailed in the scientific manner in which they were treated of by Spurzheim, constituted by far the most interesting period of my life.

I had scarcely begun the investigation of the anatomical part of their system, when I exclaimed, All I have hitherto known of the anatomy of the brain and nerves is mere child's play; and the demonstrations of it given in our schools is merely dwelling on a blank in the science, and reminding us of the futility of inquiry!

As I consider this science not merely with reference to the interest it must excite as a means of knowing the principles of the diversification of the human character, but also with regard to the important influence which a general knowledge of it, should it be proved true by time, will have on society, I shall proceed to point out the useful results of it under the several heads, as an encouragement to persons to pursue and convince themselves of the truth of statements which the vulgar hastily consider as the chimerical effusions of theoretical fancy, as one of the ephemeral manias of our days. During the inquiry we shall,

shall, I think, remove many objections against the leading doctrines of the system which popular prejudice and misconception have imagined to exist; and shall see that it is a most beautiful and perfect system of anthropology.

Anatomy and Physiology.

Although on a superficial inquiry, many people may doubt of the physiology of the organs or the general results of the system; yet the anatomical discoveries into the structure of the brain and nervous system are matter of absolute demonstration, and will remain a memorial of the industry and perseverance of Dr. Gall and Spurzheim, before whom the anatomy of these organs was wholly unknown. By means of these discoveries we now see the great consistency of Nature in all her productions throughout the creation. Animals endowed with similar faculties have corresponding parts of the brain. Indeed till now comparative anatomy has been a very confused and imperfect science: probably in future a more philosophical arrangement will be made of animals founded on the particular structure of the brain of each class, order, genus, and species.

Of the Plurality and Place of Organs.

The division of the parts of the brain into different organs of the faculties of the mind, and their local arrangement, is strictly philosophical, though the facts on which it is founded were discovered by accident, from time to time. The propensities are all at the lower and back part of the brain and cerebellum. The sentiments at the upper part of the brain, and the knowing and reflecting faculties constituting the intellectual part of our minds, are placed in front. All the organs have been discovered by observing that where a person had this or that part of the head most developed, the same person had particular faculties in a high degree; the particular faculty always corresponding with the organ. It was by such accidents that the local development as connected with particular functions was found out. But though we have this positive proof of the necessity of the development of the parts to the special faculty assigned to them; yet we have not the same proof of local action. Analogy, and the physiognomical expression of the feelings constitute, I think, the greatest proof we can obtain of this fact. To those who dispute the locality of the organs, it may be asked. Have not people in all ages considered the brain as the organ of the mind? Is it not, therefore, more rational to regard it as an assemblage of different organs corresponding to the different manifestations of the mind, than to suppose one simple organ performing such various functions?

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It seems indeed surprising to me that the brain was not regarded in this light, even before observation had pointed out the particular seats of the organs.

Of the Philosophical Tendency of the Physiology of the Organs.

It may be of use to advert to the metaphysical results of the recent investigations into the physiology of the organs of animal life, with a view to lead to that comprehensive system of the philosophy of the mind, which is the legitimate deduction from premises which an examination of these functions has established.

It tends to show,

I. The nature and limits of the influence of external impressions in the production of our ideas; which result, 1st, from the reaction of the organs in consequence of external impressions, adapted by nature to them, constituting perception:—or, 2dly, from the inherent or internal activity of the organs, acting by themselves without external impressions, or from some internal stimulus, constituting variously, as modified by mutual influences, and by the nature of the internal action of the original conceptions of particular genius; which are as it were revelations of sciences and arts from the great size and activity of particular organs. This consideration also explains visions and dreams, which are the consequence of the internal activity. Indeed a very curious history of the varieties of dreams and other internal affections, might be made from considering what organs are active in different cases, and by noticing the effect produced towards waking, when the organs of the reflecting powers begin to act.

II. We see from the physiology of the organs the nature of true and false perceptions. True ideas or perceptions result from the conformity of the action of the organs to the nature of the impressions from without, to which they are adapted. Memory,—a repetition of actions originally excited by external things. Imagination,—new combinations produced by the influence of a distinct and separate faculty on other organs. Genius, or original composition,—the great internal activity of an organ; this is influenced more or less by the organ of ideality, &c. And, lastly, we see that false ideas or impressions must be referred to irregular or disordered action of the organs; which disordered health and misguided education may excite on an organization erroneous in the proportionate development of the different organs. This leads to the consideration of the different mental derangements hereafter to be spoken of.

III. The physiology of the organs shows where certain metaphysical philosophers were right and where wrong in certain opinions; explains the relation between the Berkleian philosophy,
which

which denies external matter ; and the materialism of Priestley. In other words we hereby see where was the defect of consideration in the disciples of Kant, who were divided about objective and subjective reality. Long before I became acquainted with craniology, these subjects engaged much of my attention, and I felt convinced that a radical difference in the conformation of the mind must be the cause why certain people only regarded the objectivity and others only the subjectivity : and why others saw clearly the reality was the result of the reaction of the impressions of the object on the subject. I know persons who are defective in the organ of Individuality, who, when they are ill of nervous affections, have told me that they felt as if the external world did not exist, but that all ideas were entirely within themselves. All these things however must now be superficially treated of as varieties of insanity, as connected with particular organization and established natural influences.—I mention these facts in a hasty and imperfect manner ; they will become the subjects of future consideration of persons more qualified.

Of Insanity.

In Dr. Spurzheim's recent excellent work, he has said, advertent to the treatment of lunatics and the places of their confinement, that they may more properly be called madhouses than houses for madmen. The treatment of insane persons is certainly at present very defective and often disgusting to humanity. The discoveries of Gall and Spurzheim seem really to promise some amelioration of their medical treatment. They constitute the only scientific source of knowledge about the varieties of these interesting kinds of diseases.

Of Education.

The application of the physiology of the brain to the education of youth, consists in the cultivation of the intellect, and in the regulation of the moral character ; and is founded on the proof we have already obtained from experience, that we can ascertain from the external form of the head the principal and basis of education ; namely, the relative development of the different material conditions of the faculties.

I. With regard to the intellect.—Education consists in exercising the faculties. Phrenology, by pointing out the strongest faculties of individuals, will assist us in choosing professions for youth suitable to the genius of the individual ; and teach us, 1st, to cultivate those faculties in the exercise whereof he is likely to become eminent ; or, 2dly, to give additional excitement to those which, though naturally weak, may be roused into comparative exertion by the excitements offered by education.

II. With

II. With regard to the moral character.—In education we shall be enabled by phrenology to see where, from a preponderance of some particular faculty, there is greater necessity of a counteraction by excitement of antagonist faculties. We learn also how the superior sentiments ought to control the lower propensities, and how the organs of the will should in all cases be exercised early, to give them the greatest range of power over the propensities. We learn also another important branch of education in observing, that to strengthen and render habitual any good feeling, as benevolence for instance, we must not only inculcate it but must expose the child to objects of charity, and enhance it by setting before him instances of mercy. Thus phrenology comprises the sentiment the wise have held in all ages, of the poverty of precept when compared with example, as an incentive to moral excellence.

Of Punishment.

Phrenology will lead to important considerations regarding criminal punishment; particularly in houses of correction. It will enable us to distinguish, not only between those who have naturally strong evil propensities, from those whom distress or other contingences may have hurried on to crime; but will point out the particular nature of many evil propensities to be corrected. It is hoped that the learned authors of this system will more fully develop, in some future publication, its particular application to punishment.

Conclusion.

Having shown some of the particular useful purposes of the study of the anatomy and physiology of the organs of the mind, I may observe, in conclusion, that while, from the most accurate and continued examination of the subject, I feel fully convinced that the conclusions are legitimate deductions from demonstrable facts, and ought for that reason alone to be studied and applied, whatever might be their supposed tendency; I am nevertheless convinced that the objections raised against the deductions, by persons who fancy they will be injurious to the religion and morals of mankind, are wholly unfounded, and are the result of a very superficial examination of the subject; and that, on the contrary, it is the wild metaphysical dogmas of the modern schools against which the shafts of this accurate scrutiny into the nature and functions of mind are most successfully levelled. That, in short, the moral results of the system constitute a scientific explanation, and therefore confirmation of doctrines which common sense has always inclined to, which religions have inculcated, and which the popular and proverbial philosophy of the common people have

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expressed on many occasions more clearly than the perplexed jargon of the schools.

St. Bartholomew's Hospital,
27th Jan. 1815.

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P. S.—I have omitted entering into the particular proofs of the doctrine, as this would be trespassing on Dr. Spurzheim's lectures, which every candid inquirer should attend himself before he makes up his mind on this subject. Even if the doctrine were false, these lectures contain sufficient interesting matter to repay the trouble of attending them. I have only to apologize for these very hasty and imperfect observations, which the time allotted for a periodical publication will not allow me to revise, and to which I should not affix my name, had not several persons carelessly ascribed many unsigned letters on this subject from artists and medical and other persons, on its particular bearings, to its authors themselves, and have thus accused them of an anonymous encomium of their own discoveries. I publish them only to invite students to examine the facts for themselves, and verify their truth or falsehood by their own investigations.

XIII. *Dr. SPURZHEIM'S demonstrative Course of Lectures on Drs. GALL and SPURZHEIM'S Physiognomical System.*

[Continued from vol. xlv. p. 370.]

Lecture 10. **H**AVING finished the knowing or perceiving faculties which are common to all animals, Dr. S. proceeded to the reflecting faculties; philosophers call the latter reason, and the former understanding. Animals have understanding and some reason. Examples of dogs; one mentioned in the French translation of Locke's Essays, where a dog that was secluded by others from the fire, went out and barked so as to attract the attention of all the rest, and immediately returned and then took possession of the best place near the fire. Other instances of reasoning in animals were also mentioned, furnishing unequivocal proofs that animals reason, but in an inferior degree. Man is more than an animal. Men use facts; one states a fact, and is satisfied; another adduces a similarity or analogy, and convinces all who hear him. Men of fact have the lower part of the forehead prominent over the eyebrows; men of analogy and parable have a kind of inverted pyramid at the top front of the forehead; popular preachers have this part developed, parables and similes being the best means of conveying knowledge to the vulgar, and was adopted by Christ.

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