by the poet, it is avoided by good proſe writers, as being too elevated for that ſpecies of compoſition. It may therefore retain its charm, as long as the language exiſts; nay, the charm may increaſe, as the language grows older.

INDEED, the charm of poetical diction muſt increaſe to a certain degree, as polite literature advances. For when once a ſet of words has been conſecrated to poetry, the very ſound of them, independently of the ideas they convey, awakens, every time we hear it, the agreeable impreſſions which were connected with it when we met with them in the performances of our favourite authors. Even when ſtrung together in ſentences which convey no meaning, they produce ſome effect on the mind of a reader of ſenſibility: an effect, at leaſt, extremely different from that of an unmeaning ſentence in proſe.

LANGUAGES differ from each other widely in the copiouſneſs of their poetical diction. Our own poſſeſſes, in this reſpect, important advantages over the French: not that, in this language, there are no words appropriated to poetry, but becauſe their number is, comparatively ſpeaking, extremely limited.

THE ſcantineſs of the French poetical diction is, probably, attended with the leſs inconvenience, that the phraſes which occur in good proſe writing are leſs degraded by vulgar application than in Engliſh, in conſequence of the line being more diſtinctly and more ſtrongly drawn between polite and low expreſſions in that language than in ours. Our poets, indeed, by having a language appropriated to their own purpoſes, not only

only can preſerve a dignity of expreſſion, but can connect with the peruſal of their compoſitions, the pleaſing impreſſions which have been produced by thoſe of their predeceſſors. And hence, in the higher ſorts of poetry, where their object is to kindle, as much as poſſible, the enthuſiaſm of their readers, they not only avoid, ſtudiouſly, all expreſſions which are vulgar, but all ſuch as are borrowed from faſhionable life. This certainly cannot be done in an equal degree by a poet who writes in the French language.

In Engliſh, the poetical diction is ſo extremely copious, that it is liable to be abuſed; as it puts it in the power of authors of no genius, merely by ringing changes on the poetical vocabulary, to give a certain degree of currency to the moſt unmeaning compoſitions. In Swift's *Song by a Perſon of Quality*, the incoherence of ideas is ſcarcely greater than what is to be found in ſome admired paſſages of our faſhionable poetry.

Nor is it merely by a difference of words, that the language of poetry is diſtinguiſhed from that of proſe. When a poetical *arrangement* of words has once been eſtabliſhed by authors of reputation, the moſt common expreſſions, by being preſented in this conſecrated order, may ſerve to excite poetical aſſociations.

On the other hand, nothing more completely deſtroys the charm of poetry, than a ſtring of words which the cuſtom of ordinary diſcourſe has arranged in ſo invariable an order, that the whole phraſe may be anticipated from hearing its commencement.

mencement. A ſingle word frequently ſtrikes us as flat and proſaic, in conſequence of its familiarity; but two ſuch words coupled together in the order of converſation, can ſcarcely be introduced into ſerious poetry without appearing ludicrous.

No poet in our language has ſhewn ſo ſtrikingly as Milton, the wonderful elevation which ſtyle may derive from an arrangement of words, which, while it is perfectly intelligible, departs widely from that to which we are in general accuſtomed. Many of his moſt ſublime periods, when the order of the words is altered, are reduced nearly to the level of proſe.

To copy this artifice with ſucceſs, is a much more difficult attainment than is commonly imagined; and, of conſequence, when it is acquired, it ſecures an author, to a great degree, from that crowd of imitators who ſpoil the effect of whatever is not beyond their reach. To the poet who uſes blank verſe, it is an acquiſition of ſtill more eſſential conſequence, than to him who expreſſes himſelf in rhyme; for the more that the ſtructure of the verſe approaches to proſe, the more it is neceſſary to give novelty and dignity to the compoſition. And accordingly, among our magazine poets, ten thouſand catch the ſtructure of Pope's verſification, for one who approaches to the manner of Milton, or of Thomſon.

THE facility, however, of this imitation, like every other, increaſes with the number of thoſe who have ſtudied it with ſucceſs; for the more numerous the authors who have employed their genius in any one direction, the more copious are

the materials out of which mediocrity may ſelect and combine, ſo as to eſcape the charge of plagiariſm. And, in fact, in our own language, this, as well as the other great reſource of poetical expreſſion, the employment of appropriated words, has had its effect ſo much impaired by the abuſe which has been made of it, that a few of our beſt poets of late have endeavoured to ſtrike out a new path for themſelves, by reſting the elevation of their compoſition chiefly on a ſingular, and, to an ordinary writer, an unattainable union of harmonious verſification, with a natural arrangement of words, and a ſimple elegance of expreſſion. It is this union which ſeems to form the diſtinguiſhing charm of the poetry of Goldſmith.

FROM the remarks which have been made on the influence of the aſſociation of ideas on our judgments in matters of taſte, it is obvious how much the opinions of a nation with reſpect to merit in the fine arts, are likely to be influenced by the form of their government, and the ſtate of their manners. Voltaire, in his diſcourſe pronounced at his reception into the French academy, gives ſeveral reaſons why the poets of that country have not ſucceeded in deſcribing rural ſcenes and employments. The principal one is, the ideas of meanneſs, and poverty and wretchedneſs, which the French are accuſtomed to aſſociate with the profeſſion of huſbandry. The ſame thing is alluded to by the Abbé de Lille, in the preliminary diſcourſe prefixed to his tranſlation of the Georgics. "A tranſlation," ſays he, "of this poem, if it had been undertaken by an author "of genius, would have been better calculated than any other "work, for adding to the riches of our language. A verſion of

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" the Æneid itſelf, however well executed, would, in this reſpect, " be of leſs utility; inaſmuch as the genius of our tongue ac- " commodates itſelf more eaſily to the deſcription of heroic " atchievements, than to the details of natural phenomena, " and of the operations of huſbandry. To force it to expreſs " theſe with ſuitable dignity, would have been a real conqueſt " over that falſe delicacy, which it has contracted from our un- " fortunate prejudices."

How different muſt have been the emotions with which that divine performance of Virgil was read by an antient Roman, while he recollected that period in the hiſtory of his country, when dictators were called from the plough to the defence of the ſtate, and after having led monarchs in triumph, returned again to the ſame happy and independent occupation. A ſtate of manners to which a Roman author of a later age looked back with ſuch enthuſiaſm, that he aſcribes, by a bold poetical figure, the flouriſhing ſtate of agriculture under the republic, to the grateful returns which the earth then made to the illuſtrious hands by which ſhe was cultivated. " Gaudente terra vomere " laureato, et triumphali aratore *."

* PLIN. Nat. Hiſt. xviii. 4.

SECTION III.

Of the Influence of Aſſociation on our active Principles, and on our moral Judgments.

IN order to illuſtrate a little farther, the influence of the Aſſociation of Ideas on the human mind, I ſhall add a few remarks on ſome of its effects on our active and moral principles. In ſtating theſe remarks, I ſhall endeavour to avoid, as much as poſſible, every occaſion of controverſy, by confining myſelf to ſuch general views of the ſubject, as do not preſuppoſe any particular enumeration of our original principles of action, or any particular ſyſtem concerning the nature of the moral faculty. If my health and leiſure enable me to carry my plans into execution, I propoſe, in the ſequel of this work, to reſume theſe inquiries, and to examine the various opinions to which they have given riſe.

THE manner in which the aſſociation of ideas operates in producing new principles of action, has been explained very diſtinctly by different writers. Whatever conduces to the gratification of any natural appetite, or of any natural deſire, is itſelf deſired on account of the end to which it is ſubſervient; and by being thus habitually aſſociated in our apprehenſion with agreeable objects, it frequently comes, in proceſs of time, to be regarded as valuable in itſelf, independently of its utility. It is thus that

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wealth becomes, with many, an ultimate object of purſuit; although, at firſt, it is undoubtedly valued, merely on account of its ſubſerviency to the attainment of other objects. In like manner, men are led to deſire dreſs, equipage, retinue, furniture, on account of the eſtimation in which they are ſuppoſed to be held by the public. Such deſires are called by Dr. Hutcheſon * *ſecondary* deſires; and their origin is explained by him in the way which I have mentioned. "Since we are capable," ſays he, "of reflection, memory, obſervation, and reaſoning about "the diſtant tendencies of objects and actions, and not confined "to things preſent, there muſt ariſe, in conſequence of our "original deſires, ſecondary deſires of every thing imagined "uſeful to gratify any of the primary deſires; and that with "ſtrength proportioned to the ſeveral original deſires, and "imagined uſefulneſs or neceſſity of the advantageous object." "Thus," he continues, "as ſoon as we come to apprehend "the uſe of wealth or power to gratify any of our original de-"ſires, we muſt alſo deſire them; and hence ariſes the uni-"verſality of theſe deſires of wealth and power, ſince they are "the means of gratifying all other deſires." The only thing that appears to me exceptionable in the foregoing paſſage is, that the author claſſes the deſire of power with that of wealth; whereas I apprehend it to be clear, (for reaſons which I ſhall ſtate in another part of this work,) that the former is a primary deſire, and the latter a ſecondary one.

OUR moral judgments, too, may be modified, and even perverted, to a certain degree, in conſequence of the operation of

* See his Eſſay on the Nature and Conduct of the Paſſions.

the

the ſame principle. In the ſame manner in which a perſon who is regarded as a model of taſte may introduce, by his example, an abſurd or fantaſtical dreſs; ſo a man of ſplendid *virtues may attract ſome eſteem alſo to his imperfections; and*, if placed in a conſpicuous ſituation, may render his vices and follies objects of general imitation among the multitude.

" In the reign of Charles II." ſays Mr. Smith *, " a degree " of licentiouſneſs was deemed the characteriſtic of a liberal " education. It was connected, according to the notions of " thoſe times, with generoſity, ſincerity, magnanimity, loyalty; " and proved that the perſon who acted in this manner, was " a gentleman, and not a puritan. Severity of manners, " and regularity of conduct, on the other hand, were altogether unfaſhionable, and were connected, in the imagination of that age, with cant, cunning, hypocriſy, and low " manners. To ſuperficial minds, the vices of the great ſeem " at all times agreeable. They connect them, not only with " the ſplendor of fortune, but with many ſuperior virtues " which they aſcribe to their ſuperiors; with the ſpirit of freedom and independency; with frankneſs, generoſity, humanity, and politeneſs. The virtues of the inferior ranks of " people, on the contrary, their parſimonious frugality, their " painful induſtry, and rigid adherence to rules, ſeem to them " mean and diſagreeable. They connect them both with the " meanneſs of the ſtation to which theſe qualities commonly " belong, and with many great vices which they ſuppoſe

* Theory of Moral Sentiments.

" uſually

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" uſually accompany them; ſuch as an abject, cowardly, ill-
" natured, lying, pilfering diſpoſition."

THE theory which, in the foregoing paſſages from Hutcheſon and Smith, is employed ſo juſtly and philoſophically to explain the origin of our ſecondary deſires, and to account for ſome perverſions of our moral judgments, has been thought ſufficient, by ſome later writers, to account for the origin of all our active principles without exception. The firſt of theſe attempts to extend ſo very far the application of the doctrine of Aſſociation was made by the Reverend Mr. Gay, in a diſſertation " con-
" cerning the fundamental Principle of Virtue," which is pre-fixed by Dr. Law to his tranſlation of Archbiſhop King's Eſſay " on the Origin of Evil." In this diſſertation, the author endeavours to ſhew, " that our approbation of morality, and all " affections whatſoever, are finally reſolvable into reaſon, point-
" ing out private happineſs, and are converſant only about " things apprehended to be means tending to this end; and " that wherever this end is not perceived, they are to be ac-
" counted for from the aſſociation of ideas, and may properly " be called *habits*." The ſame principles have been ſince puſhed to a much greater length by Dr. Hartley, whoſe ſyſtem (as he himſelf informs us) took riſe from his accidentally hearing it mentioned as an opinion of Mr. Gay, " that the aſſoci-
" ation of ideas was ſufficient to account for all our intellectual " pleaſures and pains *.

IT

Mr. Hume too, who in my opinion has carried this principle of the Aſſociation of Ideas a great deal too far, has compared the univerſality of its applications

IT muſt, I think, in juſtice, be acknowledged, that this theory, concerning the origin of our affections, and of the moral ſenſe, is a moſt ingenious refinement upon the ſelfiſh ſyſtem, as it was formerly taught; and that, by means of it, the force of many of the common reaſonings againſt that ſyſtem is eluded. Among theſe reaſonings, particular ſtreſs has always been laid on the inſtantaneouſneſs with which our affections operate, and the moral ſenſe approves or condemns; and on our total want of conſciouſneſs, in ſuch caſes, of any reference to our own happineſs. The modern advocates for the ſelfiſh ſyſtem admit the fact to be as it is ſtated by their opponents; and grant, that after the moral ſenſe and our various affections are formed, their exerciſe, in particular caſes, may become completely diſintereſted; but ſtill they contend, that it is upon a regard to our own happineſs that all theſe principles are originally grafted. The analogy of avarice will ſerve to illuſtrate the ſcope of this theory. It cannot be doubted that this principle of action is artificial. It is on account of the enjoyments which it enables us to purchaſe, that money is originally deſired; and yet, in proceſs of time, by means of the agreeable impreſſions which are aſſociated with it, it comes to be deſired for its own ſake; and even continues to be an object of our purſuit, long after we have loſt all reliſh for thoſe enjoyments which it enables us to command.

cations in the philoſophy of mind, to that of the principle of attraction in phyſics. "Here," ſays he, "is a kind of attraction, which in the mental world "will be found to have as extraordinary effects as in the natural, and to ſhew "itſelf in as many and as various forms." *Treat. of Hum. Nat.* vol. i. p. 30.

WITHOUT

WITHOUT meaning to engage in any controverſy on the ſubject, I ſhall content myſelf with obſerving, in general, that there muſt be ſome limit, beyond which the theory of aſſociation cannot poſſibly be carried; for the explanation which it gives, of the formation of new principles of action, proceeds on the ſuppoſition that there are other principles previouſly exiſting in the mind. The great queſtion then is, when we are arrived at this limit; or, in other words, when we are arrived at the ſimple and original laws of our conſtitution.

IN conducting this inquiry, philoſophers have been apt to go into extremes. Lord Kaims, and ſome other authors, have been *cenſured*, and *perhaps juſtly*, for a *diſpoſition* to *multiply* original principles to an unneceſſary degree. It may be queſtioned, whether Dr. Hartley, and his followers, have not ſometimes been miſled by too eager a deſire of abridging their number.

OF theſe two errors, the former is the leaſt common, and the leaſt dangerous. It is the leaſt common, becauſe it is not ſo flattering as the other to the vanity of a theoriſt; and it is the leaſt dangerous, becauſe it has no tendency, like the other, to give riſe to a ſuppreſſion, or to a miſrepreſentation of facts; or to retard the progreſs of the ſcience, by beſtowing upon it an appearance of ſyſtematical perfection, to which, in its preſent ſtate, it is not entitled.

ABSTRACTING, however, from theſe inconveniences, which muſt always reſult from a precipitate reference of phenomena to general

general principles, it does not ſeem to me, that the theory in queſtion has any tendency to weaken the foundation of morals. It has, indeed, ſome tendency, in common with the philoſophy of Hobbes and of Mandeville, to degrade the dignity of human nature; but it leads to no ſceptical concluſions concerning the rule of life. For, although we were to grant, that all our principles of action are acquired; ſo ſtriking a difference among them muſt ſtill be admitted, as is ſufficient to diſtinguiſh clearly thoſe univerſal laws which were intended to regulate human conduct, from the local habits which are formed by education and faſhion. It muſt ſtill be admitted, that while ſome active principles are confined to particular individuals, or to particular tribes of men; there are others, which, ariſing from circumſtances in which all the ſituations of mankind muſt agree, are common to the whole ſpecies. Such active principles as fall under this laſt deſcription, at whatever period of life they may appear, are to be regarded as a part of human nature, no leſs than the inſtinct of ſuction; in the ſame manner as the acquired perception of diſtance by the eye, is to be ranked among the perceptive powers of man, no leſs than the original perceptions of any of our other ſenſes.

LEAVING, therefore, the queſtion concerning the origin of our active principles, and of the moral faculty, to be the ſubject of future diſcuſſion, I ſhall conclude this Section with a few remarks of a more practical nature.

IT has been ſhewn by different writers, how much of the beauty and ſublimity of material objects ariſes from the ideas

and feelings which we have been taught to aſſociate with them. The impreſſion produced on the external ſenſes of a poet, by the moſt ſtriking ſcene in nature, is preciſely the ſame with what is produced on the ſenſes of a peaſant or a tradeſman: yet how different is the degree of pleaſure reſulting from this impreſſion! A great part of this difference is undoubtedly to be aſcribed, to the ideas and feelings which the habitual ſtudies and amuſements of the poet have aſſociated with his organical perceptions.

A SIMILAR obſervation may be applied to all the various objects of our purſuit in life. Hardly any one of them is appreciated by any two men in the ſame manner; and frequently what one man conſiders as eſſential to his happineſs, is regarded with indifference or diſlike by another. Of theſe differences of opinion, much is, no doubt, to be aſcribed to a diverſity of conſtitution, which renders a particular employment of the intellectual or active powers agreeable to one man, which is not equally ſo to another. But much is alſo to be aſcribed to the effect of aſſociation; which, prior to any experience of human life, connects pleaſing ideas and pleaſing feelings with different objects, in the minds of different perſons.

IN conſequence of theſe aſſociations, every man appears to his neighbour to purſue the object of his wiſhes, with a zeal diſproportioned to its intrinſic value; and the philoſopher (whoſe principal enjoyment ariſes from ſpeculation) is frequently apt to ſmile at the ardour with which the active part of mankind purſue, what appear to him to be mere ſhadows. This view

of

of human affairs, ſome writers have carried ſo far, as to repreſent life as a ſcene of mere illuſions, where the mind refers to the objects around it, a colouring which exiſts only in itſelf; and where, as the Poet expreſſes it,

——" Opinion gilds with varying rays,
" Thoſe painted clouds which beautify our days."

IT may be queſtioned, if theſe repreſentations of human life be uſeful or juſt. That the caſual aſſociations which the mind forms in childhood, and in early youth, are frequently a ſource of inconvenience and of miſconduct, is ſufficiently obvious; but that this tendency of our nature increaſes, on the whole, the ſum of human enjoyment, appears to me to be indiſputable; and the inſtances in which it miſleads us from our duty and our happineſs, only prove, to what important ends it might be ſubſervient, if it were kept under proper regulation.

NOR do theſe repreſentations of life (admitting them in their full extent) juſtify the practical inferences which have been often deduced from them, with reſpect to the vanity of our purſuits. In every caſe, indeed, in which our enjoyment depends upon aſſociation, it may be ſaid, in one ſenſe, that it ariſes from the mind *itſelf*; but it does not therefore follow, that the external object which cuſtom has rendered the cauſe or the occaſion of agreeable emotions, is indifferent to our happineſs. The effect which the beauties of nature produce on the mind of the poet, is wonderfully heightened by aſſociation; but his enjoyment is not, on that account, the leſs exquiſite: nor

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are the objects of his admiration of the leſs value to his happineſs, that they derive their principal charms from the embelliſhments of his fancy.

IT is the buſineſs of education, not to counteract, in any inſtance, the eſtabliſhed laws of our conſtitution, but to direct them to their proper purpoſes. That the influence of early aſſociations on the mind might be employed, in the moſt effectual manner, to aid our moral principles, appears evidently from the effects which we daily ſee it produce, in reconciling men to a courſe of action which their reaſon forces them to condemn; and it is no leſs obvious that, by means of it, the happineſs of human life might be increaſed, and its pains diminiſhed, if the agreeable ideas and feelings which children are ſo apt to connect with events and with ſituations which depend on the caprice of fortune, were firmly aſſociated in their apprehenſions with the duties of their ſtations, with the purſuits of ſcience, and with thoſe beauties of nature which are open to all.

THESE obſervations coincide nearly with the antient ſtoical doctrine concerning the influence of *imagination* * on morals; a ſubject, on which many important remarks, (though expreſſed in a form different from that which modern philoſophers have introduced, and, perhaps, not altogether ſo preciſe and accurate,) are to be found in the Diſcourſes of Epictetus, and in the Medi-

* According to the uſe which I make of the words Imagination and Aſſociation, in this work, their effects are obviouſly diſtinguiſhable. I have thought it proper, however, to illuſtrate the difference between them a little more fully in Note [R].

tations of Antoninus *. This doctrine of the Stoical ſchool, Dr. Akenſide has in view in the following paſſage:

" Action treads the path
" In which Opinion ſays he follows good,
" Or flies from evil; and Opinion gives
" Report of good or evil, as the ſcene
" Was drawn by fancy, lovely or deform'd:
" Thus her report can never there be true,
" Where fancy cheats the intellectual eye
" With glaring colours and diſtorted lines.
" Is there a man, who at the ſound of death
" Sees ghaſtly ſhapes of terror conjur'd up,
" And black before him: naught but death-bed groans
" And fearful prayers, and plunging from the brink
" Of light and being, down the gloomy air,
" An unknown depth? Alas! in ſuch a mind,
" If no bright forms of excellence attend
" The image of his country; nor the pomp
" Of ſacred ſenates, nor the guardian voice
" Of juſtice on her throne, nor aught that wakes
" The conſcious boſom with a patriot's flame:
" Will not Opinion tell him, that to die,
" Or ſtand the hazard, is a greater ill
" Than to betray his country? And in act
" Will he not chuſe to be a wretch and live?
" Here vice begins then †."

* See what Epictetus has remarked on the χρησις δια δει φαντασιων. (Arrian, l. i. c. 12.) Οια αν πολλακις φαντασθης, τοιαυτη σοι εσται η διανοια. βαπτεται γαρ υπο των φαντασιων η ψυχη. βαπτε ουν φυτην, τη συνηθειᾳ των τοιουτων φαντασιων, &c. &c. Anton. l. v. c. 16.

† Pleaſures of Imagination, b. iii.

SECTION IV.

General Remarks on the Subjects treated in the foregoing Sections of this Chapter.

IN perusing the foregoing Sections of this Chapter, I am aware, that some of my readers may be apt to think that many of the observations which I have made, might easily be resolved into more general principles. I am also aware, that, to the followers of Dr. Hartley, a similar objection will occur against all the other parts of this work; and that it will appear to them the effect of inexcusable prejudice, that I should stop short so frequently in the explanation of phenomena; when he has accounted in so satisfactory a manner, by means of the association of ideas, for all the appearances which human nature exhibits.

To this objection, I shall not feel myself much interested to reply, provided it be granted that my observations are candidly and accurately stated, so far as they reach. Supposing that in some cases I may have stopped short too soon, my speculations, although they may be censured as imperfect, cannot be considered as standing in opposition to the conclusions of more successful inquirers.

MAY I be allowed farther to obſerve, that ſuch views of the human mind as are contained in this work, (even ſuppoſing the objection to be well-founded,) are, in my opinion, indiſpenſably neceſſary, in order to prepare the way for thoſe very general and comprehenſive theories concerning it, which ſome eminent writers of the preſent age have been ambitious to form?

CONCERNING the merit of theſe theories, I ſhall not preſume to give any judgment. I ſhall only remark, that, in all the other ſciences, the progreſs of diſcovery has been gradual, from the leſs general to the more general laws of nature; and that it would be ſingular, indeed, if, in the Philoſophy of the Human Mind, a ſcience, which but a few years ago was confeſſedly in its infancy, and which certainly labours under many diſadvantages peculiar to itſelf, a ſtep ſhould, all at once, be made to a ſingle principle comprehending all the particular phenomena which we know.

SUPPOSING ſuch a theory to be completely eſtabliſhed, it would ſtill be proper to lead the minds of ſtudents to it by gradual ſteps. One of the moſt important uſes of theory, is to give the memory a permanent hold, and a prompt command, of the particular facts which we were previouſly acquainted with; and no theory can be completely underſtood, unleſs the mind be led to it nearly in the order of inveſtigation.

IT is more particularly uſeful, in conducting the ſtudies of others, to familiariſe their minds, as completely as poſſible, with thoſe

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thoſe laws of nature for which we have the direct evidence of ſenſe, or of conſciouſneſs, before directing their inquiries to the more abſtruſe and refined generalizations of ſpeculative curioſity. In natural philoſophy, ſuppoſing the theory of Boſcovich to be true, it would ſtill be proper, or rather indeed abſolutely neceſſary, to accuſtom ſtudents, in the firſt ſtage of their phyſical education, to dwell on thoſe general phyſical facts which fall under our actual obſervation, and about which all the practical arts of life are converſant. In like manner, in the philoſophy of mind, there are many general facts for which we have the direct evidence of conſciouſneſs. The words, Attention, Conception, Memory, Abſtraction, Imagination, Curioſity, Ambition, Compaſſion, Reſentment, expreſs powers and principles of our nature, which every man may ſtudy by reflecting on his own internal operations. Words correſponding to theſe, are to be found in all languages, and may be conſidered as forming the firſt attempt towards a philoſophical claſſification of intellectual and moral phenomena. Such a claſſification, however imperfect and indiſtinct, we may be aſſured, muſt have ſome foundation in nature; and it is at leaſt prudent, for a philoſopher to keep it in view as the ground-work of his own arrangement. It not only directs our attention to thoſe facts in the human conſtitution, on which every ſolid theory in this branch of ſcience muſt be founded; but to the facts, which, in all ages, have appeared to the common ſenſe of mankind, to be the moſt ſtriking and important; and of which it ought to be the great object of theoriſts, not to ſuperſede, but to facilitate the ſtudy.

THERE

THERE is indeed good reaſon for believing, that many of the facts which our conſciouſneſs would lead us to conſider, upon a ſuperficial view, as ultimate facts, are reſolvable into other principles ſtill more general. "Long before we are "capable of reflection," (ſays Dr. Reid,) the original perceptions and notions of the mind are ſo mixed, compounded, "and decompounded, by habits, aſſociations, and abſtractions, "that it is extremely difficult for the mind to return upon its "own footſteps, and trace back thoſe operations which have "employed it ſince it firſt began to think and to act." The ſame author remarks, that, "if we could obtain a diſtinct and "full hiſtory of all that hath paſſed in the mind of a child, "from the beginning of life and ſenſation, till it grows up to "the uſe of reaſon; how its infant faculties began to work, "and how they brought forth and ripened all the various no"tions, opinions, and ſentiments, which we find in ourſelves "when we come to be capable of reflection; this would be a "treaſure of Natural Hiſtory, which would probably give more "light into the human faculties, than all the ſyſtems of philo"ſophers about them, ſince the beginning of the world." To accompliſh an analyſis of theſe complicated phenomena into the ſimple and original principles of our conſtitution, is the great object of this branch of philoſophy; but, in order to ſucceed, it is neceſſary to aſcertain facts before we begin to reaſon, and to avoid generalizing, in any inſtance, till we have completely ſecured the ground that we have gained. Such a caution, which is neceſſary in all the ſciences, is, in a more peculiar manner, neceſſary here, where the very facts from which all

our inferences muſt be drawn, are to be aſcertained only by the moſt patient attention; and, where almoſt all of them are, to a great degree, diſguiſed; partly by the inaccuracies of popular language, and partly by the miſtaken theories of philoſophers.

I HAVE only to add, that, although I have retained the phraſe of the Aſſociation of Ideas, in compliance with common language, I am far from being completely ſatisfied with this mode of expreſſion. I have retained it, chiefly that I might not expoſe myſelf to the cenſure of delivering old doctrines in a new form.

As I have endeavoured to employ it with caution, I hope that it has not often miſled me in my reaſonings. At the ſame time, I am more and more convinced of the advantages to be derived from a reformation of the common language, in moſt of the branches of ſcience. How much ſuch a reformation has effected in Chemiſtry is well known; and it is evidently much more neceſſary in the Philoſophy of Mind, where the prevailing language adds to the common inaccuracies of popular expreſſions, the peculiar diſadvantage of being all ſuggeſted by the analogy of matter. Often, in the compoſition of this work, have I recollected the advice of Bergman to Morveau *.

* "Le ſavant Profeſſeur d'Upſal, M. Bergman, écrivoit à M. de Morveau "dans les derniers temps de ſa vie, ne faites graces à aucune denomination im- "propre. Ceux qui ſavent déja entendront toujours; ceux qui ne ſavent pas "encore entendront plutôt."

Methode de Nomenclat. Chimique, par MM. MORVEAU, LAVOISIER, &c.

"In

" In reforming the nomenclature of chemiſtry, ſpare no word " which is improper. They who underſtand the ſubject al- " ready, will ſuffer no inconvenience; and they to whom the " ſubject is new, will comprehend it with the greater faci- " lity." But it belongs to ſuch authors alone, as have extended the boundaries of ſcience by their own diſcoveries, to introduce innovations in language with any hopes of ſucceſs.

CHAPTER SIXTH.

Of Memory.

SECTION I.

General Obſervations on Memory.

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AMONG the various powers of the underſtanding, there is none which has been ſo attentively examined by philoſophers, or concerning which ſo many important facts and obſervations have been collected, as the faculty of Memory. This is partly to be aſcribed to its nature, which renders it eaſily diſtinguiſhable from all the other principles of our conſtitution, even by thoſe who have not been accuſtomed to metaphyſical inveſtigations; and partly to its immediate ſubſerviency, not only to the purſuits of ſcience, but to the ordinary buſineſs of life; in conſequence of which, many of its moſt curious laws had been obſerved, long before any analyſis was attempted of the other powers of the mind; and have, for many ages, formed a part of the common maxims which are to be found in every treatiſe of education. Some important remarks on the ſubject may, in particular, be collected from the writings of the antient rhetoricians.

THE

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THE word Memory is not employed uniformly in the ſame preciſe ſenſe; but it always expreſſes ſome modification of that faculty, which enables us to treaſure up, and preſerve for future uſe, the knowledge we acquire; a faculty which is obviouſly the great foundation of all intellectual improvement, and without which, no advantage could be derived from the moſt enlarged experience. This faculty implies two things: a capacity of retaining knowledge; and a power of recalling it to our thoughts when we have occaſion to apply it to uſe. The word Memory is ſometimes employed to expreſs the capacity, and ſometimes the power. When we ſpeak of a retentive memory, we uſe it in the former ſenſe; when, of a ready memory, in the latter.

THE various particulars which compoſe our ſtock of knowledge are, from time to time, recalled to our thoughts, in one of two ways: ſometimes they recur to us ſpontaneouſly, or at leaſt, without any interference on our part; in other caſes, they are recalled, in conſequence of an effort of our will. For the former operation of the mind, we have no appropriated name in our language, diſtinct from Memory. The latter, too, is often called by the ſame name, but is more properly diſtinguiſhed by the word Recollection.

THERE are, I believe, ſome other acceptations beſides theſe, in which the word Memory has been occaſionally employed; but as its ambiguities are not of ſuch a nature as to miſlead us in our preſent inquiries, I ſhall not dwell any longer on the illuſtration of diſtinctions, which to the greater part of

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readers might appear unintereſting and minute. One diſtinction only, relative to this ſubject, occurs to me, as deſerving particular attention.

THE operations of Memory relate either to things and their relations, or to events. In the former caſe, thoughts which have been previouſly in the mind, may recur to us, without ſuggeſting the idea of the paſt, or of any modification of time whatever; as when I repeat over a poem which I have got by heart, or when I think of the features of an abſent friend. In this laſt inſtance, indeed, philoſophers diſtinguiſh the act of the mind by the name of Conception; but in ordinary diſcourſe, and frequently even in philoſophical writing, it is conſidered as an exertion of Memory. In theſe and ſimilar caſes, it is obvious, that the operations of this faculty do not neceſſarily involve the idea of the paſt.

THE caſe is different with reſpect to the memory of events. When I think of theſe, I not only recal to the mind the former objects of its thoughts, but I refer the event to a particular point of time; ſo that, of every ſuch act of memory, the idea of the paſt is a neceſſary concomitant.

I HAVE been led to take notice of this diſtinction, in order to obviate an objection which ſome of the phenomena of Memory ſeem to preſent, againſt a doctrine which I formerly ſtated, when treating of the powers of Conception and Imagination.

IT

IT is evident, that when I think of an event, in which any object of ſenſe was concerned, my recollection of the event muſt neceſſarily involve an act of Conception. Thus, when I think of a dramatic repreſentation which I have recently ſeen, my recollection of what I ſaw, neceſſarily involves a conception of the different actors by whom it was performed. But every act of recollection which relates to events, is accompanied with a belief of their paſt exiſtence. How then are we to reconcile this concluſion with the doctrine formerly maintained concerning Conception, according to which every exertion of that power is accompanied with a belief, that its object exiſts before us at the preſent moment?

THE only way that occurs to me of removing this difficulty, is by ſuppoſing, that the remembrance of a paſt event, is not a ſimple act of the mind; but that the mind firſt forms a conception of the event, and then judges from circumſtances, of the period of time to which it is to be referred: a ſuppoſition which is by no means a gratuitous one, invented to anſwer a particular purpoſe; but which, as far as I am able to judge, is agreeable to fact; for if we have the power, as will not be diſputed, of conceiving a paſt event without any reference to time, it follows, that there is nothing in the ideas or notions which Memory preſents to us, which is neceſſarily accompanied with a belief of paſt exiſtence, in a way analogous to that in which our perceptions are accompanied with a belief of the preſent exiſtence of their objects; and therefore, that the reference of the event to the particular period at which it happened, is a judgment founded on concomitant circumſtances. So long as we

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we are occupied with the conception of any particular object connected with the event, we believe the preſent exiſtence of the object; but this belief, which, in moſt caſes, is only momentary, is inſtantly corrected by habits of judging acquired by experience; and as ſoon as the mind is diſengaged from ſuch a belief, it is left at liberty to refer the event to the period at which it actually happened. Nor will the apparent inſtantaneouſneſs of ſuch judgments be conſidered as an unſurmountable objection to the doctrine now advanced, by thoſe who have reflected on the perception of diſtance obtained by ſight, which, although it ſeems to be as immediate as any perception of touch, has been ſhewn by philoſophers to be the reſult of a judgment founded on experience and obſervation. The reference we make of paſt events to the particular points of time at which they took place, will, I am inclined to think, the more we conſider the ſubject, be found the more ſtrikingly analogous to the eſtimates of diſtance we learn to form by the eye.

ALTHOUGH, however, I am, myſelf, ſatisfied with the concluſion to which the foregoing reaſonings lead, I am far from expecting that the caſe will be the ſame with all my readers. Some of their objections, which I can eaſily anticipate, might, I believe, be obviated by a little farther diſcuſſion; but as the queſtion is merely a matter of curioſity, and has no neceſſary connexion with the obſervations I am to make in this Chapter, I ſhall not proſecute the ſubject at preſent. The opinion, indeed, we form concerning it, has no reference to any of the doctrines maintained in this work, excepting to a particular ſpecu-

ſpeculation concerning the belief accompanying conception, which I ventured to ſtate, in treating of that ſubject, and which, as it appears to be extremely doubtful to ſome whoſe opinions I reſpect, I propoſed with a degree of diffidence ſuitable to the difficulty of ſuch an enquiry. The remaining obſervations which I am to make on the power of memory, whatever opinion may be formed of their importance, will furniſh but little room for a diverſity of judgment concerning their truth.

In conſidering this part of our conſtitution, one of the moſt obvious and ſtriking queſtions that occurs is, what the circumſtances are which determine the memory to retain ſome things in preference to others? Among the ſubjects which ſucceſſively occupy our thoughts, by far the greater number vaniſh, without leaving a trace behind them; while others become, as it were, a part of ourſelves, and, by their accumulations, lay a foundation for our perpetual progreſs in knowledge. Without pretending to exhauſt the ſubject, I ſhall content myſelf at preſent with a partial ſolution of this difficulty, by illuſtrating the dependence of memory upon two principles of our nature, with which it is plainly very intimately connected; attention, and the aſſociation of ideas.

I endeavoured in a former chapter to ſhew, that there is a certain act of the mind, (diſtinguiſhed, both by philoſophers and the vulgar, by the name of attention,) without which even the objects of our perceptions make no impreſſion on the memory. It is alſo matter of common remark, that the permanence of the impreſſion which any thing leaves in the memory, is propor-

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tioned to the degree of attention which was originally given to it. The obſervation has been ſo often repeated, and is ſo manifeſtly true, that it is unneceſſary to offer any illuſtration of it

I HAVE only to obſerve farther, with reſpect to attention, conſidered in the relation in which it ſtands to memory, that although it be a voluntary act, it requires experience to have it always under command. In the caſe of objects to which we have been taught to attend at an early period of life, or which are calculated to rouſe the curioſity, or to affect any of our paſſions, the attention fixes itſelf upon them, as it were ſpontaneouſly, and without any effort on our part, of which we are conſcious. How perfectly do we remember, and even retain, for a long courſe of years, the faces and the hand-writings of our acquaintances, although we never took any particular pains to fix them in the memory? On the other hand, if an object does not intereſt ſome principle of our nature, we may

* It ſeems to be owing to this dependence of memory on attention, that it is eaſier to get by heart a compoſition, after a very few readings, with an attempt to repeat it at the end of each, than after a hundred readings without ſuch an effort. The effort rouſes the attention from that languid ſtate in which it remains, while the mind is giving a paſſive reception to foreign ideas. The fact is remarked by lord Bacon, and is explained by him on the ſame principle to which I have referred it.

"Quæ expectantur et attentionem excitant, melius hærent quam quæ præ-"tervolant. Itaque ſi ſcriptum aliquod vicies perlegeris, non tam facile illud "memoriter diſces, quam ſi illud legas decies, tentando interim illud recitare, "et ubi deficit memoria, inſpiciendo librum."

BACON, *Nov. Org.* lib. ii. aph. 26.

examine

examine it again and again, with a wiſh to treaſure up the knowledge of it in the mind, without our being able to command that degree of attention which may lead us to recognize it the next time we ſee it. A perſon, for example, who has not been accuſtomed to attend particularly to horſes or to cattle, may ſtudy for a conſiderable time the appearance of a horſe or of a bullock, without being able a few days afterwards to pronounce on his identity; while a horſe-dealer or a grazier recollects many hundreds of that claſs of animals with which he is converſant, as perfectly as he does the faces of his acquaintances. In order to account for this, I would remark, that although attention be a voluntary act, and although we are always able, when we chooſe, to make a momentary exertion of it; yet, unleſs the object to which it is directed be really intereſting, in ſome degree, to the curioſity, the train of our ideas goes on, and we immediately forget our purpoſe. When we are employed, therefore, in ſtudying ſuch an object, it is not an excluſive and ſteady attention that we give to it, but we are loſing ſight of it, and recurring to it every inſtant; and the painful efforts of which we are conſcious, are not (as we are apt to ſuppoſe them to be) efforts of uncommon attention, but unſucceſsful attempts to keep the mind ſteady to its object, and to exclude the extraneous ideas, which are from time to time ſoliciting its notice.

If theſe obſervations be well founded, they afford an explanation of a fact which has been often remarked, that objects are eaſily remembered which affect any of the paſ-

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ſions*. The paſſion aſſiſts the memory, not in conſequence of any immediate connexion between them, but as it preſents, during the time it continues, a ſteady and excluſive object to the attention.

THE connexion between memory and the aſſociation of ideas is ſo ſtriking, that it has been ſuppoſed by ſome, that the whole of its phenomena might be reſolved into this principle. But this is evidently not the caſe. The aſſociation of ideas connects our various thoughts with each other, ſo as to preſent them to the mind in a certain order; but it preſuppoſes the exiſtence of theſe thoughts in the mind; or, in other words, it preſuppoſes a faculty of retaining the knowledge which we acquire. It involves alſo a power of recognizing, as former objects of attention, the thoughts that from time to time occur to us; a power which is not implied in that law of our nature which is called the aſſociation of ideas. It is poſſible, ſurely, that our thoughts might have ſucceeded each other, according to the ſame laws as at preſent, without ſuggeſting to us at all the idea of the paſt; and, in fact, this ſuppoſition is realiſed to a certain degree in the caſe of ſome old men, who retain pretty exactly the information which they receive, but are ſometimes unable to recollect in what manner the particulars which they find connected together in their thoughts, at firſt

" * Si quas res in vita videmus parvas, uſitatas, quotidianas, eas meminiſſe non " ſolemus; propterea quod nulla niſi nova aut admirabili re commovetur animus. " At ſi quid videmus aut audimus egregie turpe, aut honeſtum, inuſitatum, " magnum, incredibile, ridiculum, id diu meminiſſe conſuevimus."

Ad Herenn. lib. 3.

came

came into the mind; whether they occurred to them in a dream, or were communicated to them in converſation.

ON the other hand, it is evident, that without the aſſociating principle, the powers of retaining our thoughts, and of recognizing them when they occur to us, would have been of little uſe; for the moſt important articles of our knowledge might have remained latent in the mind, even when thoſe occaſions preſented themſelves to which they are immediately applicable. In conſequence of this law of our nature, not only are all our various ideas made to paſs, from time to time, in review before us, and to offer themſelves to our choice as ſubjects of meditation, but when an occaſion occurs which calls for the aid of our paſt experience, the occaſion itſelf recals to us all the information upon the ſubject which that experience has accumulated.

THE foregoing obſervations comprehend an analyſis of memory ſufficiently accurate for my preſent purpoſe: ſome other remarks, tending to illuſtrate the ſame ſubject more completely, will occur in the remaining ſections of this chapter.

IT is hardly neceſſary for me to add, that when we have proceeded ſo far in our enquiries concerning memory, as to obtain an analyſis of that power, and to aſcertain the relation in which it ſtands to the other principles of our conſtitution, we have advanced as far towards an explanation of it as the nature of the ſubject permits. The various theories which have at-

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tempted to account for it by traces or impreſſions in the ſenſorium, are obviouſly too unphiloſophical to deſerve a particular refutation *. Such, indeed, is the poverty of language, that we cannot ſpeak on the ſubject without employing expreſſions which ſuggeſt one theory or another; but it is of importance for us always to recollect, that theſe expreſſions are entirely figurative, and afford no explanation of the phenomena to which they refer. It is partly with a view to remind my readers of this conſideration, that, finding it impoſſible to lay aſide completely metaphorical or analogical words, I have ſtudied to avoid ſuch an uniformity in the employment of them, as might indicate a preference to one theory rather than another; and, by doing ſo, have perhaps ſometimes been led to vary the metaphor oftener and more ſuddenly, than would be proper in a compoſition which aimed at any degree of elegance. This caution in the uſe of the common language concerning memory, it ſeemed to me the more neceſſary to attend to, that the general diſpoſition which every perſon feels at the commencement of his philoſophical purſuits, to explain the phenomena of thought by the laws of matter, is, in the caſe of this particular faculty, encouraged by a variety of peculiar circumſtances. The analogy between committing a thing to memory that we wiſh to remember, and engraving on a tablet a fact that we wiſh to record, is ſo ſtriking as to preſent itſelf even to the vulgar; nor is it perhaps leſs natural to indulge the fancy in conſidering memory as a ſort of repoſitory, in which we arrange and pre-

* See Note [S].

ſerve

ſerve for future uſe the materials of our information. The immediate dependence, too, of this faculty on the ſtate of the body, which is more remarkable than that of any other faculty whatever, (as appears from the effects produced on it by old age, diſeaſe, and intoxication,) is apt to ſtrike thoſe who have not been much converſant with theſe enquiries, as beſtowing ſome plauſibility on the theory which attempts to explain its phenomena on mechanical principles.

I CANNOT help taking this opportunity of expreſſing a wiſh, that medical writers would be at more pains than they have been at hitherto, to aſcertain the various effects which are produced on the memory by diſeaſe and old age. Theſe effects are widely diverſified in different caſes. In ſome it would ſeem that the memory is impaired, in conſequence of a diminution of the power of attention; in others, that the power of recollection is diſturbed, in conſequence of a derangement of that part of the conſtitution on which the aſſociation of ideas depends. The decay of memory, which is the common effect of age, ſeems to ariſe from the former of theſe cauſes. It is probable, that, as we advance in years, the capacity of attention is weakened by ſome phyſical change in the conſtitution; but it is alſo reaſonable to think, that it loſes its vigour partly from the effect which the decay of our ſenſibility, and the extinction of our paſſions, have, in diminiſhing the intereſt which we feel in the common occurrences of life. That no derangement takes place, in ordinary caſes, in that part of the conſtitution on which the aſſociation of ideas depends, appears from the diſtinct and circumſtantial recollection which old men retain of the tranſactions

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tranſactions of their youth *. In ſome diſeaſes, this part of the conſtitution is evidently affected. A ſtroke of the palſy has been known, (while it did not deſtroy the power of ſpeech,) to render the patient incapable of recollecting the names of the moſt familiar objects. What is ſtill more remarkable, the name of an object has been known to ſuggeſt the idea of it as formerly, although the ſight of the object ceaſed to ſuggeſt the name.

In ſo far as this decay of memory which old age brings along with it, is a neceſſary conſequence of a phyſical change in the conſtitution, or a neceſſary conſequence of a diminution of ſenſibility, it is the part of a wiſe man to ſubmit cheerfully to the lot of his nature. But it is not unreaſonable to think, that ſomething may be done by our own efforts, to obviate the inconveniencies which commonly reſult from it. If individuals, who, in the early part of life, have weak memories, are ſometimes able to remedy this defect, by a greater attention to arrangement in their tranſactions, and to claſſification among their ideas, than is neceſſary to the bulk of mankind, might it not be poſſible, in the ſame

* Swift ſomewhere expreſſes his ſurpriſe, that old men ſhould remember their anecdotes ſo diſtinctly, and ſhould, notwithſtanding, have ſo little memory as to tell the ſame ſtory twice in the courſe of the ſame converſation; and a ſimilar remark is made by Montaigne, in one of his Eſſays: "Surtout "les Vieillards ſont dangereux, à qui la ſouvenance des choſes paſſées demeure, "et ont perdu la ſouvenance de leurs redites."

Liv. i. chap. ix. (Des Menteurs.)

The fact ſeems to be, that all their old ideas remain in the mind, connected as formerly by the different aſſociating principles; but that the power of attention to new ideas and new occurrences is impaired.

way,

way, to ward off, at leaſt to a certain degree, the encroachments which time makes on this faculty? The few old men who continue in the active ſcenes of life to the laſt moment, it has been often remarked, complain, in general, much leſs of a want of recollection, than their cotemporaries. This is undoubtedly owing partly to the effect which the purſuits of buſineſs muſt neceſſarily have, in keeping alive the power of attention. But it is probably owing alſo to new habits of arrangement, which the mind gradually and inſenſibly forms, from the experience of its growing infirmities. The apparent revival of memory in old men, after a temporary decline, (which is a caſe that happens not unfrequently,) ſeems to favour this ſuppoſition.

One old man, I have, myſelf, had the good fortune to know, who, after a long, an active, and an honourable life, having begun to feel ſome of the uſual effects of advanced years, has been able to find reſources in his own ſagacity, againſt moſt of the inconveniencies with which they are commonly attended; and who, by watching his gradual decline with the cool eye of an indifferent obſerver, and employing his ingenuity to retard its progreſs, has converted even the infirmities of age into a ſource of philoſophical amuſement.

SECTION II.

Of the Varieties of Memory in different Individuals.

IT is generally ſuppoſed, that, of all our faculties, Memory is that which nature has beſtowed in the moſt unequal degrees on different individuals; and it is far from being impoſſible that this opinion may be well founded. If, however, we conſider, that there is ſcarcely any man who has not memory ſufficient to learn the uſe of language, and to learn to recognize, at the firſt glance, the appearances of an infinite number of familiar objects; beſides acquiring ſuch an acquaintance with the laws of nature, and the ordinary courſe of human affairs, as is neceſſary for directing his conduct in life; we ſhall be ſatisfied that the original diſparities among men, in this reſpect, are by no means ſo immenſe as they ſeem to be at firſt view; and that much is to be aſcribed to different habits of attention, and to a difference of ſelection among the various objects and events preſented to their curioſity.

As the great purpoſe to which this faculty is ſubſervient, is to enable us to collect, and to retain, for the future regulation

of our conduct, the reſults of our paſt experience; it is evident that the degree of perfection which it attains in the caſe of different perſons, muſt vary; firſt, with the facility of making the original acquiſition; ſecondly, with the permanence of the acquiſition; and thirdly, with the quickneſs or readineſs with which the individual is able, on particular occaſions, to apply it to uſe. The qualities, therefore, of a good memory are, in the firſt place, to be ſuſceptible; ſecondly, to be retentive; and thirdly, to be ready.

It is but rarely that theſe three qualities are united in the ſame perſon. We often, indeed, meet with a memory which is at once ſuſceptible and ready; but I doubt much, if ſuch memories be commonly very retentive: for, ſuſceptibility and readineſs are both connected with a facility of aſſociating ideas, according to their more obvious relations; whereas retentiveneſs, or tenaciouſneſs of memory, depends principally on what is ſeldom united with this facility, a diſpoſition to ſyſtem and to philoſophical arrangement. Theſe obſervations it will be neceſſary to illuſtrate more particularly.

I have already remarked, in treating of a different ſubject, that the bulk of mankind, being but little accuſtomed to reflect and to generaliſe, aſſociate their ideas chiefly according to their more obvious relations; thoſe, for example, of reſemblance and of analogy; and above all, according to the caſual relations ariſing from contiguity in time and place: whereas, in the mind of a philoſopher, ideas are commonly aſſociated according to thoſe

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relations which are brought to light in conſequence of particular efforts of attention; ſuch as the relations of Cauſe and Effect, or of Premiſes and Concluſion. This difference in the modes of aſſociation of theſe two claſſes of men, is the foundation of ſome very ſtriking diverſities between them in reſpect of intellectual character.

In the firſt place, in conſequence of the nature of the relations which connect ideas together in the mind of the philoſopher, it muſt neceſſarily happen, that when he has occaſion to apply to uſe his acquired knowledge, time and reflexion will be requiſite to enable him to recollect it. In the caſe of thoſe, on the other hand, who have not been accuſtomed to ſcientific purſuits; as their ideas are connected together according to the moſt obvious relations; when any one idea of a claſs is preſented to the mind, it is immediately followed by the others, which ſucceed each other ſpontaneouſly according to the laws of aſſociation. In managing, therefore, the little details of ſome ſubaltern employment, in which all that is required, is a knowledge of forms, and a diſpoſition to obſerve them, the want of a ſyſtematical genius is an important advantage; becauſe this want renders the mind peculiarly ſuſceptible of habits, and allows the train of its ideas to accommodate itſelf perfectly to the daily and hourly occurrences of its ſituation. But if, in this reſpect, men of no general principles have an advantage over the philoſopher, they fall greatly below him in another point of view; inaſmuch as all the information which they poſſeſs, muſt neceſſarily be limited by their own proper experience; whereas the philoſopher,

pher, who is accuſtomed to refer every thing to general principles, is not only enabled, by means of theſe, to arrange the facts which experience has taught him, but by reaſoning from his principles ſynthetically, has it often in his power to determine facts *a priori*, which he has no opportunity of aſcertaining by obſervation.

It follows farther, from the foregoing principles, that the intellectual defects of the philoſopher, are of a much more corrigible nature, than thoſe of the mere man of detail. If the former is thrown by accident into a ſcene of buſineſs, more time will perhaps be neceſſary to qualify him for it, than would be requiſite for the generality of mankind; but time and experience will infallibly, ſooner or later, familiarize his mind completely with his ſituation. A capacity for ſyſtem and for philoſophical arrangement, unleſs it has been carefully cultivated in early life, is an acquiſition which can ſcarcely ever be made afterwards; and, therefore, the defects which I already mentioned, as connected with early and conſtant habits of buſineſs, adopted from imitation, and undirected by theory; may, when once theſe habits are confirmed, be pronounced to be incurable.

I am alſo inclined to believe, both from a theoretical view of the ſubject, and from my own obſervations as far as they have reached, that if we wiſh to fix the particulars of our knowledge very permanently in the memory, the moſt effectual way of doing it, is to refer them to general principles. Ideas which are connected together merely by caſual relations, preſent

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ſent themſelves with readineſs to the mind, ſo long as we are forced by the habits of our ſituation to apply them daily to uſe; but when a change of circumſtances leads us to vary the objects of our attention, we find our old ideas gradually to eſcape from the recollection: and if it ſhould happen that they eſcape from it altogether, the only method of recovering them, is by renewing thoſe ſtudies by which they were at firſt acquired. The caſe is very different with a man whoſe ideas, preſented to him at firſt by accident, have been afterwards philoſophically arranged, and referred to general principles. When he wiſhes to recollect them, ſome time and reflexion will, frequently, be neceſſary to enable him to do ſo; but the information which he has once completely acquired, continues, in general, to be an acquiſition for life; or if, accidentally, any article of it ſhould be loſt, it may often be recovered by a proceſs of reaſoning.

SOMETHING very ſimilar to this happens in the ſtudy of languages. A perſon who acquires a foreign language merely by the ear, and without any knowledge of its principles, commonly ſpeaks it, while he remains in the country where it is ſpoken, with more readineſs and fluency, than one who has ſtudied it grammatically; but in the courſe of a few years abſence, he finds himſelf almoſt as ignorant of it as before he acquired it. A language, of which we once underſtand the principles thoroughly, it is hardly poſſible to loſe by diſuſe.

A PHILOSOPHICAL arrangement of our ideas, is attended with another very important advantage. In a mind where the prevailing principles of aſſociation are founded on caſual relations

tions among the various objects of its knowledge, the thoughts muſt neceſſarily ſucceed each other in a very irregular and diſorderly manner; and the occaſions on which they preſent themſelves, will be determined merely by accident. They will often occur, when they cannot be employed to any purpoſe; and will remain concealed from our view, when the recollection of them might be uſeful. They cannot therefore be conſidered as under our own proper command. But in the caſe of a philoſopher, how ſlow ſoever he may be in the recollection of his ideas, he knows always where he is to ſearch for them, ſo as to bring them all to bear on their proper object. When he wiſhes to avail himſelf of his paſt experience, or of his former concluſions, the occaſion, itſelf, ſummons up every thought in his mind which the occaſion requires. Or if he is called upon to exert his powers of invention, and of diſcovery, the materials of both are always at hand, and are preſented to his view with ſuch a degree of connexion and arrangement, as may enable him to trace, with eaſe, their various relations. How much, invention depends upon a patient and attentive examination of our ideas, in order to diſcover the leſs obvious relations which ſubſiſt among them, I had occaſion to ſhow, at ſome length, in a former Chapter.

THE remarks which have been now made, are ſufficient to illuſtrate the advantages which the philoſopher derives, in the purſuits of ſcience, from that ſort of ſyſtematical memory which his habits of arrangement give him. It may however be doubted, whether ſuch habits be equally favourable to a talent for agreeable converſation; at leaſt, for that lively, varied, and unſtudied

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unſtudied converſation, which forms the principal charm of a promiſcuous ſociety. The converſation which pleaſes generally, muſt unite the recommendations of quickneſs, of eaſe, and of variety: and in all theſe three reſpects, that of the philoſopher is apt to be deficient. It is deficient in quickneſs, becauſe his ideas are connected by relations which occur only to an attentive and collected mind. It is deficient in eaſe, becauſe theſe relations are not the caſual and obvious ones, by which ideas are aſſociated in ordinary memories; but the ſlow diſcoveries of patient, and often painful, exertion. As the ideas, too, which he aſſociates together, are commonly of the ſame claſs, or at leaſt are referred to the ſame general principles, he is in danger of becoming tedious, by indulging himſelf in long and ſyſtematical diſcourſes; while another, poſſeſſed of the moſt inferior accompliſhments, by laying his mind completely open to impreſſions from without, and by accommodating continually the courſe of his own ideas, not only to the ideas which are ſtarted by his companions, but to every trifling and unexpected accident that may occur to give them a new direction, is the life and ſoul of every ſociety into which he enters. Even the anecdotes which the philoſopher has collected, however agreeable they may be in themſelves, are ſeldom introduced by him into converſation, with that unſtudied but happy propriety, which we admire in men of the world, whoſe facts are not referred to general principles, but are ſuggeſted to their recollection by the familiar topics and occurrences of ordinary life. Nor is it the imputation of tediouſneſs merely, to which the ſyſtematical thinker muſt ſubmit from common obſervers. It is but rarely poſſible to explain

plain completely, in a promiſcuous ſociety, all the various parts of the moſt ſimple theory; and as nothing appears weaker or more abſurd than a theory which is partially ſtated, it frequently happens, that men of ingenuity, by attempting it, ſink, in the vulgar apprehenſion, below the level of ordinary underſtandings. "Theoriarum vires" (ſays Lord Bacon) "in "apta et ſe mutuo ſuſtinente partium harmonia et quadam in "orbem demonſtratione conſiſtunt, ideoque per partes traditæ "infirmæ ſunt."

BEFORE leaving the ſubject of Caſual Memory, it may not be improper to add, that, how much ſoever it may diſqualify for ſyſtematical ſpeculation, there is a ſpecies of looſe and rambling compoſition, to which it is peculiarly favourable. With ſuch performances, it is often pleaſant to unbend the mind in ſolitude, when we are more in the humour for converſation, than for connected thinking. Montaigne is unqueſtionably at the head of this claſs of authors. "What, indeed, are his Eſſays," (to adopt his own account of them,) "but groteſque pieces of "patchwork, put together without any certain figure; or any "order, connexion, or proportion, but what is accidental *?"

IT is, however, curious, that in conſequence of the predominance in his mind of this ſpecies of Memory above every other, he is forced to acknowledge his total want of that command over his ideas, which can only be founded on habits of ſyſtematical arrangement. As the paſſage is extremely cha-

* Liv. i. chap. 27.

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racteriſtical of the author, and affords a ſtriking confirmation of ſome of the preceding obſervations, I ſhall give it in his own words. " Je ne me tiens pas bien en ma poſſeſſion et diſpoſi-
" tion: le hazard y a plus de droit que moy: l' occaſion, la
" compagnie, le branle même de ma voix tire plus de mon
" eſprit, que je n'y trouve lors que je ſonde et employe à part
" moy. Ceci m'advient auſſi, que je ne me trouve pas ou je me
" cherche; et me trouve plus par rencontre, que par l'inquiſi-
" tion de mon jugement *."

THE differences which I have now pointed out between philoſophical and caſual Memory, conſtitute the moſt remarkable of all the varieties which the minds of different individuals, conſidered in reſpect of this faculty, preſent to our obſervation. But there are other varieties, of a leſs ſtriking nature, the conſideration of which may alſo ſuggeſt ſome uſeful reflexions.

IT was before remarked, that our ideas are frequently aſſociated, in conſequence of the aſſociations which take place among their arbitrary ſigns. Indeed, in the caſe of all our general ſpeculations, it is difficult to ſee in what other way our thoughts can be aſſociated; for, I before endeavoured to ſhew, that, without the uſe of ſigns of one kind or another, it would be impoſſible for us to make claſſes or genera, objects of our attention.

ALL the ſigns by which our thoughts are expreſſed, are addreſſed either to the eye or to the ear; and the impreſſions made

* Liv. i. chap. 10. (Du parler prompt ou tardif.)

on

on theſe organs, at the time when we firſt receive an idea, contribute to give us a firmer hold of it. Viſible objects (as I obſerved in the Chapter on Conception) are remembered more eaſily than thoſe of any of our other ſenſes: and hence it is, that the bulk of mankind are more aided in their recollection by the impreſſions made on the eye, than by thoſe made on the ear. Every perſon muſt have remarked, in ſtudying the elements of geometry, how much his recollection of the theorems was aided, by the diagrams which are connected with them: and I have little doubt, that the difficulty which ſtudents commonly find to remember the propoſitions of the fifth book of Euclid, ariſes chiefly from this, that the magnitudes to which they relate, are repreſented by ſtraight lines, which do not make ſo ſtrong an impreſſion on the memory, as the figures which illuſtrate the propoſitions in the other five books.

THIS advantage, which the objects of ſight naturally have over thoſe of hearing, in the diſtinctneſs and the permanence of the impreſſions which they make on the memory, continues, and even increaſes, through life, in the caſe of the bulk of mankind; becauſe their minds, being but little addicted to general and abſtract diſquiſition, are habitually occupied, either with the immediate perception of ſuch objects, or with ſpeculations in which the conception of them is more or leſs involved; which ſpeculations, ſo far as they relate to individual things and individual events, may be carried on with little or no aſſiſtance from language.

THE caſe is different with the philoſopher, whoſe habits of abſtraction and generaliſation lay him continually under a

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neceſſity of employing words as an inſtrument of thought. Such habits co-operating with that inattention, which he is apt to contract to things external, muſt have an obvious tendency to weaken the original powers of recollection and conception with reſpect to viſible objects; and, at the ſame time, to ſtrengthen the power of retaining propoſitions and reaſonings expreſſed in language. The common ſyſtem of education, too, by exerciſing the memory ſo much in the acquiſition of grammar rules, and of paſſages from the antient authors, contributes greatly, in the caſe of men of letters, to cultivate a capacity for retaining words.

It is ſurpriſing, of what a degree of culture, our power of retaining a ſucceſſion, even of inſignificant ſounds, is ſuſceptible. Inſtances ſometimes occur, of men who are eaſily able to commit to memory, a long poem, compoſed in a language of which they are wholly ignorant: and I have, myſelf, known more than one inſtance, of an individual, who, after having forgotten completely the claſſical ſtudies of his childhood, was yet able to repeat, with fluency, long paſſages from Homer and Virgil, without annexing an idea to the words that he uttered.

This ſuſceptibility of memory with reſpect to words, is poſſeſſed by all men in a very remarkable degree in their early years, and is, indeed, neceſſary to enable them to acquire the uſe of language; but unleſs it be carefully cultivated afterwards by conſtant exerciſe, it gradually decays as we advance to maturity. The plan of education which is followed in this country, however imperfect in many reſpects, falls in happily

pily with this arrangement of nature, and ſtores the mind richly, even in infancy, with intellectual treaſures, which are to remain with it through life. The rules of grammar, which comprehend ſyſtems, more or leſs perfect, of the principles of the dead languages, take a permanent hold of the memory, when the underſtanding is yet unable to comprehend their import; and the claſſical remains of antiquity, which, at the time we acquire them, do little more than furniſh a gratification to the ear, ſupply us with inexhauſtible ſources of the moſt refined enjoyment; and, as our various powers gradually unfold themſelves, are poured forth, without effort, from the memory, to delight the imagination, and to improve the heart. It cannot be doubted, that a great variety of other articles of uſeful knowledge, particularly with reſpect to geographical and chronological details, might be communicated with advantage to children, in the form of memorial lines. It is only in childhood, that ſuch details can be learned with facility; and if they were once acquired, and rendered perfectly familiar to the mind, our riper years would be ſpared much of that painful and unintereſting labour, which is perpetually diſtracting our intellectual powers, from thoſe more important exertions, for which, in their mature ſtate, they ſeem to be deſtined.

THIS tendency of literary habits in general, and more particularly of philoſophical purſuits, to exerciſe the thoughts about words, can ſcarcely fail to have ſome effect in weakening the powers of recollection and conception with reſpect to ſenſible objects; and, in fact, I believe it will be found, that whatever advantage the philoſopher may poſſeſs over men of little education,

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cation, in ſtating general propoſitions and general reaſonings, he is commonly inferior to them in point of minuteneſs and accuracy, when he attempts to deſcribe any object which he has ſeen, or any event which he has witneſſed; ſuppoſing the curioſity of both, in ſuch caſes, to be intereſted in an equal degree. I acknowledge, indeed, that the undivided attention, which men unaccuſtomed to reflexion are able to give to the objects of their perceptions, is, in part, the cauſe of the livelineſs and correctneſs of their conceptions.

WITH this diverſity in the intellectual habits of cultivated and of uncultivated minds, there is another variety of memory which ſeems to have ſome connection. In recognizing viſible objects, the memory of one man proceeds on the general appearance, that of another attaches itſelf to ſome minute and diſtinguiſhing marks. A peaſant knows the various kinds of trees from their general habits; a botaniſt, from thoſe characteriſtical circumſtances on which his claſſification proceeds. The laſt kind of memory is, I think, moſt common among literary men, and ariſes from their habit of recollecting by means of words. It is evidently much eaſier to expreſs by a deſcription, a number of botanical marks, than the general habit of a tree; and the ſame remark is applicable to other caſes of a ſimilar nature. But to whatever cauſe we aſcribe it, there can be no doubt of the fact, that many individuals are to be found, and chiefly among men of letters, who, although they have no memory for the general appearances of objects, are yet able to retain, with correctneſs, an immenſe number of technical diſcriminations.

EACH

EACH of theſe kinds of memory, has its peculiar advantages and inconveniences, which the dread of being tedious induces me to leave to the inveſtigation of my readers.

SECTION III.

Of the Improvement of Memory.——Analyſis of the Principles on which the Culture of Memory depends.

THE improvement of which the mind is ſuſceptible by culture, is more remarkable, perhaps, in the caſe of Memory, than in that of any other of our faculties. The fact has been often taken notice of in general terms; but I am doubtful if the particular mode in which culture operates on this part of our conſtitution, has been yet examined by philoſophers with the attention which it deſerves.

OF one ſort of culture, indeed, of which Memory is ſuſceptible in a very ſtriking degree, no explanation can be given; I mean the improvement which the original faculty acquires by mere exerciſe; or in other words, the tendency which practice has to increaſe our natural facility of aſſociation. This effect of practice upon the memory, ſeems to be an ultimate law of our nature, or rather to be a particular inſtance of that general law, that all our powers, both of body and mind, may be ſtrengthened, by applying them to their proper purpoſes.

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BESIDES, however, the improvement which Memory admits of, in conſequence of the effects of exerciſe on the original faculty, it may be greatly aided in its operations, by thoſe expedients which reaſon and experience ſuggeſt for employing it to the beſt advantage. Theſe expedients furniſh a curious ſubject of philoſophical examination: perhaps, too, the inquiry may not be altogether without uſe; for, although our principal reſources for aſſiſting the memory be ſuggeſted by nature, yet it is reaſonable to think, that in this, as in ſimilar caſes, by following out ſyſtematically the hints which ſhe ſuggeſts to us, a farther preparation may be made for our intellectual improvement.

EVERY perſon muſt have remarked, in entering upon any new ſpecies of ſtudy, the difficulty of treaſuring up in the memory its elementary principles; and the growing facility which he acquires in this reſpect, as his knowledge becomes more extenſive. By analiſing the different cauſes which concur in producing this facility, we may, perhaps, be led to ſome concluſions which may admit of a practical application.

1. IN every ſcience, the ideas about which it is peculiarly converſant, are connected together by ſome particular aſſociating principle; in one ſcience, for example, by aſſociations founded on the relation of cauſe and effect; in another, by aſſociations founded on the neceſſary relations of mathematical truths; in a third, on aſſociations founded on contiguity in place or time. Hence one cauſe of the gradual improvement of memory with reſpect to the familiar objects of our knowledge; for whatever be the prevailing aſſociating principle among the ideas about which

which we are habitually occupied, it muſt neceſſarily acquire additional ſtrength from our favourite ſtudy.

2. IN proportion as a ſcience becomes more familiar to us, we acquire a greater command of attention with reſpect to the objects about which it is converſant; for the information which we already poſſeſs, gives us an intereſt in every new truth, and every new fact which have any relation to it. In moſt caſes, our habits of inattention may be traced to a want of curioſity; and therefore ſuch habits are to be corrected, not by endeavouring to force the attention in particular inſtances, but by gradually learning to place the ideas which we wiſh to remember, in an intereſting point of view.

3. WHEN we firſt enter on any new literary purſuit, we are unable to make a proper diſcrimination in point of utility and importance, among the ideas which are preſented to us; and by attempting to graſp at every thing, we fail in making thoſe moderate acquiſitions which are ſuited to the limited powers of the human mind. As our information extends, our ſelection becomes more judicious and more confined; and our knowledge of uſeful and connected truths advances rapidly, from our ceaſing to diſtract the attention with ſuch as are detached and inſignificant.

4. EVERY object of our knowledge is related to a variety of others; and may be preſented to the thoughts, ſometimes by one principle of aſſociation, and ſometimes by another. In proportion, therefore, to the multiplication of mutual relations among our

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ideas, (which is the natural reſult of growing information, and, in particular, of habits of philoſophical ſtudy,) the greater will be the number of occaſions on which they will recur to the recollection, and the firmer will be the root which each idea, in particular, will take in the memory.

It follows, too, from this obſervation, that the facility of retaining a new fact, or a new idea, will depend on the number of relations which it bears to the former objects of our knowledge; and, on the other hand, that every ſuch acquiſition, ſo far from loading the memory, gives us a firmer hold of all that part of our previous information, with which it is in any degree connected.

It may not, perhaps, be improper to take this opportunity of obſerving, although the remark be not immediately connected with our preſent ſubject, that the acceſſion made to the ſtock of our knowledge, by the new facts and ideas which we acquire, is not to be eſtimated merely by the number of theſe facts and ideas conſidered individually; but by the number of relations which they bear to one another, and to all the different particulars which were previouſly in the mind; for, "new knowledge," (as Mr. Maclaurin has well remarked *,) "does not "conſiſt ſo much in our having acceſs to a new object, as in "comparing it with others already known, obſerving its relations to them, or diſcerning what it has in common with "them, and wherein their diſparity conſiſts: and, therefore,

* See the Concluſion of his View of Newton's Diſcoveries.

"our

" our knowledge is vaſtly greater than the ſum of what all its " objects ſeparately could afford; and when a new object comes " within our reach, the addition to our knowledge is the " greater, the more we already know; ſo that it increaſes, not " as the new objects increaſe, but in a much higher pro- " portion."

5. In the laſt place, the natural powers of Memory are, in the caſe of the philoſopher, greatly aided by his peculiar habits of claſſification and arrangement. As this is by far the moſt important improvement of which Memory is ſuſceptible, I ſhall conſider it more particularly than any of the others I have mentioned.

The advantages which the memory derives from a proper claſſification of our ideas, may be beſt conceived by attending to its effects in enabling us to conduct, with eaſe, the common buſineſs of life. In what inextricable confuſion would the lawyer or the merchant be immediately involved, if he were to depoſit, in his cabinet, promiſcuouſly, the various written documents which daily and hourly paſs through his hands? Nor could this confuſion be prevented by the natural powers of memory, however vigorous they might happen to be. By a proper diſtribution of theſe documents, and a judicious reference of them to a few general titles, a very ordinary memory is enabled to accompliſh more, than the moſt retentive, unaſſiſted by method. We know, with certainty, where to find any article we may have occaſion for, if it be in our poſſeſſion; and

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the ſearch is confined within reaſonable limits, inſtead of being allowed to wander at random amidſt a chaos of particulars.

OR, to take an inſtance ſtill more immediately applicable to our purpoſe: ſuppoſe that a man of letters were to record, in a common-place book, without any method, all the various ideas and facts which occurred to him in the courſe of his ſtudies; what difficulties would he perpetually experience in applying his acquiſitions to uſe? and how completely and eaſily might theſe difficulties be obviated by referring the particulars of his information to certain general heads? It is obvious, too, that, by doing ſo, he would not only have his knowledge much more completely under his command, but as the particulars claſſed together would all have ſome connexion, more or leſs, with each other, he would be enabled to trace, with advantage, thoſe mutual relations among his ideas, which it is the object of philoſophy to aſcertain.

A COMMON-PLACE book, conducted without any method, is an exact picture of the memory of a man whoſe inquiries are not directed by philoſophy. And the advantages of order in treaſuring up our ideas in the mind, are perfectly analogous to its effects when they are recorded in writing.

NOR is this all. In order to retain our knowledge diſtinctly and permanently, it is neceſſary that we ſhould frequently recal it to our recollection. But how can this be done without the aid of arrangement? Or ſuppoſing that it were poſſible, how much

much time and labour would be neceſſary for bringing under our review, the various particulars of which our information is compoſed? In proportion as it is properly ſyſtematiſed, this time and labour are abridged. The mind dwells habitually, not on detached facts, but on a comparatively ſmall number of general principles; and, by means of theſe, it can ſummon up, as occaſions may require, an infinite number of particulars aſſociated with them; each of which, conſidered as a ſolitary truth, would have been as burdenſome to the memory, as the general principle with which it is connected.

I WOULD not wiſh it to be underſtood from theſe obſervations, that *philoſophy conſiſts in claſſification alone*; and that its only uſe is to aſſiſt the memory. I have often, indeed, heard this aſſerted in general terms; but it appears to me to be obvious, that although this be one of its moſt important uſes, yet ſomething more is neceſſary to complete the definition of it. Were the caſe otherwiſe, it would follow, that all claſſifications are equally philoſophical, provided they are equally comprehenſive. The very great importance of this ſubject will, I hope, be a ſufficient apology for me, in taking this opportunity to correct ſome miſtaken opinions which have been formed concerning it.

SECTION IV.

Continuation of the ſame Subject.——Aid which the Memory derives from Philoſophical Arrangement.

IT was before obſerved, that the great uſe of the faculty of Memory, is to enable us to treaſure up, for the future regulation of our conduct, the reſults of our paſt experience, and of our paſt reflexions. But in every caſe in which we judge of the future from the paſt, we muſt proceed on the belief, that there is, in the courſe of events, a certain degree, at leaſt, of uniformity. And, accordingly, this belief is not only juſtified by experience, but (as Dr. Reid has ſhewn, in a very ſatisfactory manner) it forms a part of the original conſtitution of the human mind. In the general laws of the material world, this uniformity is found to be complete; inſomuch that, in the ſame combinations of circumſtances, we expect, with the moſt perfect aſſurance, that the ſame reſults will take place. In the moral world, the courſe of events does not appear to be equally regular; but ſtill it is regular, to ſo great a degree, as to afford us many rules of importance in the conduct of life.

A KNOW-

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A KNOWLEDGE of Nature, in ſo far as it is abſolutely neceſſary for the preſervation of our animal exiſtence, is obtruded on us, without any reflexion on our part, from our earlieſt infancy. It is thus that children learn of themſelves to accommodate their conduct to the eſtabliſhed laws of the material world. In doing ſo, they are guided merely by memory, and the inſtinctive principle of anticipation, which has juſt been mentioned.

IN forming concluſions concerning future events, the philoſopher, as well as the infant, can only build with ſafety on paſt experience; and he, too, as well as the infant, proceeds on an inſtinctive belief, for which he is unable to account, of the uniformity of the laws of nature. There are, however, two important reſpects, which diſtinguiſh the knowledge he poſſeſſes from that of ordinary men. In the Firſt place, it is far more extenſive, in conſequence of the aſſiſtance which ſcience gives to his natural powers of invention and diſcovery. Secondly, it is not only more eaſily retained in the memory, and more conveniently applied to uſe, in conſequence of the manner in which his ideas are arranged; but it enables him to aſcertain, by a proceſs of reaſoning, all thoſe truths which may be ſynthetically deduced from his general principles. The illuſtration of theſe particulars will lead to ſome uſeful remarks; and will at the ſame time ſhew, that, in diſcuſſing the ſubject of this Section, I have not loſt ſight of the inquiry which occaſioned it.

I. 1. IT was already remarked, that the natural powers of Memory, together with that inſtinctive anticipation of the fu-

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ture from the paſt, which forms one of the original principles of the mind, are ſufficient to enable infants, after a very ſhort experience, to preſerve their animal exiſtence. The laws of nature, which it is not ſo important for us to know, and which are the objects of philoſophical curioſity, are not ſo obviouſly expoſed to our view, but are, in general, brought to light by means of experiments which are made for the purpoſe of diſcovery; or, in other words, by artificial combinations of circumſtances, which we have no opportunity of ſeeing conjoined in the courſe of our ordinary experience. In this manner, it is evident, that many connexions may be aſcertained, which would never have occurred ſpontaneouſly to our obſervation.

2. THERE are, too, ſome inſtances, particularly in the caſe of the aſtronomical phenomena, in which events, that appear to common obſervers to be altogether anomalous, are found, upon a more accurate and continued examination of them, to be ſubjected to a regular law. Such, in particular, are thoſe phenomena in the heavens, which we are able to predict by means of cycles. In the caſes formerly deſcribed, our knowledge of nature is extended by placing her in new ſituations. In theſe caſes, it is extended by continuing our obſervations beyond the limits of ordinary curioſity.

3. IN the caſe of human affairs, ſo long as we confine our attention to particulars, we do not obſerve the ſame uniformity, as in the phenomena of the material world. When, however, we extend our views to events which depend on a combination of different circumſtances, ſuch a degree of uniformity appears,

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as enables us to eſtabliſh general rules, from which probable conjectures may often be formed with reſpect to futurity. It is thus, that we can pronounce, with much greater confidence, *concerning the proportion of deaths which ſhall happen in a certain period among a given number of men*, than we can predict the death of any individual; and that it is more reaſonable to employ our ſagacity, in ſpeculating concerning the probable determinations of a numerous ſociety, than concerning events which depend on the will of a ſingle perſon.

In what manner this uniformity in events depending on contingent circumſtances is produced, I ſhall not inquire at preſent. The advantages which we derive from it are obvious, as it enables us to collect, from our paſt experience, many general rules, both with reſpect to the hiſtory of political ſocieties, and the characters and conduct of men in private life.

4. In the laſt place; the knowledge of the philoſopher is more extenſive than that of other men, in conſequence of the attention which he gives, not merely to objects and to events, but to the *relations* which different objects and different events bear to each other.

The obſervations and the experience of the vulgar are almoſt wholly limited to things perceived by the ſenſes. A ſimilarity between different objects, or between different events, rouſes their curioſity, and leads them to claſſification, and to general rules. But a ſimilarity between different *relations*, is ſeldom to be traced without previous habits of philoſophical inquiry. Many

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ſuch ſimilarities or connexions, however, are to be found in nature; and when once they are aſcertained, they frequently lead to important diſcoveries; not only with reſpect to other relations, but with reſpect to the objects or to the events which are related. Theſe remarks it will be neceſſary to illuſtrate more particularly.

THE great object of Geometry is to aſcertain the relations which exiſt between different quantities, and the connexions which exiſt between different relations. When we demonſtrate, that the angle at the centre of a circle is double of the angle at the circumference on the ſame baſe, we aſcertain a relation *between two quantities.* When *we demonſtrate, that triangles of* the ſame altitude are to each other as their baſes, we aſcertain a connexion between two relations. It is obvious, how much the mathematical ſciences muſt contribute to enlarge our knowledge of the univerſe, in conſequence of ſuch diſcoveries. In that ſimpleſt of all proceſſes of practical geometry, which teaches us to meaſure the height of an acceſſible tower, by comparing the length of its ſhadow with that of a ſtaff fixed vertically in the ground, we proceed on the principle, that the relation between the ſhadow of the ſtaff and the height of the ſtaff is the ſame with the relation between the ſhadow of the tower and the height of the tower. But the former relation we can aſcertain by actual meaſurement; and, of conſequence, we not only obtain the other relation; but, as we can meaſure one of the related quantities, we obtain alſo the other quantity. In every caſe in which mathematics aſſiſts us in meaſuring the magnitudes or the diſtances of objects, it proceeds on the ſame principle; that is,

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it begins with aſcertaining connexions among different relations, and thus enables us to carry our inquiries from facts which are expoſed to the examination of our ſenſes, to the moſt remote parts of the univerſe.

I OBSERVED alſo, that there are various relations exiſting among phyſical events, and various connexions exiſting among theſe relations. It is owing to this circumſtance, that mathematics is ſo uſeful an inſtrument in the hands of the phyſical inquirer. In that beautiful theorem of Huyghens, which demonſtrates, that the time of a complete oſcillation of a pendulum in the cycloid, is to the time in which a body would fall through the axis of the cycloid, as the circumference of a circle is to its diameter, we are made acquainted with a very curious and unexpected connexion between two relations; and the knowledge of this connexion facilitates the determination of a moſt important fact with reſpect to the deſcent of heavy bodies near the earth's ſurface, which could not be aſcertained conveniently by a direct experiment.

IN examining, with attention, the relations among different phyſical events, and the connexions among different relations, we ſometimes are led by mere induction to the diſcovery of a general law; while, to ordinary obſervers, nothing appears but irregularity. From the writings of the earlier opticians we learn, that, in examining the firſt principles of dioptrics, they were led by the analogy of the law of reflexion, to ſearch for the relation between the angles of incidence and refraction, (in the caſe of light paſſing from one medium into another,) in

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the angles themſelves; and that ſome of them, finding this inquiry unſucceſsful, took the trouble to determine, by experiments, (in the caſe of the media which moſt frequently fall under conſideration,) the angle of refraction correſponding to every minute of incidence. Some very laborious tables, deduced from ſuch experiments, are to be found in the works of Kircher. At length, Snellius diſcovered what is now called the law of refraction, which comprehends their whole contents in a ſingle ſentence.

THE law of the planetary motions, deduced by Kepler, from the obſervations of Tycho Brahe, is another ſtriking illuſtration of the order, which an attentive inquirer is ſometimes able to trace, among the relations of phyſical events, when the events themſelves appear, on a ſuperficial view, to be perfectly anomalous.

SUCH laws are, in ſome reſpects, analogous to the cycles which I have already mentioned; but they differ from them in this, that a cycle is, commonly, deduced from obſervations made on phyſical events which are obvious to the ſenſes; whereas the laws we have now been conſidering, are deduced from an examination of relations which are known only to men of ſcience. The moſt celebrated aſtronomical cycles, accordingly, are of a very remote antiquity, and were probably diſcovered at a period, when the ſtudy of aſtronomy conſiſted merely in accumulating and recording the more ſtriking appearances of the heavens.

II. HAVING

II. HAVING now endeavoured to ſhew, how much philoſophy contributes to extend our knowledge of facts, by aiding our natural powers of invention and diſcovery, I proceed to explain, in what manner it ſuperſedes the neceſſity of ſtudying particular truths, by putting us in poſſeſſion of a comparatively ſmall number of general principles in which they are involved.

I ALREADY remarked the aſſiſtance which philoſophy gives to the memory, in conſequence of the arrangement it introduces among our ideas. In this reſpect even a hypothetical theory may facilitate the recollection of facts; in the ſame manner in which the memory is aided in remembering the objects of natural hiſtory by artificial claſſifications.

THE advantages, however, we derive from true philoſophy, are incomparably greater than what are to be expected from any hypothetical theories. Theſe, indeed, may aſſiſt us in recollecting the particulars we are already acquainted with; but it is only from the laws of nature, which have been traced analytically from facts, that we can venture, with ſafety, to deduce conſequences by reaſoning *a priori*. An example will illuſtrate and confirm this obſervation.

SUPPOSE that a glaſs tube, thirty inches long, is filled with mercury, excepting eight inches, and is inverted as in the Torricellian experiment, ſo that the eight inches of common air may riſe to the top; and that I wiſh to know at what height the mercury will remain ſuſpended in the tube, the barometer being at that time twenty-eight inches high. There is here a combi-

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combination of different laws, which it is neceſſary to attend to, in order to be able to predict the reſult. 1. The air is a heavy fluid, and the preſſure of the atmoſphere is meaſured by the column of mercury in the barometer. 2. The air is an elaſtic fluid; and its elaſticity at the earth's ſurface (as it reſiſts the preſſure of the atmoſphere) is meaſured by the column of mercury in the barometer. 3. In different ſtates, the elaſtic force of the air is reciprocally as the ſpaces which it occupies. But, in this experiment, the mercury which remains ſuſpended in the tube, together with the elaſtic force of the air in the top of the tube, is a counterbalance to the preſſure of the atmoſphere; and therefore their joint effect muſt be equal to the preſſure of a column of mercury twenty-eight inches high. Hence we obtain an algebraical equation, which affords an eaſy ſolution of the problem. It is further evident, that my knowledge of the phyſical laws which are here combined, puts it in my power to foretel the reſult, not only in this caſe, but in all the caſes of a ſimilar nature which can be ſuppoſed. The problem, in any particular inſtance, might be ſolved by making the experiment; but the reſult would be of no uſe to me, if the ſlighteſt alteration were made on the data.

It is in this manner that philoſophy, by putting us in poſſeſſion of a few general facts, enables us to determine, by reaſoning, what will be the reſult of any ſuppoſed combination of them, and thus to comprehend an infinite variety of particulars, which no memory, however vigorous, would have been able to retain. In conſequence of the knowledge of ſuch general facts, the philoſopher is relieved from the neceſſity of treaſuring up in his

his mind, all thoſe truths which are involved in his principles, and which may be deduced from them by reaſoning; and he can often proſecute his diſcoveries ſynthetically, in thoſe parts of the univerſe which he has no acceſs to examine by immediate obſervation. There is, therefore, this important difference between a hypothetical theory, and a theory obtained by induction; that the latter not only enables us to remember the facts we already know, but to aſcertain by reaſoning, many facts which we have never had an opportunity of examining; whereas, when we reaſon from a hypotheſis *a priori*, we are almoſt certain of running into error; and, conſequently, whatever may be its uſe to the memory, it can never be truſted to, in judging of caſes which have not previouſly fallen within our experience. CHAP. VI.

THERE are ſome ſciences, in which hypothetical theories are more uſeful than in others; thoſe ſciences, to wit, in which we have occaſion for an extenſive knowledge and a ready recollection of facts, and which, at the ſame time, are yet in too imperfect a ſtate to allow us to obtain juſt theories by the method of induction. This is particularly the caſe in the ſcience of medicine, in which we are under a neceſſity to apply our knowledge, ſuch as it is, to practice. It is alſo, in ſome degree, the caſe in agriculture. In the merely ſpeculative parts of phyſics and chemiſtry, we may go on patiently accumulating facts, without forming any one concluſion, farther than our facts authoriſe us; and leave to poſterity the credit of eſtabliſhing the theory to which our labours are ſubſervient. But in medicine, in which it is of conſequence to have our knowledge at command, it ſeems reaſonable to think, that hypo-

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hypothetical theories may be uſed with advantage; provided always, that they are conſidered merely in the light of artificial memories, and that the ſtudent is prepared to lay them aſide, or to correct them, in proportion as his knowledge of nature becomes more extenſive. I am, indeed, ready to confeſs, that this is a caution which it is more eaſy to give than to follow: for it is painful to change any of our habits of arrangement, and to relinquiſh thoſe ſyſtems in which we have been educated, and which have long flattered us with an idea of our own wiſdom. Dr. Gregory mentions * it as a ſtriking and diſtinguiſhing circumſtance in the character of Sydenham, that, although full of hypothetical reaſoning, it did not render him the leſs attentive to obſervation; and that his hypotheſes ſeem to have ſat ſo looſely about him, that either they did not influence his practice at all, or he could eaſily abandon them, whenever they would not bend to his experience.

* Lectures on the Duties and Qualifications of a Phyſician.

SECTION V.

Continuation of the ſame ſubject.—Effects produced on the Memory by committing to Writing our acquired Knowledge.

HAVING treated at conſiderable length of the improvement of memory, it may not be improper, before leaving this part of the ſubject, to conſider what effects are likely to be produced on the mind by the practice of committing to writing our acquired knowledge. That ſuch a practice is unfavourable, in ſome reſpects, to the faculty of memory, by ſuperſeding, to a certain degree, the neceſſity of its exertions, has been often remarked, and I believe is true; but the advantages with which it is attended in other reſpects, are ſo important, as to overbalance greatly this trifling inconvenience.

IT is not my intention at preſent to examine and compare together the different methods which have been propoſed, of keeping a common-place book. In this, as in other caſes of a ſimilar kind, it may be difficult, perhaps, or impoſſible, to eſtabliſh any rules which will apply univerſally. Individuals muſt be left to judge for themſelves, and to adapt their contrivances to the particular nature of their literary purſuits, and to their own peculiar habits of aſſociation and arrangement. The remarks which I am to offer are very general, and are intended merely to illuſtrate a few of the advantages which the art of writing affords

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to the philoſopher, for recording, in the courſe of his progreſs through life, the reſults of his ſpeculations, and the fruits of his experience.

THE utility of writing, in enabling one generation to tranſmit its diſcoveries to another, and in thus giving riſe to a gradual progreſs in the ſpecies, has been ſufficiently illuſtrated by many authors. Little attention, however, has been paid to another of its effects, which is no leſs important; I mean, to the foundation which it lays for a perpetual progreſs in the intellectual powers of the individual.

IT is to experience, and to our own reflections, that we are indebted for by far the moſt valuable part of our knowledge: and hence it is, that although in youth the imagination may be more vigorous, and the genius more original, than in advanced years; yet, in the caſe of a man of obſervation and inquiry, the judgment may be expected, at leaſt as long as his faculties remain in perfection, to become every day ſounder and more enlightened. It is, however, only by the conſtant practice of writing, that the reſults of our experience, and the progreſs of our ideas, can be accurately recorded. If they are truſted merely to the memory, they will gradually vaniſh from it like a dream, or will come in time to be ſo blended with the ſuggeſtions of imagination, that we ſhall not be able to reaſon from them with any degree of confidence. What improvements in ſcience might we not flatter ourſelves with the hopes of accompliſhing, had we only activity and induſtry to treaſure up every plauſible hint that occurs to us! Hardly a day paſſes, when many ſuch do not occur to ourſelves, or are ſuggeſted by others:

and detached and inſulated, as they may appear at preſent, ſome of them may perhaps afterwards, at the diſtance of years, furniſh the key-ſtone of an important ſyſtem.

BUT it is not only in this point of view that the philoſopher derives advantage from the practice of writing. Without its aſſiſtance, he could ſeldom be able to advance beyond thoſe ſimple elementary truths which are current in the world, and which form, in the various branches of ſcience, the eſtabliſhed creed of the age he lives in. How inconſiderable would have been the progreſs of mathematicians, in their more abſtruſe ſpeculations, without the aid of the algebraical notation; and to what ſublime diſcoveries have they been led by this beautiful contrivance, which, by relieving the memory of the effort neceſſary for recollecting the ſteps of a long inveſtigation, has enabled them to proſecute an infinite variety of inquiries, to which the unaſſiſted powers of the human mind would have been altogether unequal! In the other ſciences, it is true, we have ſeldom or never occaſion to follow out ſuch long chains of conſequences as in mathematics; but in theſe ſciences, if the chain of inveſtigation be ſhorter, it is far more difficult to make the tranſition from one link to another; and it is only by dwelling long on our ideas, and rendering them perfectly familiar to us, that ſuch tranſitions can, in moſt inſtances, be made with ſafety. In morals and politics, when we advance a ſtep beyond thoſe elementary truths which are daily preſented to us in books or converſation, there is no method of rendering our concluſions familiar to us, but by committing them to writing, and making them frequently the ſubjects of our meditation. When we have once done ſo, theſe concluſions become ele-

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mentary truths with reſpect to us; and we may advance from them with confidence to others which are more remote, and which are far beyond the reach of vulgar diſcovery. By following ſuch a plan, we can hardly fail to have our induſtry rewarded in due time by ſome important improvement; and it is only by ſuch a plan that we can reaſonably hope to extend conſiderably the boundaries of human knowledge. I do not ſay that theſe habits of ſtudy are equally favourable to brilliancy of converſation. On the contrary, I believe that thoſe men who poſſeſs this accompliſhment in the higheſt degree, are ſuch as do not advance beyond elementary truths; or rather, perhaps, who advance only a ſingle ſtep beyond them; that is, who think a little more deeply than the vulgar, but whoſe concluſions are not ſo far removed from common opinions, as to render it neceſſary for them, when called upon to defend them, to exhauſt the patience of their hearers, by ſtating a long train of intermediate ideas. They who have puſhed their inquiries much farther than the common ſyſtems of their times, and have rendered familiar to their own minds the intermediate ſteps by which they have been led to their concluſions, are too apt to conceive other men to be in the ſame ſituation with themſelves; and when they mean to inſtruct, are mortified to find that they are only regarded as paradoxical and viſionary. It is but rarely we find a man of very ſplendid and various converſation to be poſſeſſed of a profound judgment, or of great originality of genius.

Nor is it merely to the philoſopher, who wiſhes to diſtinguiſh himſelf by his diſcoveries, that writing affords an uſeful inſtrument

ment of ſtudy. Important aſſiſtance may be derived from it by all thoſe who wiſh to impreſs on their minds the inveſtigations which occur to them in the courſe of their reading; for although writing may weaken (as I already acknowledged it does) a memory for detached obſervations, or for inſulated facts, it will be found the only effectual method of fixing in it permanently, thoſe acquiſitions which involve long proceſſes of reaſoning.

When we are employed in inquiries of our own, the concluſions which we form make a much deeper and more laſting impreſſion on the memory, than any knowledge which we imbibe paſſively from another. This is undoubtedly owing, in part, to the effect which the ardour of diſcovery has, in rouſing the activity of the mind, and in fixing its attention; but I apprehend it is chiefly to be aſcribed to this, that when we follow out a train of thinking of our own, our ideas are arranged in that order which is moſt agreeable to our prevailing habits of aſſociation. The only method of putting our acquired knowledge on a level, in this reſpect, with our original ſpeculations, is, after making ourſelves acquainted with our author's ideas, to ſtudy the ſubject over again in our own way; to pauſe, from time to time, in the courſe of our reading, in order to conſider what we have gained; to recollect what the propoſitions are, which the author wiſhes to eſtabliſh, and to examine the different proofs which he employs to ſupport them. In making ſuch an experiment, we commonly find, that the different ſteps of the proceſs arrange themſelves in our minds, in a manner different from that in which the author has ſtated them; and that, while his argu-

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ment ſeems, in ſome places, obſcure, from its conciſeneſs; it is tedious in others, from being unneceſſarily expanded. When we have reduced the reaſoning to that form, which appears to ourſelves to be the moſt natural and ſatisfactory, we may conclude with certainty, not that this form is better in itſelf than another, but that it is the beſt adapted to our memory. Such reaſonings, therefore, as we have occaſion frequently to apply, either in the buſineſs of life, or in the courſe of our ſtudies, it is of importance to us to commit to writing, in a language and in an order of our own; and if, at any time, we find it neceſſary to refreſh our recollection on the ſubject, to have recourſe to our own compoſition, in preference to that of any other author.

THAT the plan of reading which is commonly followed is very different from that which I have been recommending, will not be diſputed. Moſt people read merely to paſs an idle hour, or to pleaſe themſelves with the idea of employment, while their indolence prevents them from any active exertion; and a conſiderable number with a view to the diſplay which they are afterwards to make of their literary acquiſitions. From whichſoever of theſe motives a perſon is led to the peruſal of books, it is hardly poſſible that he can derive from them any material advantage. If he reads merely from indolence, the ideas which paſs through his mind will probably leave little or no impreſſion; and if he reads from vanity, he will be more anxious to ſelect ſtriking particulars in the matter or expreſſion, than to ſeize the ſpirit and ſcope of the author's reaſoning, or to examine how far he has made any additions to the ſtock of uſeful and ſolid knowledge.

knowledge. "Though it is ſcarce poſſible," ſays Dr. Butler *, "to avoid judging, in ſome way or other, of almoſt every thing "which offers itſelf to one's thoughts, yet it is certain, that "many perſons, from different cauſes, never exerciſe their "judgment upon what comes before them, in ſuch a manner as "to be able to determine how far it be concluſive. They are "perhaps entertained with ſome things, not ſo with others; "they like, and they diſlike; but whether that which is pro-"poſed to be made out, be really made out or not; whether a "matter be ſtated according to the real truth of the caſe, ſeems, "to the generality of people, a circumſtance of little or no im-"portance. Arguments are often wanted for ſome accidental "purpoſe; but proof, as ſuch, is what they never want, for "their own ſatisfaction of mind, or conduct in life. Not "to mention the multitudes who read merely for the ſake of "talking, or to qualify themſelves for the world, or ſome ſuch "kind of reaſons; there are even of the few who read for their "own entertainment, and have a real curioſity to ſee what is "ſaid, ſeveral, which is aſtoniſhing, who have no ſort of "curioſity to ſee what is true: I ſay curioſity, becauſe it is too "obvious to be mentioned how much that religious and ſacred "attention which is due to truth, and to the important queſtion, "what is the rule of life, is loſt out of the world.

"For the ſake of this whole claſs of readers, for they are of "different capacities, different kinds, and get into this way "from different occaſions, I have often wiſhed, that it had

* See the Preface to his Sermons.

"been

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" been the cuſtom to lay before people nothing in matters of
" argument but premiſes, and leave them to draw concluſions
" themſelves; which, although it could not be done in all
" caſes, might in many.

" THE great number of books and papers of amuſement,
" which, of one kind or another, daily come in one's way,
" have in part occaſioned, and moſt perfectly fall in with and
" humour this idle way of reading and conſidering things.
" By this means, time, even in ſolitude, is happily got rid of,
" without the pain of attention; neither is any part of it
" more put to the account of idleneſs; one can ſcarce forbear
" ſaying, is ſpent with leſs thought, than great part of that
" which is ſpent in reading."

IF the plan of ſtudy which I formerly deſcribed were adopted, it would undoubtedly diminiſh very much the number of books which it would be poſſible to turn over; but I am convinced that it would add greatly to the ſtock of uſeful and ſolid knowledge; and by rendering our acquired ideas in ſome meaſure our own, would give us a more ready and practical command of them: not to mention, that if we are poſſeſſed of any inventive powers, ſuch exerciſes would continually furniſh them with an opportunity of diſplaying themſelves, upon all the different ſubjects which may paſs under our review.

NOTHING, in truth, has ſuch a tendency to weaken, not only the powers of invention, but the intellectual powers in general, as a habit of extenſive and various reading, without reflexion.

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The activity and force of the mind are gradually impaired, in conſequence of diſuſe; and not unfrequently all our principles and opinions come to be loſt, in the infinite multiplicity and diſcordancy of our acquired ideas.

By confining our ambition to purſue the truth with modeſty and candour, and learning to value our acquiſitions only in ſo far as they contribute to make us wiſer and happier, we may perhaps be obliged to ſacrifice the temporary admiration of the common diſpenſers of literary fame; but we may reſt aſſured, that it is in this way only we can hope to make real progreſs in knowledge, or to enrich the world with uſeful inventions.

"It requires courage, indeed," (as Helvetius has remarked,) "to remain ignorant of thoſe uſeleſs ſubjects which are generally "valued;" but it is a courage neceſſary to men who either love the truth, or who aſpire to eſtabliſh a permanent reputation.

SECTION VI.

Continuation of the ſame Subject.——Of Artificial Memory.

BY an Artificial Memory is meant, a method of connecting in the mind, things difficult to be remembered, with things eaſily remembered; ſo as to enable it to retain, and to recollect the former, by means of the latter. For this purpoſe, various contrivances have been propoſed, but I think the foregoing definition applies to all of them.

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SOME ſorts of artificial memory are intended to aſſiſt the natural powers of the human mind on particular occaſions, which require a more than ordinary effort of recollection; for example, to aſſiſt a public ſpeaker to recollect the arrangement of a long diſcourſe. Others have been deviſed with a view to enable us to extend the circle of our acquired knowledge, and to give us a more ready command of all the various particulars of our information.

THE topical Memory, ſo much celebrated among the antient rhetoricians, comes under the former deſcription.

I ALREADY remarked, the effect of ſenſible objects in recalling to the mind the ideas with which it happened to be occupied, at the time when theſe objects were formerly perceived. In travelling along a road, the ſight of the more remarkable ſcenes we meet with, frequently puts us in mind of the ſubjects we were thinking or talking of when we laſt ſaw them. Such facts, which are perfectly familiar even to the vulgar, might very naturally ſuggeſt the poſſibility of aſſiſting the memory, by eſtabliſhing a connexion between the ideas we wiſh to remember, and certain ſenſible objects, which have been found from experience to make a permanent impreſſion on the mind *. I have been told of a young woman, in a very low

* "Cum in loca aliqua poſt tempus reverſi ſumus, non ipſa agnoſcimus "tantum, ſed etiam, quæ in his fecerimus, reminiſcimur, perſonæque ſubeunt, "nonunquam tacitæ quoque cogitationes in mentem revertuntur. Nata eſt "igitur, ut in pleriſque, ars ab experimento."

QUINCT. *Inſt. Orat.* lib. xi. cap. 2.

rank

rank of life, who contrived a method of committing to memory the ſermons which ſhe was accuſtomed to hear, by fixing her attention during the different heads of the diſcourſe, on different compartments of the roof of the church; in ſuch a manner, as that when ſhe afterwards ſaw the roof, or recollected the order in which its compartments were diſpoſed, ſhe recollected the method which the preacher had obſerved in treating his ſubject. This contrivance was perfectly analogous to the topical memory of the antients; an art which, whatever be the opinion we entertain of its uſe, is certainly entitled, in a high degree, to the praiſe of ingenuity.

SUPPOSE that I were to fix in my memory the different apartments in ſome very large building, and that I had accuſtomed myſelf to think of theſe apartments always in the ſame invariable order. Suppoſe farther, that, in preparing myſelf for a public diſcourſe, in which I had occaſion to treat of a great variety of particulars, I was anxious to fix in my memory the order I propoſed to obſerve in the communication of my ideas. It is evident, that, by a proper diviſion of my ſubject into heads, and by connecting each head with a particular apartment, (which I could eaſily do, by conceiving myſelf to be ſitting in the apartment while I was ſtudying the part of my diſcourſe I meant to connect with it,) the habitual order in which theſe apartments occurred to my thoughts, would preſent to me, in their proper arrangement, and without any effort on my part, the ideas of which I was to treat. It is alſo obvious, that a very little practice would enable me to avail myſelf of this

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contrivance, without any embarraſſment or diſtraction of my attention *.

As to the utility of this art, it appears to me to depend entirely on the particular object which we ſuppoſe the ſpeaker to have in view; whether, as was too often the caſe with the antient rhetoricians, to bewilder a judge, and to ſilence an adverſary; or fairly and candidly to lead an audience to the truth. On the former ſuppoſition, nothing can poſſibly give an orator a greater ſuperiority, than the poſſeſſion of a ſecret, which, while it enables him to expreſs himſelf with facility and the appearance of method, puts it in his power, at the ſame time, to diſpoſe his arguments and his facts, in whatever order he judges to be the moſt proper to miſlead the judgment, and to perplex the memory, of thoſe whom he addreſſes. And ſuch, it is manifeſt, is the effect, not only of the topical memory of the antients, but of all other contrivances which aid the recollection, upon any principle different from the natural and logical arrangement of our ideas.

* In ſo far as it was the object of this ſpecies of artificial memory to aſſiſt an orator in recollecting the plan and arrangement of his diſcourſe, the accounts of it which are given by the antient rhetoricians are abundantly ſatisfactory. It appears, however, that its uſe was more extenſive; and that it was ſo contrived, as to facilitate the recollection of a premeditated compoſition. In what manner this was done, it is not eaſy to conjecture from the imperfect explanations of the art, which have been tranſmitted to modern times. The reader may conſult CICERO *de Orat.* lib. ii. cap. 87, 88.—*Rhetor. ad Herennium*, lib. iii. cap. 16. et ſeq.—QUINCTIL. *Inſt. Orat.* lib. xi. cap. 2.

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To thoſe, on the other hand, who ſpeak with a view to convince or to inform others, it is of conſequence that the topics which they mean to illuſtrate, ſhould be arranged in an order equally favourable to their own recollection and to that of their hearers. For this purpoſe, nothing is effectual, but that method which is ſuggeſted by the order of their own inveſtigations; a method which leads the mind from one idea to another, either by means of obvious and ſtriking aſſociations, or by thoſe relations which connect the different ſteps of a clear and accurate proceſs of reaſoning. It is thus only that the attention of an audience can be completely and inceſſantly engaged, and that the ſubſtance of a long diſcourſe can be remembered without effort. And it is thus only that a ſpeaker, after a mature conſideration of his ſubject, can poſſeſs a juſt confidence in his own powers of recollection, in ſtating all the different premiſes which lead to the concluſion he wiſhes to eſtabliſh.

In modern times, ſuch contrivances have been very little, if at all, made uſe of by public ſpeakers; but various ingenious attempts have been made, to aſſiſt the memory, in acquiring and retaining thoſe branches of knowledge which it has been ſuppoſed neceſſary for a ſcholar to carry always about with him; and which, at the ſame time, from the number of particular details which they involve, are not calculated, of themſelves, to make a very laſting impreſſion on the mind. Of this ſort is the Memoria Technica of Mr. Grey, in which a great deal of hiſtorical, chronological, and geographical knowledge is compriſed in a ſet of verſes, which the ſtudent is ſuppoſed to make as familiar to himſelf as ſchool-boys do the rules of grammar.

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grammar. Theſe verſes are, in general, a mere aſſemblage of proper names, diſpoſed in a rude ſort of meaſure; ſome ſlight alterations being occaſionally made on the final ſyllables of the words, ſo as to be ſignificant (according to certain principles laid down in the beginning of the work) of important dates, or of other particulars which it appeared to the author uſeful to aſſociate with the names.

I HAVE heard very oppoſite opinions with reſpect to the utility of this ingenious ſyſtem. The prevailing opinion is, I believe, againſt it; although it has been mentioned in terms of high approbation by ſome writers of eminence. Dr. Prieſtley, whoſe judgment, in matters of this ſort, is certainly entitled to reſpect, has ſaid, that "it is a method ſo eaſily learned, and "which may be of ſo much uſe in recollecting dates, when "other methods are not at hand, that he thinks all perſons of a "liberal education inexcuſable, who will not take the ſmall de-"gree of pains that is neceſſary to make themſelves maſters of "it; or who think any thing mean, or unworthy of their no-"tice, which is ſo uſeful and convenient *."

IN judging of the utility of this, or of any other contrivance of the ſame kind, to a particular perſon, a great deal muſt depend on the ſpecies of memory which he has received from nature, or has acquired in the courſe of his early education. Some men, as I already remarked, (eſpecially among thoſe who have been habitually exerciſed in childhood in getting by heart grammar rules,) have an extraordinary facility in acquiring and retaining

* Lectures on Hiſtory, p. 157.

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the moſt barbarous and the moſt inſignificant verſes; which another perſon would find as difficult to remember, as the geographical and chronological details of which it is the object of this art to relieve the memory. Allowing, therefore, the general utilty of the art, no one method, perhaps, is entitled to an excluſive preference; as one contrivance may be beſt ſuited to the faculties of one perſon, and a very different one to thoſe of another.

ONE important objection applies to all of them, that they accuſtom the mind to aſſociate ideas by accidental and arbitrary connexions; and, therefore, how much ſoever they may contribute, in the courſe of converſation, to an oſtentatious diſplay of acquired knowledge, they are, perhaps, of little real ſervice to us, when we are ſeriouſly engaged in the purſuit of truth. I own, too, I am very doubtful with reſpect to the utility of a great part of that information which they are commonly employed to impreſs on the memory, and on which the generality of learned men are diſpoſed to value themſelves. It certainly is of no uſe, but in ſo far as it is ſubſervient to the gratification of their vanity; and the acquiſition of it conſumes a great deal of time and attention, which might have been employed in extending the boundaries of human knowledge. To thoſe, however, who are of a different opinion, ſuch contrivances as Mr. Grey's may be extremely uſeful: and to all men they may be of ſervice, in fixing in the memory thoſe inſulated and unintereſting particulars, which it is either neceſſary for them to be acquainted with, from their ſituation; or which cuſtom has rendered, in the common opinion, eſſential branches of a liberal education. I

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would, in particular, recommend this author's method of recollecting dates, by ſubſtituting letters for the numeral cyphers; and forming theſe letters into words, and the words into verſes. I have found it, at leaſt in my own caſe, the moſt effectual of all ſuch contrivances of which I have had experience.

SECTION VII.

Continuation of the ſame Subject.——Importance of making a proper Selection among the Objects of our Knowledge, in order to derive Advantage from the Acquiſitions of Memory.

THE cultivation of Memory, with all the helps that we can derive to it from art, will be of little uſe to us, unleſs we make a proper ſelection of the particulars to be remembered. Such a ſelection is neceſſary to enable us to profit by reading; and ſtill more ſo, to enable us to profit by obſervation, to which every man is indebted for by far the moſt valuable part of his knowledge.

WHEN we firſt enter on any new literary purſuit, we commonly find our efforts of attention painful and unſatisfactory. We have no diſcrimination in our curioſity; and by graſping at every thing, we fail in making thoſe moderate acquiſitions which are ſuited to our limited faculties. As our knowledge to know what particulars are likely to be of uſe

uſe to us; and acquire a habit of directing our examination to theſe, without diſtracting the attention with others. It is partly owing to a ſimilar circumſtance, that moſt readers complain of a defect of memory, when they firſt enter on the ſtudy of hiſtory. They cannot ſeparate important from trifling facts, and find themſelves unable to retain any thing, from their anxiety to ſecure the whole.

In order to give a proper direction to our attention in the courſe of our ſtudies, it is uſeful, before engaging in particular purſuits, to acquire as familiar an acquaintance as poſſible with the great outlines of the different branches of ſcience; with the moſt important concluſions which have hitherto been formed in them, and with the moſt important deſiderata which remain to be ſupplied. In the caſe too of thoſe parts of knowledge, which are not yet ripe for the formation of philoſophical ſyſtems, it may be of uſe to ſtudy the various hypothetical theories which have been propoſed for connecting together and arranging the phenomena. By ſuch general views alone we can prevent ourſelves from being loſt, amidſt a labyrinth of particulars, or can engage in a courſe of extenſive and various reading, with an enlightened and diſcriminating attention. While they withdraw our notice from barren and inſulated facts, they direct it to ſuch as tend to illuſtrate principles which have either been already eſtabliſhed, or which, fromhaving that degree of connection among themſelves, which is neceſſary to give plauſibility to a hypothetical theory, are likely to furniſh, in time, the materials of a juſter ſyſtem.

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SOME of the followers of Lord Bacon have, I think, been led, in their zeal for the method of induction, to cenſure hypothetical theories with too great a degree of ſeverity. Such theories have certainly been frequently of uſe, in putting philoſophers upon the road of diſcovery. Indeed, it has probably been in this way, that moſt diſcoveries have been made; for although a knowledge of facts muſt be prior to the formation of a juſt theory, yet a hypothetical theory is generally our beſt guide to the knowledge of uſeful facts. If a man, without forming to himſelf any conjecture concerning the unknown laws of nature, were to ſet himſelf merely to accumulate facts at random, he might, perhaps, ſtumble upon ſome important diſcovery; but by far the greater part of his labours would be wholely uſeleſs. Every philoſophical inquirer, before he begins a ſet of experiments, has ſome general principle in his view, which he ſuſpects to be a law of nature *: and although his conjectures may be often wrong, yet they ſerve to give his inquiries a particular direction, and to bring under his eye a number of facts which have a certain relation to each other. It has been often remarked, that the attempts to diſcover the philoſopher's ſtone, and the quadrature of the circle, have led to many uſeful diſcoveries in chemiſtry and mathematics. And they have plainly done ſo, merely by limiting the field of ob-

* "Recte ſiquidem Plato, 'Qui aliquid quærit, id ipſum, quod quærit, 'generali quadam notione comprehendit: aliter, qui fieri poteſt, ut illud, cum 'fuerit inventum, agnoſcat?" Idcirco quo amplior et certior fuerit anticipatio 'noſtra; eo magis directa et compendioſa erit inveſtigatio."

De Aug. Scient. lib. v. cap. 3.

ſervation

ſervation and inquiry, and checking that indiſcriminate and deſultory attention which is ſo natural to an indolent mind. A hypothetical theory, however erroneous, may anſwer a ſimilar purpoſe. "Prudens interrogatio," (ſays Lord Bacon,) "eſt "dimidium ſcientiæ. Vaga enim experientia et ſe tantum "ſequens mera palpatio eſt, et homines potius ſtupefacit quam "informat." What, indeed, are Newton's queries, but ſo many hypotheſes which are propoſed as ſubjects of examination to philoſophers? And did not even the great doctrine of gravitation take its firſt riſe from a fortunate conjecture?

WHILE, therefore, we maintain, with the followers of Bacon, that no theory is to be admitted as proved, any farther than it is ſupported by facts, we ſhould, at the ſame time, acknowledge our obligations to thoſe writers who hazard their conjectures to the world with modeſty and diffidence. And it may not be improper to add, that men of a ſyſtematizing turn are not now ſo uſeleſs as formerly; for we are already poſſeſſed of a great ſtock of facts; and there is ſcarcely any theory ſo bad as not to bring together a number of particulars which have a certain degree of relation or analogy to each other.

THE foregoing remarks are applicable to all our various ſtudies; whether they are conducted in the way of reading, or of obſervation. From neither of theſe two ſources of information can we hope to derive much advantage, unleſs we have ſome general principles to direct our attention to proper objects.

WITH reſpect to obſervation, ſome farther cautions may be uſeful; for in guarding againſt an indiſcriminate accumulation

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of particulars, it is poſſible to fall into the oppoſite extreme, and to acquire a habit of inattention to the phenomena which preſent themſelves to our ſenſes. The former is the error of men of little education; the latter is more common among men of retirement and ſtudy.

ONE of the chief effects of a liberal education, is to enable us to withdraw the attention from the preſent objects of our perceptions, and to dwell at pleaſure on the paſt, the abſent, or the future. But when we are led to carry theſe efforts to an exceſs, either from a warm and romantic imagination, or from an anxious and ſanguine temper, it is eaſy to ſee that the power of obſervation is likely to be weakened, and habits of inattention to be contracted. The ſame effect may be produced by too early an indulgence in philoſophical purſuits, before the mind has been prepared for the ſtudy of general truths, by exerciſing its faculties among particular objects, and particular occurrences. In this way, it contracts an averſion to the examination of details, from the pleaſure which it has experienced in the contemplation or in the diſcovery of general principles. Both of theſe turns of thought, however, preſuppoſe a certain degree of obſervation; for the materials of imagination are ſupplied by the ſenſes; and the general truths which occupy the philoſopher, would be wholly unintelligible to him, if he was a total ſtranger to all experience with reſpect to the courſe of nature and of human life. The obſervations, indeed, which are made by men of a warm imagination, are likely to be inaccurate and fallacious; and thoſe of the ſpeculative philoſopher are frequently carried no farther than is neceſſary to enable him to comprehend.

comprehend the terms which relate to the ſubjects of his reaſoning; but both the one and the other muſt have looked abroad occaſionally at nature, and at the world; if not to aſcertain facts by actual examination, at leaſt to ſtore their minds with ideas. CHAP. VI.

THE metaphyſician, whoſe attention is directed to the faculties and operations of the mind, is the only man who poſſeſſes within himſelf the materials of his ſpeculations and reaſonings. It is accordingly among this claſs of literary men, that habits of inattention to things external have been carried to the greateſt extreme.

IT is obſerved by Dr. Reid, that the power of reflexion, (by which he means the power of attending to the ſubjects of our conſciouſneſs,) is the laſt of our intellectual faculties which unfolds itſelf; and that in the greater part of mankind it never unfolds itſelf at all. It is a power, indeed, which being ſubſervient merely to the gratification of metaphyſical curioſity, it is not eſſentially neceſſary for us to poſſeſs, in any conſiderable degree. The power of obſervation, on the other hand, which is neceſſary for the preſervation even of our animal exiſtence, diſcovers itſelf in infants long before they attain the uſe of ſpeech; or rather, I ſhould have ſaid, as ſoon as they come into the world: and where nature is allowed free ſcope, it continues active and vigorous through life. It was plainly the intention of nature, that in infancy and youth it ſhould occupy the mind almoſt excluſively, and that we ſhould acquire all our neceſſary information before engaging in ſpeculations.

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lations which are leſs eſſential: and accordingly this is the hiſtory of the intellectual progreſs, in by far the greater number of individuals. In conſequence of this, the difficulty of metaphyſical reſearches is undoubtedly much increaſed; for the mind being conſtantly occupied in the earlier part of life about the properties and laws of matter, acquires habits of inattention to the ſubjects of conſciouſneſs, which are not to be ſurmounted, without a degree of patience and perſeverance of which few men are capable: but the inconvenience would evidently have been greatly increaſed, if the order of nature had, in this reſpect, been reverſed, and if the curioſity had been excited at as early a period, by the phenomena of the intellectual world, as by thoſe of the material. Of what would have happened on this ſuppoſition, we may form a judgment from thoſe men who, in conſequence of an exceſſive indulgence in metaphyſical purſuits, have weakened, to an unnatural degree, their capacity of attending to external objects and occurrences. Few metaphyſicians, perhaps, are to be found, who are not deficient in the power of obſervation: for, although a taſte for ſuch abſtract ſpeculations is far from being common, it is more apt, perhaps, than any other, when it has once been formed, to take an excluſive hold of the mind, and to ſhut up the other ſources of intellectual improvement. As the metaphyſician carries within himſelf the materials of his reaſoning, he is not under a neceſſity of looking abroad for ſubjects of ſpeculation or amuſement; and unleſs he be very careful to guard againſt the effects of his favourite purſuits, he is in more danger than literary men of any other denomination, to loſe all intereſt about the common and proper objects of human curioſity.

To

To prevent any danger from this quarter, I apprehend that the ſtudy of the mind ſhould form the laſt branch of the education of youth; an order which nature herſelf ſeems to point out, by what I have already remarked, with reſpect to the developement of our faculties. After the underſtanding is well ſtored with particular facts, and has been converſant with particular ſcientific purſuits, it will be enabled to ſpeculate concerning its own powers with additional advantage, and will run no hazard of indulging too far in ſuch inquiries. Nothing can be more abſurd, on this as well as on many other accounts, than the common practice which is followed in our univerſities, of beginning a courſe of philoſophical education with the ſtudy of logic. If this order were completely reverſed; and if the ſtudy of logic were delayed till after the mind of the ſtudent was well ſtored with particular facts in phyſics, in chemiſtry, in natural and civil hiſtory; his attention might be led with the moſt important advantage, and without any danger to his power of obſervation, to an examination of his own faculties; which, beſides opening to him a new and pleaſing field of ſpeculation, would enable him to form an eſtimate of his own powers, of the acquiſitions he has made, of the habits he has formed, and of the farther improvements of which his mind is ſuſceptible.

In general, wherever habits of inattention, and an incapacity of obſervation, are very remarkable, they will be found to have ariſen from ſome defect in early education. I already remarked, that, when nature is allowed free ſcope, the curioſity, during early youth, is alive to every external object, and to every external occurrence, while the powers of imagination and reflexion

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do not diſplay themſelves till a much later period; the former till about the age of puberty, and the latter till we approach to manhood. It ſometimes, however, happens that, in conſequence of a peculiar diſpoſition of mind, or of an infirm bodily conſtitution, a child is led to ſeek amuſement from books, and to loſe a reliſh for thoſe recreations which are ſuited to his age. In ſuch inſtances, the ordinary progreſs of the intellectual powers is prematurely quickened; but that beſt of all educations is loſt, which nature has prepared both for the philoſopher and the man of the world, amidſt the active ſports and the hazardous adventures of childhood. It is from theſe alone, that we can acquire, not only that force of character which is ſuited to the more arduous ſituations of life, but that complete and prompt command of attention to things external, without which the higheſt endowments of the underſtanding, however they may fit a man for the ſolitary ſpeculations of the cloſet, are but of little uſe in the practice of affairs, or for enabling him to profit by his perſonal experience.

WHERE, however, ſuch habits of inattention have unfortunately been contracted, we ought not to deſpair of them as perfectly incurable. The attention, indeed, as I formerly remarked, can ſeldom be forced in particular inſtances; but we may gradually learn to place the objects we wiſh to attend to, in lights more intereſting than thoſe in which we have been accuſtomed to view them. Much may be expected from a change of ſcene, and a change of purſuits; but, above all, much may be expected from foreign travel. The objects which we meet with excite our ſurpriſe by their novelty; and in this manner, we not only gradually

gradually acquire the power of obſerving and examining them with attention, but, from the effects of contraſt, the curioſity comes to be rouſed with reſpect to the correſponding objects in our own country, which, from our early familiarity with them, we had formerly been accuſtomed to overlook. In this reſpect the effects of foreign travel, in directing the attention to familiar objects and occurrences, is ſomewhat analogous to that which the ſtudy of a dead or of a foreign language produces, in leading the curioſity to examine the grammatical ſtructure of our own.

CONSIDERABLE advantage may alſo be derived, in overcoming the habits of inattention, which we may have contracted to particular ſubjects, from ſtudying the ſyſtems, true or falſe, which philoſophers have propoſed for explaining or for arranging the facts connected with them. By means of theſe ſyſtems, not only is the curioſity circumſcribed and directed, inſtead of being allowed to wander at random, but, in conſequence of our being enabled to connect facts with general principles, it becomes intereſted in the examination of thoſe particulars which would otherwiſe have eſcaped our notice.

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SECTION VIII.

Of the Connection between Memory and philoſophical Genius.

IT is commonly ſuppoſed, that genius is ſeldom united with a very tenacious memory. So far, however, as my own obſervation has reached, I can ſcarcely recollect one perſon who poſſeſſes the former of theſe qualities, without a more than ordinary ſhare of the latter.

ON a ſuperficial view of the ſubject, indeed, the common opinion has ſome appearance of truth; for, we are naturally led, in conſequence of the topics about which converſation is uſually employed, to eſtimate the extent of memory, by the impreſſion which trivial occurrences make upon it; and theſe in general eſcape the recollection of a man of ability, not becauſe he is unable to retain them, but becauſe he does not attend to them. It is probable, likewiſe, that accidental aſſociations, founded on contiguity in time and place, may make but a ſlight impreſſion on his mind. But it does not therefore follow, that his ſtock of facts is ſmall. They are connected together in his memory by principles of aſſociation, different from thoſe which prevail in ordinary minds; and they are on that very account the more uſeful: for as the aſſociations are founded upon real connexions among the ideas, (although they may be leſs conducive to the fluency, and perhaps to the wit of converſation,)

verſation,) they are of incomparably greater uſe in ſuggeſting facts which are to ſerve as a foundation for reaſoning or for invention. CHAP VI.

It frequently happens too, that a man of genius, in conſequence of a peculiarly ſtrong attachment to a particular ſubject, may firſt feel a want of inclination, and may afterwards acquire a want of capacity of attending to common occurrences. But it is probable that the whole ſtock of ideas in his mind, is not inferior to that of other men; and that however unprofitably he may have directed his curioſity, the ignorance which he diſcovers on ordinary ſubjects does not ariſe from a want of memory, but from a peculiarity in the ſelection which he has made of the objects of his ſtudy.

Montaigne * frequently complains, in his writings, of his want of memory; and he indeed gives many very extraordinary inſtances of his ignorance on ſome of the moſt ordinary topics of information. But it is obvious to any perſon who reads his works with attention, that this ignorance did not proceed from an original defect of memory, but from the ſingular and whimſical direction which his curioſity had taken at an early period of life. "I can do nothing," ſays he, "without my memorandum book; and ſo great is my difficulty "in remembering proper names, that I am forced to call my "domeſtic ſervants by their offices. I am ignorant of the

* Il n'eſt homme à qui il ſieſe ſi mal de ſe meſler de parler de memoire. Car je n'en recognoy quaſi trace en moy; et ne penſe qu'il y en ait au monde une autre ſi marveilleuſe en defaillance. *Eſſais de* Montaigne, liv. i. ch. 9.

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" greater part of our coins in uſe; of the difference of one " grain from another, both in the earth and in the granary; " what uſe leaven is of in making bread, and why wine muſt " ſtand ſome time in the vat before it ferments." Yet the ſame author appears evidently, from his writings, to have had his memory ſtored with an infinite variety of apothegms, and of hiſtorical paſſages, which had ſtruck his imagination; and to have been familiarly acquainted, not only with the names, but with the abſurd and exploded opinions of the antient philoſophers; with the ideas of Plato, the atoms of Epicurus, the plenum and vacuum of Leucippus and Democritus, the water of Thales, the numbers of Pythagoras, the infinite of Parmenides, and the unity of Muſæus. In complaining too of his want of preſence of mind, he indirectly acknowledges a degree of memory which, if it had been judiciouſly employed, would have been more than ſufficient for the acquiſition of all thoſe common branches of knowledge in which he appears to have been deficient. " When I have an oration to ſpeak," ſays he, " of " any conſiderable length, I am reduced to the miſerable ne- " ceſſity of getting it, word for word, by heart."

THE ſtrange and apparently inconſiſtent combination of knowledge and ignorance which the writings of Montaigne exhibit, led Malebranche (who ſeems to have formed too low an opinion both of his genius and character) to tax him with affectation; and even to call in queſtion the credibility of ſome of his aſſertions. But no one who is well acquainted with this moſt amuſing author, can reaſonably ſuſpect his veracity; and, in the preſent inſtance, I can give him complete credit, not only from

my general opinion of his ſincerity, but from having obſerved, in the courſe of my own experience, more than one example of the ſame ſort of combination; not indeed carried to ſuch a length as Montaigne deſcribes, but bearing a ſtriking reſemblance to it.

THE obſervations which have already been made, account, in part, for the origin of the common opinion, that genius and memory are ſeldom united in great degrees in the ſame perſon; and at the ſame time ſhew, that ſome of the facts on which that opinion is founded, do not juſtify ſuch a concluſion. Beſides theſe, however, there are other circumſtances, which, at firſt view, ſeem rather to indicate an inconſiſtency between extenſive memory and original genius.

THE ſpecies of memory which excites the greateſt degree of admiration in the ordinary intercourſe of ſociety, is a memory for detached and inſulated facts; and it is certain that thoſe men who are poſſeſſed of it, are very ſeldom diſtinguiſhed by the higher gifts of the mind. Such a ſpecies of memory is unfavourable to philoſophical arrangement; becauſe it in part ſupplies the place of arrangement. One great uſe of philoſophy, as I already ſhewed, is to give us an extenſive command of particular truths, by furniſhing us with general principles, under which a number of ſuch truths is comprehended. A perſon in whoſe mind caſual aſſociations of time and place make a laſting impreſſion, has not the ſame inducements to philoſophize, with others who connect facts together, chiefly by the relations of cauſe and effect, or of premiſes and concluſion. I have heard it

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it obſerved, that thoſe men who have riſen to the greateſt eminence in the profeſſion of law, have been in general ſuch as had, at firſt, an averſion to the ſtudy. The reaſon probably is, that to a mind fond of general principles, every ſtudy muſt be at firſt diſguſting, which preſents to it a chaos of facts apparently unconnected with each other. But this love of arrangement, if united with perſevering induſtry, will at laſt conquer every difficulty; will introduce order into what ſeemed, on a ſuperficial view, a maſs of confuſion, and reduce the dry and unintereſting detail of poſitive ſtatutes into a ſyſtem comparatively luminous and beautiful.

THE *obſervation, I believe, may be made more general, and* may be applied to every ſcience in which there is a great multiplicity of facts to be remembered. A man deſtitute of genius may, with little effort, treaſure up in his memory a number of particulars in chemiſtry or natural hiſtory, which he refers to no principle, and from which he deduces no concluſion; and from his facility in acquiring this ſtock of information, may flatter himſelf with the belief that he poſſeſſes a natural taſte for theſe branches of knowledge. But they who are really deſtined to extend the boundaries of ſcience, when they firſt enter on new purſuits, feel their attention diſtracted, and their memory overloaded with facts among which they can trace no relation, and are ſometimes apt to deſpair entirely of their future progreſs. In due time, however, their ſuperiority appears, and ariſes in part from that very diſſatisfaction which they at firſt experienced, and which does not ceaſe to ſtimulate their inquiries, till they are enabled to trace, amidſt a chaos of apparently unconnected

materials, that ſimplicity and beauty which always characteriſe the operations of nature. CHAP. VI.

THERE are, beſides, other circumſtances which retard the progreſs of a man of genius, when he enters on a new purſuit, and which ſometimes render him apparently inferior to thoſe who are poſſeſſed of ordinary capacity. A want of curioſity *, and of invention, facilitates greatly the acquiſition of knowledge. It renders the mind paſſive, in receiving the ideas of others, and ſaves all the time which might be employed in examining their foundation, or in tracing their conſequences. They who are poſſeſſed of much acuteneſs and originality, enter with difficulty into the views of others; not from any defect in their power of apprehenſion, but becauſe they cannot adopt opinions which they have not examined; and becauſe their attention is often ſeduced by their own ſpeculations.

IT is not merely in the acquiſition of knowledge that a man of genius is likely to find himſelf ſurpaſſed by others: he has commonly his information much leſs at command, than thoſe who are poſſeſſed of an inferior degree of originality; and, what is ſomewhat remarkable, he has it leaſt of all at command on thoſe ſubjects on which he has found his invention moſt fertile. Sir Iſaac Newton, as we are told by Dr. Pemberton, was often at a loſs, when the converſation turned on his own diſcoveries †. It is probable that they made but a ſlight impreſſion

* I mean a want of curioſity about truth. "There are many men," ſays Dr. Butler, "who have a ſtrong curioſity to know what is ſaid, who have "little or no curioſity to know what is true."

† See Note [T].

on

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on his mind, and that a conſciouſneſs of his inventive powers prevented him from taking much pains to treaſure them up in his memory. Men of little ingenuity ſeldom forget the ideas they acquire; becauſe they know that when an occaſion occurs for applying their knowledge to uſe, they muſt truſt to memory, and not to invention. Explain an arithmetical rule to a perſon of common underſtanding, who is unacquainted with the principles of the ſcience; he will ſoon get the rule by heart, and become dexterous in the application of it. Another, of more ingenuity, will examine the principle of the rule before he applies it to uſe, and will ſcarcely take the trouble to commit to memory a proceſs, which he knows he can, at any time, with a little reflexion, recover. The conſequence will be, that, in the practice of calculation, he will appear more ſlow and heſitating, than if he followed the received rules of arithmetic without reflexion or reaſoning.

SOMETHING of the ſame kind happens every day in converſation. By far the greater part of the opinions we announce in it, are not the immediate reſult of reaſoning on the ſpot, but have been previouſly formed in the cloſet, or perhaps have been adopted implicitly on the authority of others. The promptitude, therefore, with which a man decides in ordinary diſcourſe, is not a certain teſt of the quickneſs of his apprehenſion *; as it may perhaps ariſe from thoſe uncommon efforts to furniſh the memory with acquired knowledge, by which men of ſlow

* Memoria facit prompti ingenii famam, ut illa quæ dicimus, non domo attuliſſe, ſed ibi protinus ſumpſiſſe videamur.

QUINCTIL. *Inſt. Orat.* lib. xi. cap. 2.

parts

parts endeavour to compenſate for their want of invention; while, on the other hand, it is poſſible that a conſciouſneſs of originality may give riſe to a manner apparently embarraſſed, by leading the perſon who feels it, to truſt too much to extempore exertions *.

In general, I believe, it may be laid down as a rule, that thoſe who carry about with them a great degree of acquired information, which they have always at command, or who have rendered their own diſcoveries ſo familiar to them, as always to be in a condition to explain them without recollection, are very ſeldom poſſeſſed of much invention, or even of much quickneſs of apprehenſion. A man of original genius, who is fond of exerciſing his reaſoning powers anew on every point as it occurs to him, and who cannot ſubmit to rehearſe the ideas of others, or to repeat by rote the concluſions which he has deduced from previous reflexion, often appears, to ſuperficial obſervers, to fall below the level of ordinary underſtandings; while another, deſtitute both of quickneſs and invention, is admired for that promptitude in his deciſions, which ariſes from the inferiority of his intellectual abilities.

* In the foregoing obſervations it is not meant to be implied, that originality of genius is incompatible with a ready recollection of acquired knowledge; but only that it has a tendency unfavourable to it, and that more time and practice will commonly be neceſſary to familiarize the mind of a man of invention to the ideas of others, or even to the concluſions of his own underſtanding, than are requiſite in ordinary caſes. Habits of literary converſation, and, ſtill more, habits of extempore diſcuſſion in a popular aſſembly, are peculiarly uſeful in giving us a ready and practical command of our knowledge. There is much good ſenſe in the following aphoriſm of Bacon: "Reading makes a full man, writing a "correct man, and ſpeaking a ready man." See a commentary on this aphoriſm in one of the Numbers of the Adventurer.

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IT muſt indeed be acknowledged in favour of the laſt deſcrip-tion of men, that in ordinary converſation they form the moſt agreeable, and perhaps the moſt inſtructive, companions. How inexhauſtible ſoever the invention of an individual may be, the variety of his own peculiar ideas can bear no proportion to the whole maſs of uſeful and curious information of which the world is already poſſeſſed. The converſation, accordingly, of men of genius, is ſometimes extremely limited; and is intereſt-ing to the few alone, who know the value, and who can diſ-tinguiſh the marks of originality. In conſequence too of that partiality which every man feels for his own ſpeculations, they are more in danger of being dogmatical and diſputatious, than thoſe who have no ſyſtem which they are intereſted to defend.

THE ſame obſervations may be applied to authors. A book which contains the diſcoveries of one individual only, may be admired by a few, who are intimately acquainted with the hiſtory of the ſcience to which it relates, but it has little chance for popularity with the multitude. An author who poſſeſſes induſtry ſufficient to collect the ideas of others, and judgment ſufficient to arrange them ſkilfully, is the moſt likely perſon to acquire a high degree of literary fame: and although, in the opinion of enlightened judges, invention forms the chief cha-racteriſtic of genius, yet it commonly happens that the objects of public admiration are men who are much leſs diſtinguiſhed by this quality, than by extenſive learning and cultivated taſte. Perhaps too, for the multitude, the latter claſs of authors is the moſt uſeful; as their writings contain the more ſolid diſcoveries which others have brought to light, ſeparated from thoſe errors with which truth is often blended in the firſt formation of a ſyſtem.

CHAPTER SEVENTH.

Of Imagination.

SECTION I.

Analyſis of Imagination.

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I HAVE already endeavoured to draw the line between Conception and Imagination. The province of the former is to preſent us with an exact tranſcript of what we have formerly felt and perceived: that of the latter, to make a ſelection of qualities and of circumſtances, from a variety of different objects, and by combining and diſpoſing theſe to form a new creation of its own.

THE operations of Imagination, however, are by no means confined to the materials which Conception furniſhes; but may be equally employed about all the different ſubjects of our knowledge. As it is the ſame power of Reaſoning which enables us to carry on our inveſtigations with reſpect to individual objects, and with reſpect to claſſes or genera; ſo it was by the ſame proceſſes of analyſis and combination, that the genius of Mil-

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ton produced the Garden of Eden; that of Harrington, the Commonwealth of Oceana; and that of Shakeſpeare, the Characters of Hamlet and Falſtaff. The difference between theſe ſeveral efforts of genius, conſiſts only in the manner in which the original materials were acquired: ſo far as the power of Imagination is concerned, the proceſſes are perfectly analogous.

To all theſe various modes in which Imagination may diſplay itſelf, the greater part of the remarks contained in this chapter will be found to apply, under proper limitations; but in order to render the ſubject more obvious to the reader's examination, I ſhall, in the farther proſecution of it, endeavour to convey my ideas, rather by means of particular examples, than in the form of general principles; leaving it to his own judgment to determine, with what modifications the concluſions to which we are led, may be extended to other combinations of circumſtances.

AMONG the innumerable illuſtrations which this extenſive ſubject preſents to our choice, the combinations which the mind forms out of materials ſupplied by the power of Conception, recommend themſelves ſtrongly, both by their ſimplicity, and by the intereſting nature of the diſcuſſions to which they lead. Of theſe materials, a very large proportion have been originally collected by the ſenſe of ſight; a ſenſe which introduces a much greater variety of pleaſures to the mind, than any of the others; and the perceptions of which, the mind has, upon that account, a peculiar enjoyment in recalling. It is this ſenſe, accordingly, which, in the firſt inſtance, ſupplies the painter and the

ſtatuary, with *all* the ſubjects upon which their genius is exerciſed; and which furniſhes to the deſcriptive Poet, by far *the greater part* of the materials of his art. The very etymology of the word Imagination has a reference to viſible objects; and, in its moſt ordinary acceptation, it is either uſed as ſynonymous with the conception of ſuch objects, or is applied to caſes in which this is the principal faculty employed. I mention theſe circumſtances, in order to ſatisfy the reader, why ſo many of the illuſtrations which occur in the following inquiries are borrowed from the arts of Painting and of Poetry.

It was already obſerved, that Imagination is a complex power*. *It includes Conception or ſimple Apprehenſion*, which enables us to form a notion of thoſe former objects of perception or of knowledge, out of which we are to make a ſelection; Abſtraction, which ſeparates the ſelected materials from the qualities and circumſtances which are connected with them in nature; and Judgment or Taſte, which ſelects the materials, and directs their combination. To theſe powers, we may add, that particular habit of aſſociation to which I formerly gave the name of Fancy; as it is this which preſents to our choice, all the different materials which are ſubſervient to the efforts of Imagination, and which may therefore be conſidered as forming the ground-work of poetical genius.

To illuſtrate theſe obſervations, let us conſider the ſteps by which Milton muſt have proceeded in creating his imaginary Garden of Eden. When he firſt propoſed to himſelf that ſub-

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ject of deſcription, it is reaſonable to ſuppoſe, that a variety of the moſt ſtriking ſcenes which he had ſeen crowded into his mind. The Aſſociation of Ideas ſuggeſted them, and the power of Conception placed each of them before him with all its beauties and imperfections. In every natural ſcene, if we deſtine it for any particular purpoſe, there are defects and redundancies, which art may ſometimes, but cannot always, correct. But the power of Imagination is unlimited. She can create and annihilate; and diſpoſe, at pleaſure, her woods, her rocks, and her rivers. Milton, accordingly, would not copy his Eden from any one ſcene, but would ſelect from each the features which were moſt eminently beautiful. The power of Abſtraction enabled him to make the ſeparation, and Taſte directed him in the ſelection. Thus he was furniſhed with his materials; by a ſkilful combination of which, he has created a landſcape, more perfect probably in all its parts, than was ever realiſed in nature; and certainly very different from any thing which this country exhibited, at the period when he wrote. It is a curious remark of Mr. Walpole, that Milton's Eden is free from the defects of the old Engliſh garden, and is imagined on the ſame principles which it was reſerved for the preſent age to carry into execution.

FROM what has been ſaid, it is ſufficiently evident, that Imagination is not a ſimple power of the mind, like Attention, Conception, or Abſtraction; but that it is formed by a combination of various faculties. It is farther evident, that it muſt appear under very different forms, in the caſe of different individuals; as ſome of its component parts are liable to be greatly influenced

influenced by habit, and other accidental circumſtances. The variety, for example, of the materials out of which the combinations of the Poet or the Painter are formed, will depend much on the tendency of external ſituation, to ſtore the mind with a multiplicity of Conceptions; and the beauty of theſe combinations will depend entirely on the ſucceſs with which the power of Taſte has been cultivated. What we call, therefore, the power of Imagination is not the gift of nature, but the reſult of acquired habits, aided by favourable circumſtances. It is not an original endowment of the mind, but an accompliſhment formed by experience and ſituation; and which, in its different gradations, fills up all the interval between the firſt efforts of *untutored genius, and the ſublime creations of Raphael or of* Milton.

AN uncommon degree of Imagination conſtitutes *poetical genius;* a talent which, although chiefly diſplayed in poetical compoſition, is alſo the foundation (though not preciſely in the ſame manner) of various other arts. A few remarks on the relation which Imagination bears to ſome of the moſt intereſting of theſe, will throw additional light on its nature and office.

SECTION II.

Of Imagination conſidered in its Relation to ſome of the Fine Arts.

AMONG the Arts connected with Imagination, ſome not only take their riſe from this power, but produce objects which are addreſſed to it. Others take their riſe from Imagination, but produce objects which are addreſſed to the power of Perception.

To the latter of theſe two claſſes of Arts, belongs that of Gardening; or, as it has been lately called, the Art of creating Landſcape. In this Art, the deſigner is limited in his creation by nature; and his only province is to correct, to improve, and to adorn. As he cannot repeat his experiments, in order to obſerve the effect, he muſt call up, in his imagination, the ſcene which he means to produce; and apply to this imaginary ſcene his taſte and his judgment; or, in other words, to a lively conception of viſible objects, he muſt add a power (which long experience and attentive obſervation alone can give him) of judging beforehand, of the effect which they would produce, if they were actually exhibited to his ſenſes. This power forms, what Lord Chatham beautifully and expreſſively called, *the prophetic*

phetic Eye of Taſte; that eye which (if I may borrow the language of Mr. Gray,) "ſees all the beauties that a place is "ſuſceptible of, long before they are born; and when it plants "a ſeedling, already ſits under the ſhade of it, and enjoys the "effect it will have, from every point of view that lies in the "proſpect *." But although the artiſt who creates a landſcape, copies it from his imagination, the ſcene which he exhibits is addreſſed to the ſenſes, and may produce its full effect on the minds of others, without any effort on their part, either of imagination or of conception. CHAP. VII.

To prevent being miſunderſtood, it is neceſſary for me to remark, that, in the laſt obſervation, I ſpeak merely of the natural effects produced by a landſcape, and abſtract entirely from the pleaſure which may reſult from an accidental aſſociation of ideas with a particular ſcene. The effect reſulting from ſuch aſſociations will depend, in a great meaſure, on the livelineſs with which the aſſociated objects are conceived, and on the affecting nature of the pictures which a creative imagination, when once rouſed, will preſent to the mind; but the pleaſures thus ariſing from the accidental exerciſe that a landſcape may give to the imagination, muſt not be confounded with thoſe which it is naturally fitted to produce.

In Painting, (excepting in thoſe inſtances in which it exhibits a faithful copy of a particular object,) the original idea muſt be

* Gray's Works, by Mason, p. 277.

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formed in the imagination: and, in moſt caſes, the exerciſe of imagination muſt concur with perception, before the picture can produce that effect on the mind of the ſpectator which the artiſt has in view. Painting, therefore, does not belong entirely to either of the two claſſes of Arts formerly mentioned, but has ſomething in common with them both.

In ſo far as the Painter aims at copying exactly what he ſees, he may be guided mechanically by general rules; and he requires no aid from that creative genius which is characteriſtical of the Poet. The pleaſure, however, which reſults from painting, conſidered merely as an imitative art, is extremely trifling; and is ſpecifically different from that which it aims to produce, by awakening the imagination. Even in portrait-painting, the ſervile copyiſt of nature is regarded in no higher light than that of a tradeſman. "Deception," (as Reynolds has excellently obſerved,) "inſtead of advancing the "art, is, in reality, carrying it back to its infant ſtate. The "firſt eſſays of painting were certainly nothing but mere "imitations of individual objects; and when this amounted to "a deception, the artiſt had accompliſhed his purpoſe *."

When the hiſtory or the landſcape Painter indulges his genius, in forming new combinations of his own, he vies with the Poet in the nobleſt exertion of the poetical art: and he avails himſelf of his profeſſional ſkill, as the Poet avails himſelf

* Notes on Mason's Tranſlation of Fresnoy's Poem on the Art of Painting, p. 114.

of language, only to convey the ideas in his mind. To deceive the eye by accurate repreſentations of particular forms, is no longer his aim; but, by the touches of an expreſſive pencil, to ſpeak to the imaginations of others. Imitation, therefore, is not the end which he propoſes to himſelf, but the means which he employs in order to accompliſh it: nay, if the imitation be carried ſo far as to preclude all exerciſe of the ſpectator's imagination, it will diſappoint, in a great meaſure, the purpoſe of the artiſt.

In Poetry, and in every other ſpecies of compoſition, in which one perſon attempts, by means of language, to preſent to the mind of another, the objects of his own imagination; this power is neceſſary, though not in the ſame degree, to the author and to the reader. When we peruſe a deſcription, we naturally feel a diſpoſition to form, in our own minds, a diſtinct picture of what is deſcribed; and in proportion to the attention and intereſt which the ſubject excites, the picture becomes ſteady and determinate. It is ſcarcely poſſible for us to hear much of a particular town, without forming ſome notion of its figure and ſize and ſituation; and in reading hiſtory and poetry, I believe it ſeldom happens, that we do not annex imaginary appearances to the names of our favourite characters. It is, at the ſame time, almoſt certain, that the imaginations of no two men coincide upon ſuch occaſions; and, therefore, though both may be pleaſed, the agreeable impreſſions which they feel, may be widely different from each other, according as the pictures by which they are produced

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are more or leſs happily imagined. Hence it is, that when a perſon accuſtomed to dramatic reading ſees, for the firſt time, one of his favourite characters repreſented on the ſtage, he is generally diſſatisfied with the exhibition, however eminent the actor may be; and if he ſhould happen, before this repreſentation, to have been very familiarly acquainted with the character, the caſe may continue to be the ſame through life. For my own part, I have never received from any Falſtaff on the ſtage, half the pleaſure which Shakeſpeare gives me in the cloſet; and I am perſuaded, that I ſhould feel ſome degree of uneaſineſs, if I were preſent at any attempt to perſonate the figure or the voice of Don Quixote or Sancho Panca. It is not always that the actor, on ſuch occaſions, falls ſhort of our expectation. He diſappoints us, by exhibiting ſomething different from what our imagination had anticipated, and which conſequently appears to us, at the moment, to be an unfaithful repreſentation of the Poet's idea: and until a frequent repetition of the performance has completely obliterated our former impreſſions, it is impoſſible for us to form an adequate eſtimate of its merit.

SIMILAR obſervations may be applied to other ſubjects. The ſight of any natural ſcene, or of any work of art, provided we have not previouſly heard of it, commonly produces a greater effect, at firſt, than ever afterwards: but if, in conſequence of a deſcription, we have been led to form a previous notion of it, I apprehend, the effect will be found leſs pleaſing, the firſt time it is ſeen, than the ſecond. Although the deſcription ſhould fall ſhort

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ſhort greatly of the reality, yet the diſappointment which we feel, on meeting with ſomething different from what we expected, diminiſhes our ſatisfaction. The ſecond time we ſee the ſcene, the effect of novelty is indeed leſs than before; but it is ſtill conſiderable, and the imagination now anticipates nothing which is not realiſed in the perception.

THE remarks which have been made, afford a ſatisfactory reaſon why ſo few are to be found who have a genuine reliſh for the beauties of poetry. The deſigns of Kent and of Brown evince in their authors a degree of imagination entirely analogous to that of the deſcriptive poet; but when they are once executed, their beauties, (excepting thoſe which reſult from aſſociation,) meet the eye of every ſpectator. In poetry the effect is inconſiderable, unleſs upon a mind which poſſeſſes ſome degree of the author's genius; a mind amply furniſhed, by its previous habits, with the means of interpreting the language which he employs; and able, by its own imagination, to cooperate with the efforts of his art.

IT has been often remarked, that the general words which expreſs complex ideas, ſeldom convey preciſely the ſame meaning to different individuals, and that hence ariſes much of the ambiguity of language. The ſame obſervation holds, in no inconſiderable degree, with reſpect to the names of ſenſible objects. When the words River, Mountain, Grove, occur in a deſcription, a perſon of lively conceptions naturally thinks of ſome particular river, mountain, and grove, that have made an

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impreſſion on his mind; and whatever the notions are, which he is led by his imagination to form of theſe objects, they muſt neceſſarily approach to the ſtandard of what he has ſeen. Hence it is evident that, according to the different habits and education of individuals; according to the livelineſs of their conceptions, and according to the creative power of their imaginations, the ſame words will produce very different effects on different minds. When a perſon who has received his education in the country, reads a deſcription of a rural retirement; the houſe, the river, the woods, to which he was firſt accuſtomed, preſent themſelves ſpontaneouſly to his conception, accompanied, perhaps, with the recollection of his early friendſhips, and all thoſe pleaſing ideas which are commonly aſſociated with the ſcenes of childhood and of youth. How different is the effect of the deſcription upon his mind, from what it would produce on one who has paſſed his tender years at a diſtance from the beauties of nature, and whoſe infant ſports are connected in his memory with the gloomy alleys of a commercial city!

BUT it is not only in interpreting the particular words of a deſcription, that the powers of Imagination and Conception are employed. They are farther neceſſary for filling up the different parts of that picture, of which the moſt minute deſcriber can only trace the outline. In the beſt deſcription, there is much left to the reader to ſupply; and the effect which it produces on his mind will depend, in a conſiderable degree, on the invention and taſte with which the picture is finiſhed. It is therefore poſſible, on the one hand, that the happieſt efforts of poetical

poetical genius may be peruſed with perfect indifference by a man of ſound judgment, and not deſtitute of natural ſenſibility; and on the other hand, that a cold and common-place deſcription may be the means of awakening, in a rich and glowing imagination, a degree of enthuſiaſm unknown to the author.

ALL the different arts which I have hitherto mentioned as taking riſe from the imagination, have this in common, that their primary object is to pleaſe. This obſervation applies to the art of poetry, no leſs than to the others; nay, it is this circumſtance which characteriſes poetry, and diſtinguiſhes it from all the other claſſes of literary compoſition. The object of the Philoſopher is to inform and enlighten mankind; that of the Orator, to acquire an aſcendant over the will of others, by bending to his own purpoſes their judgments, their imaginations, and their paſſions: but the primary and the diſtinguiſhing aim of the Poet is, *to pleaſe*; and the principal reſource which he poſſeſſes for this purpoſe, is by addreſſing the imagination. Sometimes, indeed, he may ſeem to encroach on the province of the Philoſopher or of the Orator; but, in theſe inſtances, he only borrows from them the means by which he accompliſhes his end. If he attempts to enlighten and to inform, he addreſſes the underſtanding only as a vehicle of pleaſure: if he makes an appeal to the paſſions, it is only to paſſions which it is pleaſing to indulge. The Philoſopher, in like manner, in order to accompliſh his end of inſtruction, may find it expedient, occaſionally, to amuſe the imagination, or to make an appeal to the paſſions: the Orator may, at one time, ſtate to his hearers a proceſs of reaſoning; at another, a calm narrative of facts; and,

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and, at a third, he may give the reins to poetical fancy. But ſtill the ultimate end of the Philoſopher is to inſtruct, and of the Orator to perſuade; and whatever means they make uſe of, which are not ſubſervient to this purpoſe, are out of place, and obſtruct the effect of their labours.

THE meaſured compoſition in which the Poet expreſſes himſelf, is only one of the means which he employs to pleaſe. As the delight which he conveys to the imagination, is heightened by the other agreeable impreſſions which he can unite in the mind at the ſame time; he ſtudies to beſtow, upon the medium of communication which he employs, all the various beauties of which it is ſuſceptible. Among theſe beauties, the harmony of numbers is not the leaſt powerful; for its effect is conſtant, and does not interfere with any of the other pleaſures which language produces. A ſucceſſion of agreeable perceptions is kept up by the organical effect of words upon the ear; while they inform the underſtanding by their perſpicuity and preciſion, or pleaſe the imagination by the pictures they ſuggeſt, or touch the heart by the aſſociations they awaken. Of all theſe charms of language, the Poet may avail himſelf; and they are all ſo many inſtruments of his art. To the Philoſopher and the Orator they may *occaſionally* be of uſe; and to both they muſt be *conſtantly* ſo far an object of attention, that nothing may occur in their compoſitions, which may diſtract the attention, by offending either the ear or the taſte; but the Poet muſt not reſt ſatisfied with this negative praiſe. Pleaſure is the end of his art; and the more numerous the ſources of it which he can open, the greater will be the effect produced by the efforts of his genius.

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THE province of the poet is limited only by the variety of human enjoyments. Whatever is in the reality ſubſervient to our happineſs, is a ſource of pleaſure, when preſented to our conceptions, and may ſometimes derive from the heightenings of imagination, a momentary charm, which we exchange with reluctance for the ſubſtantial gratifications of the ſenſes. The province of the painter, and of the ſtatuary, is confined to the imitation of viſible objects, and to the exhibition of ſuch intellectual and moral qualities, as the human body is fitted to expreſs. In ornamental architecture, and in ornamental gardening, the ſole aim of the artiſt is to give pleaſure to the eye, by the beauty or ſublimity of material forms. But to the poet all the various charms of external nature; all that is amiable or intereſting, or reſpectable in human character; all that excites and engages our benevolent affections; all thoſe truths which make the heart feel itſelf better and more happy; all theſe ſupply materials, out of which he forms and peoples a world of his own, where no inconveniences damp our enjoyments, and where no ſhades darken our proſpects.

THAT the pleaſures of poetry ariſe chiefly from the agreeable feelings which it conveys to the mind, by awakening the imagination, is a propoſition which may ſeem too obvious to ſtand in need of proof. As the ingenious Inquirer, however, into "the Origin of our Ideas of the Sublime and Beautiful," has diſputed the common notions upon this ſubject, I ſhall conſider ſome of the principal arguments by which he has ſupported his opinion.

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THE leading principle of the theory which I am now to examine is, "That the common effect of poetry is not to "raiſe ideas of things;" or, as I would rather chuſe to expreſs it, its common effect is not to give exerciſe to the powers of conception and imagination. That I may not be accuſed of miſrepreſentation, I ſhall ſtate the doctrine at length in the words of the author. "If words have all their poſſible ex- "tent of power, three effects ariſe in the mind of the hearer. "The firſt is the *ſound;* the ſecond, the *picture*, or repreſentation "of the thing ſignified by the ſound; the third is, the *affection* "of the ſoul produced by one or by both of the foregoing. "Compounded abſtract words, (honour, juſtice, liberty, and the "like,) produce the firſt and the laſt of theſe effects, but not the "ſecond. Simple abſtracts are uſed to ſignify ſome one ſimple "idea, without much adverting to others which may chance "to attend it; as blue, green, hot, cold, and the like: theſe "are capable of effecting all three of the purpoſes of words; "as the aggregate words, man, caſtle, horſe, &c. are in a yet "higher degree. But I am of opinion, that the moſt general "effect even of theſe words, does not ariſe from their forming "pictures of the ſeveral things they would repreſent in the "imagination; becauſe, on a very diligent examination of my "own mind, and getting others to conſider theirs, I do not "find that once in twenty times any ſuch picture is formed; "and when it is, there is moſt commonly a particular effort "of the imagination for that purpoſe. But the aggregate words "operate, as I ſaid of the compound abſtracts, not by preſenting "any image to the mind, but by having from uſe the ſame effect

"on

" on being mentioned, that their original has when it is ſeen. " Suppoſe we were to read a paſſage to this effect: " The river " Danube riſes in a moiſt and mountainous ſoil in the heart of " Germany, where, winding to and fro, it waters ſeveral prin- " cipalities, until turning into Auſtria, and leaving the walls of " Vienna, it paſſes into Hungary; there, with a vaſt flood, " augmented by the Saave and the Drave, it quits Chriſtendom, " and rolling through the barbarous countries which border on " Tartary, it enters by many mouths into the Black Sea." In " this deſcription many things are mentioned; as mountains, " rivers, cities, the ſea, &c. But let any body examine him- " ſelf, and ſee whether he has had impreſſed on his imagination " any pictures of a river, mountain, watery ſoil, Germany, " &c. Indeed, it is impoſſible, in the rapidity and quick ſuc- " ceſſion of words in converſation, to have ideas both of the " ſound of the word, and of the thing repreſented; beſides, ſome " words expreſſing real eſſences, are ſo mixed with others of a " general and nominal import, that it is impracticable to jump " from ſenſe to thought, from particulars to generals, from " things to words, in ſuch a manner as to anſwer the purpoſes " of life; nor is it neceſſary that we ſhould."

In farther confirmation of this doctrine, Mr. Burke refers to the poetical works of the late amiable and ingenious Dr. Blacklock. " *Here*," ſays he, " *is a poet, doubtleſs as much* " *affected by his own deſcriptions, as any that reads them can* " *be;* and yet he is affected with this ſtrong enthuſiaſm, by " things of which he neither has, nor can poſſibly have, any " idea, farther than that of a bare ſound; and why may not

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" thoſe who read his works be affected in the ſame manner that " he was, with as little of any real ideas of the things de- " ſcribed?"

BEFORE I proceed to make any remarks on theſe paſſages, I muſt obſerve in general, that I perfectly agree with Mr. Burke, in thinking that a very great proportion of the words which we habitually employ, have no effect to " raiſe ideas in the mind;" or to exerciſe the powers of conception and imagination. My notions on this ſubject I have already ſufficiently explained in treating of Abſtraction.

I AGREE with him farther, that a great proportion of the words which are uſed in poetry and eloquence, produce very powerful effects on the mind, by exciting emotions which we have been accuſtomed to aſſociate with particular ſounds; without leading the imagination to form to itſelf any pictures or repreſentations: and his account of the manner in which ſuch words operate, appears to me ſatisfactory. " Such words " are in reality but mere ſounds; but they are ſounds, " which, being uſed on particular occaſions, wherein we re- " ceive ſome good, or ſuffer ſome evil; or ſee others af- " fected with good or evil; or which we hear applied to other " intereſting things or events; and being applied in ſuch a " variety of caſes, that we know readily by habit to what things " they belong, they produce in the mind, whenever they are " afterwards mentioned, effects ſimilar to thoſe of their occa- " ſions. The ſounds being often uſed without reference to any " particular occaſion, and carrying ſtill their firſt impreſſions,

" they at laſt utterly loſe their connexion with the particular " occaſions that gave riſe to them; yet the ſound, without any " annexed notion, continues to operate as before."

NOTWITHSTANDING, however, theſe conceſſions, I cannot admit that it is in this way that poetry produces its principal effect. Whence is it that general and abſtract expreſſions are ſo tame and lifeleſs, in compariſon of thoſe which are particular and figurative? Is it not becauſe the former do not give any exerciſe to the imagination, like the latter? The abſtract words *piety* and *reſignation* (for example) may undoubtedly excite ſome emotion, in conſequence of ſuch aſſociations as Mr. Burke has deſcribed; but how different is their effect, from that of the picture preſented in the two laſt lines of the following paſſage?

" A hermit on the banks of Trent,
" Far from the world's bewildering maze,
" To humbler ſcenes of calm content
" Had fled, from brighter, buſier days.
" If, haply, from his guarded breaſt
" Should ſteal the unſuſpected ſigh,
" And memory, an unbidden gueſt,
" With former paſſions fill'd his eye;
" Then pious hope and duty prais'd
" The wiſdom of th' unerring ſway;
" *And while his eye to heaven he rais'd,*
" *Its ſilent water ſunk away.*"

IN treating of abſtraction I formerly remarked, that the perfection of philoſophical language is to approach as nearly as poſſible

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poſſible to that ſpecies of language we employ in algebra, and to exclude every expreſſion which has a tendency to divert the attention by exciting the imagination, or to bias the judgment by caſual aſſociations. For this purpoſe the philoſopher ought to be ſparing in the employment of figurative words, and to convey his notions by general expreſſions which have been accurately defined. To the orator who wiſhes to miſlead the underſtanding, or to influence the paſſions, it may, on the ſame account, be frequently uſeful to clothe his reaſoning in a language approaching to that of poetry. Hence may be traced a variety of rules, with reſpect to propriety of ſtyle, in theſe two kinds of compoſition; which rules can only be aſcertained by conſidering the different ends which the philoſopher and the orator have in view.

In poetry, as truths and facts are introduced, not for the purpoſe of information, but to convey pleaſure to the mind, nothing offends more, than thoſe general expreſſions which form the great inſtrument of philoſophical reaſoning. The original pleaſures, which it is the aim of poetry to recal to the mind, are all derived from individual objects; and, of conſequence, (with a very few exceptions, which it does not belong to my preſent ſubject to enumerate,) the more particular, and the more appropriated its language is, the greater will be the charm it poſſeſſes.

With reſpect to the deſcription of the courſe of the Danube already quoted, I ſhall not diſpute the reſult of the experiment to be as the author repreſents it. That words may often be

applied to their proper purpoſes, without our annexing any particular notions to them, I have formerly ſhewn at great length; and I ſhall admit that the meaning of this deſcription may be ſo underſtood. But to be underſtood, is not the ſole object of the poet: his primary object, is to pleaſe; and the pleaſure which he conveys will, in general, be found to be proportioned to the beauty and livelineſs of the images which he ſuggeſts. In the caſe of a poet born blind, the effect of poetry muſt depend on other cauſes; but whatever opinion we may form on this point, it appears to me impoſſible, that ſuch a poet ſhould receive, even from his own deſcriptions, the ſame degree of pleaſure which they may convey to a reader, who is capable of conceiving the ſcenes which are deſcribed. Indeed this inſtance which Mr. Burke produces in ſupport of his theory, is ſufficient of itſelf to ſhew, that the theory cannot be true in the extent in which it is ſtated.

By way of contraſt to the deſcription of the Danube, I ſhall quote a ſtanza from Gray, which affords a very beautiful example of the two different effects of poetical expreſſion. The pleaſure conveyed by the two laſt lines reſolves almoſt entirely into Mr. Burke's principles; but, great as this pleaſure is, how inconſiderable is it in compariſon of that ariſing from the continued and varied exerciſe which the preceding lines give to the imagination?

" In climes beyond the ſolar road,
" Where ſhaggy forms o'er ice-built mountains roam,
" The mule has broke the twilight-gloom,
" To cheer the ſhiv'ring native's dull abode.

" And

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" And oft, beneath the od'rous ſhade
" Of Chili's boundleſs foreſts laid,
" She deigns to hear the ſavage youth repeat,
" In looſe numbers wildly ſweet,
" Their feather-cinctur'd chiefs, and duſky loves.
" Her track where'er the goddeſs roves,
" Glory purſue, and generous ſhame,
" Th' unconquerable mind, and freedom's holy flame.

I CANNOT help remarking further, the effect of the ſolemn and uniform flow of the verſe in this exquiſite ſtanza, in retarding the pronunciation of the reader; ſo as to arreſt his attention to every ſucceſſive picture, till it has time to produce its proper impreſſion. More of the charm of poetical rythm ariſes from this circumſtance, than is commonly imagined.

To thoſe who wiſh to ſtudy the theory of poetical expreſſion, no author in our language affords a richer variety of illuſtrations than the poet laſt quoted. His merits, in many other reſpects, are great; but his ſkill in this particular is more peculiarly ſtriking. How much he had made the principles of this branch of his art an object of ſtudy, appears from his letters publiſhed by Mr. Maſon.

I HAVE ſometimes thought, that, in the laſt line of the following paſſage, he had in view the two different effects of words already deſcribed; the effect of ſome, in awakening the powers of Conception and Imagination; and that of others, in exciting aſſociated emotions:

" Hark,

" Hark, his hands the lyre explore!
" Bright-ey'd Fancy hovering o'er,
" Scatters from her pictur'd urn,
" Thoughts, that breathe, and words, that burn."——

SECTION III.

Continuation of the ſame Subject.—Relation of Imagination and of Taſte to Genius.

FROM the remarks made in the foregoing Sections, it is obvious, in what manner a perſon accuſtomed to analiſe and combine his conceptions, may acquire an idea of beauties ſuperior to any which he has ſeen realiſed. It may alſo be eaſily inferred, that a habit of forming ſuch intellectual combinations, and of remarking their effects on our own minds, muſt contribute to refine and to exalt the Taſte, to a degree which it never can attain in thoſe men, who ſtudy to improve it by the obſervation and compariſon of external objects only.

A CULTIVATED Taſte, combined with a creative Imagination, conſtitutes Genius in the Fine Arts. Without taſte, imagination could produce only a random analyſis and combination of our conceptions; and without imagination, taſte would be deſtitute of the faculty of invention. Theſe two ingredients of genius may be mixed together in all poſſible proportions; and where either is poſſeſſed in a degree remarkably exceeding what falls

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to the ordinary ſhare of mankind, it may compenſate in ſome meaſure for a deficiency in the other. An uncommonly correct taſte, with little imagination, if it does not produce works which excite admiration, produces at leaſt nothing which can offend. An uncommon fertility of imagination, even when it offends, excites our wonder by its creative power; and ſhews what it could have performed, had its exertions been guided by a more perfect model.

In the infancy of the Arts, an union of theſe two powers in the ſame mind is neceſſary for the production of every work of genius. Taſte, without imagination, is, in ſuch a ſituation, impoſſible; for, as there are no monuments of antient genius on which it can be formed, it muſt be the reſult of experiments, which nothing but the imagination of every individual can enable him to make. Such a taſte muſt neceſſarily be imperfect, in conſequence of the limited experience of which it is the reſult; but, without imagination, it could not have been acquired even in this imperfect degree.

In the progreſs of the Arts the caſe comes to be altered. The productions of genius accumulate to ſuch an extent, that taſte may be formed by a careful ſtudy of the works of others; and, as formerly imagination had ſerved as a neceſſary foundation for taſte, taſte begins now to invade the province of imagination, and to circumſcribe combinations which the latter faculty has been employed, during a long ſucceſſion of ages, approach to improvement, preſent ſuch ample materials to a judicious ſelection, and, by a high ſtandard of excellence, continually preſent to

to the thoughts, induſtry, aſſiſted by the moſt moderate degree of imagination, will, in time, produce performances, not only more free from faults, but incomparably more powerful in their effects, than the moſt original efforts of untutored genius; which, guided by an uncultivated taſte, copies after an inferior model of perfection. What Reynolds obſerves of Painting, may be applied to all the other Fine Arts: that, "as the Painter, "by bringing together in one piece, thoſe beauties, which are "diſperſed amongſt a great variety of individuals, produces a "figure more beautiful than can be found in nature; ſo that "artiſt who can unite in himſelf the excellencies of the various "painters, will approach nearer to perfection than any of his "*maſters**."

SECTION IV.

Of the Influence of Imagination on Human Character and Happineſs.

HITHERTO we have conſidered the power of Imagination chiefly as it is connected with the Fine Arts. But it deſerves our attention ſtill more, on account of its extenſive influence on human character and happineſs.

THE lower animals, as far as we are able to judge, are entirely occupied with the objects of their preſent perceptions:

* P. 226.

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and the caſe is nearly the ſame with the inferior orders of our own ſpecies. One of the principal effects which a liberal education produces on the mind, is to accuſtom us to withdraw our attention from the objects of ſenſe, and to direct it, at pleaſure, to thoſe intellectual combinations which delight the imagination. Even, however, among men of cultivated underſtandings, this faculty is poſſeſſed in very unequal degrees by different individuals; and theſe differences (whether reſulting from original conſtitution or from early education) lay the foundation of ſome ſtriking varieties in human character.

WHAT we commonly call ſenſibility, depends, in a great meaſure, on the power of imagination. Point out to two men, any object of diſtreſs;—a man, for example, reduced by misfortune from eaſy circumſtances to indigence. The one feels merely in proportion to what he perceives by his ſenſes. The other follows, in imagination, the unfortunate man to his dwelling, and partakes with him and his family in their domeſtic diſtreſſes. He liſtens to their converſation, while they recal to remembrance the flattering proſpects which they once indulged; the circle of friends they had been forced to leave; the liberal plans of education which were begun and interrupted; and pictures out to himſelf all the various reſources which delicacy and pride ſuggeſt, to conceal poverty from the world. As he proceeds in the painting, his ſenſibility increaſes, and he weeps, not for what he ſees, but for what he imagines. It will be ſaid, that it was his ſenſibility which originally rouſed his imagination; and the obſervation is undoubtedly true; but

it is equally evident, on the other hand, that the warmth of his imagination increaſes and prolongs his ſenſibility.

THIS is beautifully illuſtrated in the Sentimental Journey of Sterne. While engaged in a train of reflections on the ſtate priſons in France, the accidental ſight of a ſtarling in a cage ſuggeſts to him the idea of a captive in his dungeon. He indulges his imagination, "and looks through the twilight of the "grated door to take the picture."

"I BEHELD," (ſays he,) "his body half-waſted away with "long expectation and confinement, and felt what kind of ſick-"neſs of the heart it is, which ariſes from hope deferred. "Upon looking nearer, I ſaw him pale and feveriſh: in thirty "years the weſtern breeze had not once fanned his blood: he "had ſeen no ſun, no moon, in all that time, nor had the voice "of friend or kinſman breathed through his lattice.——His "children——But here my heart began to bleed, and I was "forced to go on with another part of the portrait.

"HE was ſitting upon the ground, in the fartheſt corner of "his dungeon, on a little ſtraw, which was alternately his chair "and bed: a little calender of ſmall ſticks was laid at the head, "notched all over with the diſmal days and nights he had paſſed "there:—he had one of theſe little ſticks in his hand, and "with a ruſty nail he was etching another day of miſery to add "to the heap. As I darkened the little light he had, he lifted "up a hopeleſs eye towards the door, then caſt it down—ſhook "his head, and went on with his work of affliction."

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THE foregoing obſervations may account, in part, for the effect which exhibitions of fictitious diſtreſs produce on ſome perſons, who do not diſcover much ſenſibility to the diſtreſſes of real life. In a Novel, or a Tragedy, the picture is completely finiſhed in all its parts; and we are made acquainted, not only with every circumſtance on which the diſtreſs turns, but with the ſentiments and feelings of every character with reſpect to his ſituation. In real life we ſee, in general, only detached ſcenes of the Tragedy; and the impreſſion is ſlight, unleſs imagination finiſhes the characters, and ſupplies the incidents that are wanting.

IT *is not only to ſcenes of diſtreſs that imagination* increaſes our ſenſibility. It gives us a double ſhare in the proſperity of others, and enables us to partake, with a more lively intereſt, in every fortunate incident that occurs either to individuals or to communities. Even from the productions of the earth, and the viciſſitudes of the year, it carries forward our thoughts to the enjoyments they bring to the ſenſitive creation, and, by intereſting our benevolent affections in the ſcenes we behold, lends a new charm to the beauties of nature.

I HAVE often been inclined to think, that the apparent coldneſs and ſelfiſhneſs of mankind may be traced, in a great meaſure, to a want of attention and a want of imagination. In the caſe of misfortunes which happen to ourſelves, or to our near connexions, neither of theſe powers is neceſſary to make us acquainted with our ſituation; ſo that we feel, of neceſſity, the correſpondent emotions. But without an uncommon degree of both, it is impoſſible

impoſſible for any man to comprehend completely, the ſituation of his neighbour, or to have an idea of a great part of the diſtreſs which exiſts in the world. If we feel therefore more for ourſelves than for others, the difference is to be aſcribed, at leaſt partly, to this; that, in the former caſe, the facts which are the foundation of our feelings, are more fully before us, than they poſſibly can be in the latter.

In order to prevent miſapprehenſions of my meaning, it is neceſſary for me to add, that I do not mean to deny that it is a law of our nature, in caſes in which there is an interference between our own intereſt and that of other men, to give a certain degree of preference to ourſelves; even ſuppoſing our neighbour's ſituation to be as completely known to us as our own. I only affirm, that, where this preference becomes blameable and unjuſt, the effect is to be accounted for partly in the way I mentioned *. One ſtriking proof of this is, the powerful emotions which may be occaſionally excited in the minds of the moſt callous, when the attention has once been fixed, and the imagination awakened, by eloquent and circumſtantial and pathetic deſcription.

A very amiable and profound moraliſt, in the account which he has given of the origin of our ſenſe of juſtice, has, I think, drawn a leſs pleaſing picture of the natural conſtitution of the human mind, than is agreeable to truth. "To diſturb," (ſays

* I ſay partly; for habits of inattention to the ſituation of other men, undoubtedly preſuppoſe ſome defect in the ſocial affections.

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he,) " the happineſs of our neighbour, merely becauſe it ſtands " in the way of our own; to take from him what is of real uſe " to him, merely becauſe it may be of equal or of more uſe to " us; or, to indulge, in this manner, at the expence of other " people, the natural preference which every man has for his " own happineſs above that of other people, is what no impar- " tial ſpectator can go along with. Every man is, no doubt, " firſt and principally recommended to his own care; and as " he is fitter to take care of himſelf than of any other perſon, " it is fit and right that it ſhould be ſo. Every man, therefore, " is much more deeply intereſted in whatever immediately con- " cerns himſelf, than in what concerns any other man: and to " hear, perhaps, of the death of another perſon with whom we " have no particular connexion, will give us leſs concern, will " ſpoil our ſtomach, or break our reſt, much leſs than a very " inſignificant diſaſter which has befallen ourſelves. But though " the ruin of our neighbour may affect us much leſs than a very " ſmall misfortune of our own, we muſt not ruin him to pre- " vent that ſmall misfortune, nor even to prevent our own " ruin. We muſt here, as in all other caſes, view ourſelves, " not ſo much according to that light in which we may natu- " rally appear to ourſelves, as according to that in which we " naturally appear to others. Though every man may, ac- " cording to the proverb, be the whole world to himſelf, to the " reſt of mankind he is a moſt inſignificant part of it. Though " his own happineſs may be of more importance to him than " that of all the world beſides, to every other perſon it is of " no more conſequence than that of any other man. Though " it may be true, therefore, that every individual, in his own " breaſt,

" breaſt, naturally prefers himſelf to all mankind, yet he dares " not look mankind in the face, and avow that he acts ac- " cording to this principle. He feels that, in this preference " they can never go along with him, and that how natural " ſoever it may be to him, it muſt always appear exceſſive and " extravagant to them. When he views himſelf in the light " in which he is conſcious that others will view him, he ſees " that to them he is but one of the multitude, in no reſpect " better than any other in it. If he would act ſo as that the " impartial ſpectator may enter into the principles of his con- " duct, which is what of all things he has the greateſt deſire to " do, he muſt, upon this, as upon all other occaſions, humble " the arrogance of his ſelf-love, and bring it down to ſome- " thing which other men can go along with."

I AM ready to acknowledge, that there is much truth in this paſſage; and that a prudential regard to the opinion of others, might teach a man of good ſenſe, without the aid of more amiable motives, to conceal his unreaſonable partialities in favour of himſelf, and to act agreeably to what he conceives to be the ſentiments of impartial ſpectators. But I cannot help thinking, that the fact is much too ſtrongly ſtated with reſpect to the natural partiality of ſelf-love, ſuppoſing the ſituation of our neighbours to be as completely preſented to our view, as our own muſt of neceſſity be. When the Orator wiſhes to combat the ſelfiſh paſſions of his audience, and to rouſe them to a ſenſe of what they owe to mankind; what mode of perſuaſion does nature dictate to him? Is it to remind them

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of the importance of the good opinion of the world, and of the neceſſity, in order to obtain it, of accommodating their conduct to the ſentiments of others, rather than to their own feelings? Such conſiderations undoubtedly might, with ſome men, produce a certain effect; and might lead them to aſſume the appearance of virtue; but they would never excite a ſentiment of indignation at the thought of injuſtice, or a ſudden and involuntary burſt of diſintereſted affection. If the Orator can only ſucceed in fixing their attention to facts, and in bringing theſe facts home to their imagination by the power of his eloquence, he has completely attained his object. No ſooner are the facts apprehended, than the benevolent principles of our nature diſplay themſelves in all their beauty. The moſt cautious and timid loſe, for a moment, all thought of themſelves, and deſpiſing every conſideration of prudence or of ſafety, become wholly engroſſed with the fortunes of others.

MANY other facts, which are commonly alledged as proofs of the original ſelfiſhneſs of mankind, may be explained, in part, in a ſimilar way; and may be traced to habits of inattention, or to a want of imagination, ariſing, probably, from ſome fault in early education.

WHAT has now been remarked with reſpect to the ſocial principles, may be applied to all our other paſſions, excepting thoſe which take their riſe from the body. They are commonly ſtrong in proportion to the warmth and vigour of the imagination.

IT is, however, extremely curious, that when an imagination, which is naturally phlegmatic, or which, like thoſe of the vulgar, has little activity from a want of culture, is fairly rouſed by the deſcriptions of the Orator or of the Poet, it is more apt to produce the violence of enthuſiaſm, than in minds of a ſuperior order. By giving this faculty occaſional exerciſe, we acquire a great degree of command over it. As we can withdraw the attention at pleaſure from objects of ſenſe, and tranſport ourſelves into a world of our own, ſo, when we wiſh to moderate our enthuſiaſm, we can diſmiſs the objects of imagination, and return to our ordinary perceptions and occupations. But in a mind to which theſe intellectual viſions are not familiar, and which borrows them completely from the genius of another, imagination, when once excited, becomes perfectly ungovernable, and produces ſomething like a temporary inſanity. Hence the wonderful effects of popular eloquence on the lower orders; effects which are much more remarkable, than what it ever produces on men of education.

SECTION V.

Continuation of the ſame Subject.—Inconveniences reſulting from an ill-regulated Imagination.

IT was undoubtedly the intention of Nature, that the objects of perception ſhould produce much ſtronger impreſſions on the mind than its own operations. And, accordingly, they always do ſo, when proper care has been taken in early life, to exerciſe the different principles of our conſtitution. But it is poſſible, by long habits of ſolitary reflection, to reverſe this order of things, and to weaken the attention to ſenſible objects to ſo great a degree, as to leave the conduct almoſt wholly under the influence of imagination. Removed to a diſtance from ſociety, and from the purſuits of life, when we have been long accuſtomed to converſe with our own thoughts, and have found our activity gratified by intellectual exertions, which afford ſcope to all our powers and affections, without expoſing us to the inconveniences reſulting from the buſtle of the world, we are apt to contract an unnatural predilection for meditation, and to loſe all intereſt in external occurrences. In ſuch a ſituation too, the mind gradually loſes that command which education, when properly conducted, gives it over the train of its ideas; till at length the moſt extravagant dreams of

of imagination acquire as powerful an influence in exciting all its paſſions, as if they were realities. A wild and mountainous country, which preſents but a limited variety of objects, and theſe only of ſuch a ſort as "awake to ſolemn thought," has a remarkable effect in cheriſhing this enthuſiaſm.

When ſuch diſorders of the imagination have been long confirmed by habit, the evil may perhaps be beyond a remedy; but in their inferior degrees, much may be expected from our own efforts; in particular, from mingling gradually in the buſineſs and amuſements of the world; or, if we have ſufficient force of mind for the exertion, from reſolutely plunging into thoſe active and intereſting and hazardous ſcenes, which, by compelling us to attend to external circumſtances, may weaken the impreſſions of imagination, and ſtrengthen thoſe produced by realities. The advice of the poet, in theſe caſes, is equally beautiful and juſt:

"Go, ſoft enthuſiaſt! quit the cypreſs groves,
"Nor to the rivulet's lonely moanings tune
"Your ſad complaint. Go, ſeek the cheerful haunts
"Of men, and mingle with the buſtling crowd;
"Lay ſchemes for wealth, or power, or fame, the wiſh
"Of nobler minds, and puſh them night and day.
"Or join the caravan in queſt of ſcenes
"New to your eyes, and ſhifting every hour,
"Beyond the Alps, beyond the Appenines.
"Or, more adventurous, ruſh into the field

"Where

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" Where war grows hot; and raging through the ſky,
" The lofty trumpet ſwells the madd'ning ſoul;
" And in the hardy camp and toilſome march,
" Forget all ſofter and leſs manly cares *.

THE diſordered ſtate of mind to which theſe obſervations refer is the more intereſting, that it is chiefly incident to men of uncommon ſenſibility and genius. It has been often remarked, that there is a connexion between genius and melancholy; and there is one ſenſe of the word *melancholy*, in which the remark is undoubtedly true; a ſenſe which it may be difficult to define, but in which it implies nothing either gloomy or malevolent †. This, I think, is not only confirmed by facts, but may be inferred from ſome principles which were formerly ſtated on the ſubject of invention; for as the diſpoſition now alluded to has a tendency to retard the current of thought, and to collect the attention of the mind, it is peculiarly favourable to the diſcovery of thoſe profound concluſions which reſult from an accurate examination of the leſs obvious relations among our ideas. From the ſame principles too, may be traced ſome of the effects which ſituation and early education produce on the intellectual character. Among the natives of wild and ſolitary countries we may expect to meet with ſublime exertions of poetical ima-

* Armſtrong.

† Διὰ τι πάντες ὅσοι περιττοὶ γεγονασιν ἀνδρες, ἢ κατα φιλοσοφιαν, ἢ πολιτικην, ἢ ποιησιν, ἢ τεχνας, φαινονται μελαγχολικοι ὀντες.

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gination and of philoſophical reſearch; while thoſe men whoſe attention has been diſſipated from infancy amidſt the buſtle of the world, and whoſe current of thought has been trained to yield and accommodate itſelf, every moment, to the rapid ſucceſſion of trifles, which diverſify faſhionable life, acquire, without any effort on their part, the intellectual habits which are favourable to gaiety, vivacity, and wit.

When a man, under the habitual influence of a warm imagination, is obliged to mingle occaſionally in the ſcenes of real buſineſs, he is perpetually in danger of being miſled by his own enthuſiaſm. What we call good ſenſe in the conduct of life, conſiſts chiefly in that temper of mind which enables its poſſeſſor to view, at all times, with perfect coolneſs and accuracy, all the various circumſtances of his ſituation; ſo that each of them may produce its due impreſſion on him, without any exaggeration ariſing from his own peculiar habits. But to a man of an ill-regulated imagination, external circumſtances only ſerve as hints to excite his own thoughts, and the conduct he purſues has, in general, far leſs reference to his real ſituation, than to ſome imaginary one, in which he conceives himſelf to be placed: in conſequence of which, while he appears to himſelf to be acting with the moſt perfect wiſdom and conſiſtency, he may frequently exhibit to others all the appearances of folly. Such, pretty nearly, ſeems to be the idea which the Author * of the "Reflexions on the Character and Writings of Rouſſeau,"

* Madame de Stael.

has

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has formed of that extraordinary man. "His faculties," we are told, "were ſlow in their operation, but his heart was "ardent: it was in conſequence of his own meditations that "he became impaſſioned: he diſcovered no ſudden emotions, "but all his feelings grew upon reflexion. It has, perhaps, "happened to him to fall in love gradually with a woman, "by dwelling on the idea of her during her abſence. Some-"times he would part with you with all his former affection; "but if an expreſſion had eſcaped you, which might bear an "unfavourable conſtruction, he would recollect it, examine it, "exaggerate it, perhaps dwell upon it for a month, and con-"clude by a total breach with you. Hence it was, that there was "ſcarce a poſſibility of undeceiving him; for the light which broke "in upon him at once was not ſufficient to efface the wrong "impreſſions which had taken place ſo gradually in his mind. "It was extremely difficult, too, to continue long on an inti-"mate footing with him. A word, a geſture, furniſhed him "with matter of profound meditation: he connected the moſt "trifling circumſtances like ſo many mathematical propoſitions, "and conceived his concluſions to be ſupported by the evidence "of demonſtration. I believe," continues this ingenious writer, "that imagination was the ſtrongeſt of his faculties, and that "it had almoſt abſorbed all the reſt. He dreamed rather than "exiſted, and the events of his life might be ſaid, more pro-"perly, to have paſſed in his mind, than without him: a mode "of being, one ſhould have thought, that ought to have ſe-"cured him from diſtruſt, as it prevented him from obſerva-"tion; but the truth was, it did not hinder him from attempt-

" ing to obſerve; it only rendered his obſervations erroneous. " That his ſoul was tender, no one can doubt, after having " read his works; but his imagination ſometimes interpoſed " between his reaſon and his affections, and deſtroyed their " influence: he appeared ſometimes void of ſenſibility; but " it was becauſe he did not perceive objects ſuch as they " were. Had he ſeen them with our eyes, his heart would " have been more affected than ours."

In this very ſtriking deſcription we ſee the melancholy picture of ſenſibility and genius approaching to infanity. It is a caſe, probably, that but rarely occurs, in the extent here deſcribed: but, I believe, there is no man who has lived much in the world, who will not trace many reſembling features to it, in the circle of his own acquaintances: perhaps there are few, who have not been occaſionally conſcious of ſome reſemblance to it in themſelves.

To theſe obſervations we may add, that by an exceſſive indulgence in the pleaſures of imagination, the taſte may acquire a faſtidious refinement unſuitable to the preſent ſituation of human nature; and thoſe intellectual and moral habits, which ought to be formed by actual experience of the world, may be gradually ſo accommodated to the dreams of poetry and romance, as to diſqualify us for the ſcene in which we are deſtined to act. Such a diſtempered ſtate of the mind is an endleſs ſource of error; more particularly when we are placed in thoſe critical ſituations, in which our conduct determines our future

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happineſs or miſery; and which, on account of this extenſive influence on human life, form the principal ground-work of fictitious compoſition. The effect of novels, in miſleading the paſſions of youth, with reſpect to the moſt intereſting and important of all relations, is one of the many inſtances of the inconveniences reſulting from an ill-regulated imagination.

THE paſſion of love has been, in every age, the favourite ſubject of the poets, and has given birth to the fineſt productions of human genius. Theſe are the natural delight of the young and ſuſceptible, long before the influence of the paſſions is felt; and from theſe a romantic mind forms to itſelf an ideal model of beauty and perfection, and becomes enamoured with its own creation. On a heart which has been long accuſtomed to be thus warmed by the imagination, the excellencies of real characters make but a ſlight impreſſion: and, accordingly, it will be found, that men of a romantic turn, unleſs when under the influence of violent paſſions, are ſeldom attached to a particular object. Where, indeed, ſuch a turn is united with a warmth of temperament, the effects are different; but they are equally fatal to happineſs. As the diſtinctions which exiſt among real characters are confounded by falſe and exaggerated conceptions of ideal perfection, the choice is directed to ſome object by caprice and accident; a ſlight reſemblance is miſtaken for an exact coincidence; and the deſcriptions of the poet and novelliſt are applied literally to an individual, who perhaps falls ſhort of the common ſtandard of excellence. "I am certain," ſays the Author laſt quoted, in her account

account of the character of Rouſſeau, " that he never formed an " attachment which was not founded on caprice. It was illu- " ſions alone that could captivate his paſſions; and it was ne- " ceſſary for him always to accompliſh his miſtreſs from his " own fancy. I am certain alſo," ſhe adds, " that the woman " whom he loved the moſt, and perhaps the only woman " whom he loved conſtantly, was his own *Julie*."

In the caſe of this particular paſſion, the effects of a romantic imagination are obvious to the moſt careleſs obſerver; and they have often led moraliſts to regret, that a temper of mind ſo dangerous to happineſs ſhould have received ſo much encouragement from ſome writers of our own age, who might have employed their genius to better purpoſes. Theſe, however, are not the only effects which ſuch habits of ſtudy have on the character. Some others, which are not ſo apparent at firſt view, have a tendency, not only to miſlead us where our own happineſs is at ſtake, but to defeat the operation of thoſe active principles, which were intended to unite us to ſociety. The manner in which imagination influences the mind, in the inſtances which I allude to at preſent, is curious, and deſerves a more particular explanation.

I shall have occaſion afterwards to ſhew *, in treating of our moral powers, that experience diminiſhes the influence of paſſive impreſſions on the mind, but ſtrengthens our active

* The following reaſoning was ſuggeſted to me by a paſſage in Butler's Analogy, which the reader will find in note [U] at the end of the volume.

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principles. A courſe of debauchery deadens the ſenſe of pleaſure, but increaſes the deſire of gratification. An immoderate uſe of ſtrong liquors deſtroys the ſenſibility of the palate, but ſtrengthens the habit of intemperance. The enjoyments we derive from any favourite purſuit gradually decay as we advance in years: and yet we continue to proſecute our favourite purſuits with increaſing ſteadineſs and vigour.

ON theſe two laws of our nature is founded our capacity of moral improvement. In proportion as we are accuſtomed to obey our ſenſe of duty, the influence of the temptations to vice is diminiſhed; while, at the ſame time, our habit of virtuous conduct is confirmed. *How many paſſive impreſſions, for inſtance,* muſt be overcome, before the virtue of beneficence can exert itſelf uniformly and habitually! How many circumſtances are there in the diſtreſſes of others, which have a tendency to alienate our hearts from them, and which prompt us to withdraw from the ſight of the miſerable! The impreſſions we receive from theſe, are unfavourable to virtue: their force, however, every day diminiſhes, and it may perhaps, by perſeverance, be wholly deſtroyed. It is thus that the character of the beneficent man is formed. The paſſive impreſſions which he felt originally, and which counteracted his ſenſe of duty, have loſt their influence, and a habit of beneficence is become part of his nature.

IT muſt be owned, that this reaſoning may, in part, be retorted; for among thoſe paſſive impreſſions, which are weakened by

by repetition, there are ſome which have a beneficial tendency. The uneaſineſs, in particular, which the ſight of diſtreſs occaſions, is a ſtrong incentive to acts of humanity; and it cannot be denied that it is leſſened by experience. This might naturally lead us to expect, that the young and unpractiſed would be more diſpoſed to perform beneficent actions, than thoſe who are advanced in life, and who have been familiar with ſcenes of miſery. And, in truth, the fact would be ſo, were it not that the effect of cuſtom on this paſſive impreſſion is counteracted by its effect on others; and, above all, by its influence in ſtrengthening the active habit of beneficence. An old and experienced phyſician is leſs affected by the ſight of bodily pain, than a younger practitioner; but he has acquired a more confirmed habit of aſſiſting the ſick and helpleſs, and would offer greater violence to his nature, if he ſhould with-hold from them any relief that he has in his power to beſtow. In this caſe, we ſee a beautiful proviſion made for our moral improvement, as the effects of experience on one part of our conſtitution, are made to counteract its effects on another.

If the foregoing obſervations be well founded, it will follow, that habits of virtue are not to be formed in retirement, but by mingling in the ſcenes of active life, and that an habitual attention to exhibitions of fictitious diſtreſs, is not merely uſeleſs to the character, but poſitively hurtful.

It will not, I think, be diſputed, that the frequent peruſal of pathetic compoſitions diminiſhes the uneaſineſs which they

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are naturally fitted to excite. A perſon who indulges habitually in ſuch ſtudies, may feel a growing deſire of his uſual gratification, but he is every day leſs and leſs affected by the ſcenes which are preſented to him. I believe it would be difficult to find an actor long hackneyed on the ſtage, who is capable of being completely intereſted by the diſtreſſes of a tragedy. The effect of ſuch compoſitions and repreſentations, in rendering the mind callous to actual diſtreſs, is ſtill greater; for as the imagination of the Poet almoſt always carries him beyond truth and nature, a familiarity with the tragic ſcenes which he exhibits, can hardly fail to deaden the impreſſion produced by the comparatively trifling ſufferings which the ordinary courſe of human affairs preſents to us. In real life, a proviſion is made for this gradual decay of ſenſibility, by the proportional decay of other paſſive impreſſions, which have an oppoſite tendency, and by the additional force which our active habits are daily acquiring. Exhibitions of fictitious diſtreſs, while they produce the former change on the character, have no influence in producing the latter: on the contrary, they tend to ſtrengthen thoſe paſſive impreſſions which counteract beneficence. The ſcenes into which the Novelliſt introduces us are, in general, perfectly unlike thoſe which occur in the world. As his object is to pleaſe, he removes from his deſcriptions every circumſtance which is diſguſting, and preſents us with hiſtories of elegant and dignified diſtreſs. It is not ſuch ſcenes that human life exhibits. We have to act, not with refined and elevated characters, but with the mean, the illiterate, the vulgar, and the profligate. The peruſal of fictitious hiſtory has a tendency to increaſe that diſguſt

guſt which we naturally feel at the concomitants of diſtreſs, and to cultivate a falſe refinement of taſte, inconſiſtent with our condition as members of ſociety. Nay, it is poſſible for this refinement to be carried ſo far, as to withdraw a man from the duties of life, and even from the ſight of thoſe diſtreſſes which he might alleviate. And, accordingly, many are to be found, who, if the ſituations of romance were realiſed, would not fail to diſplay the virtues of their favourite characters, whoſe ſenſe of duty is not ſufficiently ſtrong to engage them in the humble and private ſcenes of human miſery.

To theſe effects of fictitious hiſtory we may add, that it gives no exerciſe to our active habits. In real life, we proceed from the paſſive impreſſion to thoſe exertions which it was intended to produce. In the contemplation of imaginary ſufferings, we ſtop ſhort at the impreſſion, and whatever benevolent diſpoſitions we may feel, we have no opportunity of carrying them into action.

FROM theſe reaſonings it appears, that an habitual attention to exhibitions of fictitious diſtreſs, is in every view calculated to check our moral improvement. It diminiſhes that uneaſineſs which we feel at the ſight of diſtreſs, and which prompts us to relieve it. It ſtrengthens that diſguſt which the loathſome concomitants of diſtreſs excite in the mind, and which prompts us to avoid the ſight of miſery; while, at the ſame time, it has no tendency to confirm thoſe habits of active beneficence, without which, the beſt diſpoſitions are uſeleſs. I would not, however, be underſtood to diſapprove entirely of fictitious narratives,

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narratives, or of pathetic compoſitions. On the contrary, I think that the peruſal of them may be attended with advantage, when the effects which I have mentioned are corrected by habits of real buſineſs. They ſoothe the mind when ruffled by the rude intercourſe of ſociety, and ſtealing the attention inſenſibly from our own cares, ſubſtitute, inſtead of diſcontent and diſtreſs, a tender and pleaſing melancholy. By exhibitions of characters a little elevated above the common ſtandard, they have a tendency to cultivate the taſte in life; to quicken our diſguſt at what is mean or offenſive, and to form the mind inſenſibly to elegance and dignity. Their tendency to cultivate the powers of moral perception has never been diſputed; and when the influence of ſuch perceptions is powerfully felt, and is united with an active and manly temper, they render the character not only more amiable, but more happy in itſelf, and more uſeful to others; for although a rectitude of judgment with reſpect to conduct, and ſtrong moral feelings, do, by no means, alone conſtitute virtue; yet they are frequently neceſſary to direct our behaviour in the more critical ſituations of life; and they increaſe the intereſt we take in the general proſperity of virtue in the world. I believe, likewiſe, that, by means of fictitious hiſtory, diſplays of character may be moſt ſucceſsfully given, and the various weakneſſes of the heart expoſed. I only meant to inſinuate, that a taſte for them may be carried too far; that the ſenſibility which terminates in imagination, is but a refined and ſelfiſh luxury; and that nothing can effectually advance our moral improvement, but an attention to the active duties which belong to our ſtations.

SECTION VI.

Continuation of the ſame Subject.——Important Uſes to which the Power of Imagination is ſubſervient.

THE faculty of Imagination is the great ſpring of human activity, and the principal ſource of human improvement. As it delights in preſenting to the mind ſcenes and characters more perfect than thoſe which we are acquainted with, it prevents us from ever being completely ſatisfied with our preſent condition, or with our paſt attainments, and engages us continually in the purſuit of ſome untried enjoyment, or of ſome ideal excellence. Hence the ardour of the ſelfiſh to better their fortunes, and to add to their perſonal accompliſhments; and hence the zeal of the Patriot and the Philoſopher to advance the virtue and the happineſs of the human race. Deſtroy this faculty, and the condition of man will become as ſtationary as that of the brutes.

WHEN the notions of enjoyment or of excellence which imagination has formed, are greatly raiſed above the ordi-

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nary ſtandard, they intereſt the paſſions too deeply to leave us at all times the cool exerciſe of reaſon, and produce that ſtate of the mind which is commonly known by the name of Enthuſiaſm; a temper which is one of the moſt fruitful ſources of error and diſappointment; but which is a ſource, at the ſame time, of heroic actions and of exalted characters. To the exaggerated conceptions of eloquence which perpetually revolved in the mind of Cicero; to that idea which haunted his thoughts of *aliquid immenſum infinitumque;* we are indebted for ſome of the moſt ſplendid diſplays of human genius: and it is probable that ſomething of the ſame kind has been felt by every man who has riſen much above the level of humanity, either in ſpeculation or in action. It is happy for the individual, when theſe enthuſiaſtic deſires are directed to events which do not depend on the caprice of fortune.

THE pleaſure we receive from the higher kinds of poetry takes riſe, in part, from that diſſatisfaction which the objects of imagination inſpire us with, for the ſcenes, the events, and the characters, with which our ſenſes are converſant. Tired and diſguſted with this world of imperfection, we delight to eſcape to another of the poet's creation, where the charms of nature wear an eternal bloom, and where ſources of enjoyment are opened to us, ſuited to the vaſt capacities of the human mind. On this natural love of poetical fiction, lord Bacon has founded a very ingenious argument for the ſoul's immortality; and, indeed, one of the moſt important purpoſes to which it is ſubſervient,

ſervient, is to elevate the mind above the purſuits of our preſent condition, and to direct the views to higher objects. In the mean time, it is rendered ſubſervient alſo, in an eminent degree, to the improvement and happineſs of mankind, by the tendency which it has to accelerate the progreſs of ſociety.

As the pictures which the poet preſents to us are never (even in works of pure deſcription) faithful copies from nature, but are always meant to be improvements on the original ſhe affords, it cannot be doubted that they muſt have ſome effect in refining and exalting our taſte, both with reſpect to material beauty, and to the objects of our purſuit in life. It has been alledged, that the works of our deſcriptive poets have contributed to diffuſe that taſte for pictureſque beauty, which is ſo prevalent in England, and to recal the public admiration from the fantaſtic decorations of art, to the more powerful and permanent charms of cultivated nature; and it is certain, that the firſt ardours of many an illuſtrious character have been kindled by the compoſitions of Homer and Virgil. It is difficult to ſay, to what a degree, in the earlier periods of ſociety, the rude compoſitions of the bard and the minſtrel may have been inſtrumental in humanizing the minds of ſavage warriors, and in accelerating the growth of cultivated manners. Among the Scandinavians and the Celtæ we know that this order of men was held in very peculiar veneration; and, accordingly, it would appear, from the monuments which remain of theſe nations, that they were diſtinguiſhed by a delicacy in the paſſion of love, and by a humanity and generoſity to the vanquiſhed in war, which ſeldom appear among barbarous tribes; and with which it is hardly poſſible to conceive

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how men in ſuch a ſtate of ſociety could have been inſpired, but by a ſeparate claſs of individuals in the community, who devoted themſelves to the pacific profeſſion of poetry, and to the cultivation of that creative power of the mind, which anticipates the courſe of human affairs; and preſents, in prophetic viſion, to the poet and the philoſopher, the bleſſings which accompany the progreſs of reaſon and refinement.

NOR muſt we omit to mention the important effects of Imagination in multiplying the ſources of innocent enjoyment, beyond what this limited ſcene affords. Not to inſiſt on the nobler efforts of genius, which have rendered this part of our conſtitution ſubſervient to moral improvement; how much has the ſphere of our happineſs been extended by thoſe agreeable fictions which introduce us to new worlds, and make us acquainted with new orders of being! What a fund of amuſement, through life, is prepared for one who reads, in his childhood, the fables of ancient Greece! They dwell habitually on the memory, and are ready, at all times, to fill up the intervals of buſineſs, or of ſerious reflexion; and in his hours of rural retirement and leiſure, they warm his mind with the fire of antient genius, and animate every ſcene he enters, with the offspring of claſſical fancy.

IT is, however, chiefly in painting future ſcenes that Imagination loves to indulge herſelf, and her prophetic dreams are almoſt always favourable to happineſs. By an erroneous education, indeed, it is poſſible to render this faculty an inſtrument of

of conſtant and of exquiſite diſtreſs; but in ſuch caſes (abſtracting from the influence of a conſtitutional melancholy) the diſtreſſes of a gloomy imagination are to be aſcribed not to nature, but to the force of early impreſſions.

THE common bias of the mind undoubtedly is, (ſuch is the benevolent appointment of Providence,) to think favourably of the future; to overvalue the chances of poſſible good, and to under-rate the riſks of poſſible evil; and in the caſe of ſome fortunate individuals, this diſpoſition remains after a thouſand diſappointments. To what this bias of our nature is owing, it is not material for us to inquire: the fact is certain, and it is an important one to our happineſs. It ſupports us under the real diſtreſſes of life, and cheers and animates all our labours: and although it is ſometimes apt to produce, in a weak and indolent mind, thoſe deceitful ſuggeſtions of ambition and vanity, which lead us to ſacrifice the duties and the comforts of the preſent moment, to romantic hopes and expectations; yet it muſt be acknowledged, when connected with habits of activity, and regulated by a ſolid judgment, to have a favourable effect on the character, by inſpiring that ardour and enthuſiaſm which both prompt to great enterpriſes, and are neceſſary to enſure their ſucceſs. When ſuch a temper is united (as it commonly is) with pleaſing notions, concerning the order of the univerſe, and in particular concerning the condition and the proſpects of man, it places our happineſs, in a great meaſure, beyond the power of fortune. While it adds a double reliſh to every enjoyment, it blunts the edge of all our ſufferings; and even when human life

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life preſents to us no object on which our hopes can reſt, it invites the imagination beyond the dark and troubled horizon which terminates all our earthly proſpects, to wander unconfined in the regions of futurity. A man of benevolence, whoſe mind is enlarged by philoſophy, will indulge the ſame agreeable anticipations with reſpect to ſociety; will view all the different improvements in arts, in commerce, and in the ſciences, as co-operating to promote the union, the happineſs, and the virtue of mankind; and, amidſt the political diſorders reſulting from the prejudices and follies of his own times, will look forward with tranſport, to the bleſſings which are reſerved for poſterity in a more enlightened age.

NOTES

AND

ILLUSTRATIONS.

NOTES, &c.

NOTE [A], page 4.

I AM happy in being able to confirm this doctrine by the authority of Mr. Turgot and of Mr. Condorcet.

" Puiſque l'exiſtence des corps n'eſt pour nous que la permanence " d'etres dont les propriétés répondent à un certain ordre de nos ſenſa- " tions, il en réſulte qu'elle n'a rien de plus certain que celle d'autres " etres qui ſe manifeſtent également par leurs effets ſur nous; & puiſ- " que nos obſervations ſur nos propres facultés, confirmées par celles " que nous faiſons ſur les etres penſants qui animent auſſi des corps, " ne nous montrent aucune analogie entre l'etre qui ſent ou qui penſe " & l'etre qui nous offre le phénomene de l'étendue ou de l'impéné- " trabilité, il n'y a aucune raiſon de croire ces etres de la même nature. " Ainſi la ſpiritualité de l'ame n'eſt pas une opinion qui ait beſoin de " preuves, mais le réſultat ſimple & natural d'une analyſe exacte de " nos idées, & de nos facultés."

Vie de M. TURGOT, *par M.* CONDORCET.

Des Cartes was the firſt philoſopher who ſtated, in a clear and ſatisfactory manner, the diſtinction between mind and matter, and who pointed out the proper plan for ſtudying the intellectual phenomena. It is chiefly in conſequence of his preciſe ideas with reſpect to this diſtinction, that we may remark, in all his metaphyſical writings, a perſpicuity which is not obſervable in thoſe of any of his predeceſſors.

Dr. *Reid* has remarked, that although *Des Cartes* infers the exiſtence of mind, from the operations of which we are conſcious, yet he could not reconcile himſelf to the notion of an unknown ſubſtance, or ſubſtratum, to which theſe operations belonged. And it was on this account, he conjectures, that he made the eſſence of the ſoul to conſiſt in thought; as, for a ſimilar reaſon, he had made the eſſence of matter to conſiſt in extenſion. But I am afraid, that this ſuppoſition is not perfectly reconcileable with Des Cartes' writings; for he repeatedly ſpeaks with the utmoſt confidence of the exiſtence of ſubſtances of which we have only a relative idea; and, even in attempting to ſhew that thought is the eſſential attribute of mind, and extenſion of matter, he conſiders them as nothing more than attributes or qualities belonging to theſe ſubſtances.

" Per ſubſtantiam nihil aliud intelligere poſſumus, quam rem quæ " ita exiſtit, ut nulla alia re indigeat ad exiſtendum. Et quidem ſub- " ſtantia quæ nulla plane re indigeat, unica tantum poteſt intelligi, " nempe Deus. Alias vero omnes, non niſi ope concurſus Dei exiſtere " poſſe percipimus. Atque ideo nomen ſubſtantiæ non convenit Deo " et illis *univoce* ut dici ſolet in ſcholis; hoc eſt, nulla ejus nominis " ſignificatio, poteſt diſtincte intelligi, quæ Deo, et creaturis ſit com- " munis.

" Poſſunt autem ſubſtantia corporea, et mens, ſive ſubſtantia cogi- " tans, creata, ſub hoc communi conceptu intelligi; quod ſint res, " quæ ſolo Dei concurſu agent ad exiſtendum. Verumtamen non poteſt " ſubſtantia primum animadverti ex hoc ſolo, quod ſit res exiſtens, " quia hoc ſolum per ſe nos non afficit: ſed facile ipſam agnoſcimus ex " quolibet ejus attributo, per communem illam notionem, quod nihili " nulla ſunt attributa, nullævæ proprietates aut qualitates. Ex hoc " enim, quod aliquod attributum adeſſe percipiamus, concludimus " aliquam rem exiſtentem, ſive ſubſtantiam cui illud tribui poſſit, ne- " ceſſario etiam adeſſe.

" Et

" Et quidem ex quolibet attributo ſubſtantia cognoſcitur: ſed una " tamen eſt cujuſque ſubſtantiæ præcipua proprietas, quæ ipſius na- " turam eſſentiamque conſtituit, et ad quam aliæ omnes referuntur. " Nempe extenſio in longum, latum et profundum ſubſtantiæ corpo- " reæ naturam conſtituit; et cogitatio conſtituit naturam ſubſtantiæ " cogitantis." *Princip. Philoſoph.* pars i. cap. 51, 52, 53.

In ſtating the relative notions which we have of mind and of body, I have avoided the uſe of the word *ſubſtance*, as I am unwilling to furniſh the ſlighteſt occaſion for controverſy; and have contented myſelf with defining *mind* to be *that* which feels, thinks, wills, hopes, fears, deſires, &c. That my conſciouſneſs of theſe and other operations is neceſſarily accompanied with a conviction of my own exiſtence, and with a conviction that all of them belong to one and the ſame being, is not an hypotheſis, but a fact; of which it is no more poſſible for me to doubt, than of the *reality of my own ſenſations or volitions.*

NOTE [B], page 68.

DOCTOR REID remarks, that Des Cartes rejected a part only of the antient theory of perception, and adopted the other part. " That theory," ſays he, " may be divided into two parts: the firſt, " that images, ſpecies, or forms of external objects, come from the " object, and enter by the avenues of the ſenſes to the mind: the ſe- " cond part is, that the external object itſelf is not perceived, but " only the ſpecies or image of it in the mind. The firſt part, Des " Cartes and his followers rejected and refuted by ſolid arguments; " but the ſecond part, neither he nor his followers have thought of " calling in queſtion; being perſuaded that it is only a repreſentative " image in the mind of the external object that we perceive, and not " the object itſelf. And this image, which the peripatetics called a

" ſpecies, he calls an idea, changing the name only, while he admits " the thing."

The account which this paſſage contains of Des Cartes' doctrine concerning perception, is, I believe, agreeable to his prevailing opinion, as it may be collected from the general tenor of his writings; and the obſervation with which it concludes is undoubtedly true, that neither he nor any of his followers ever called in queſtion the exiſtence of ideas, as the immediate objects of our perception. With reſpect, however, to the firſt part of the antient theory, as here ſtated, it may be proper to remark, that Des Cartes, although evidently by no means ſatisfied with it, ſometimes expreſſes himſelf as if he rather doubted of it, than expreſsly denied it; and at other times, when preſſed with objections to his own particular ſyſtem, he admits, at leaſt in part, the truth of it. The following paſſage is one of the moſt explicit I recollect, in oppoſition to the antient doctrine.

" Obſervandum præterea, animam, nullis imaginibus ab objectis ad " cerebrum miſſis egere ut ſentiat, (contra quam communiter philo- " ſophi noſtri ſtatuunt,) aut ad minimum, longe aliter illarum ima- " ginum naturam concipiendam eſſe quam vulgo fit. Quum enim " circa eas nil conſiderent, præter ſimilitudinem earum cum objectis " quæ repræſentant, non poſſunt explicare, qua ratione ab objectis " formari queant, et recipi ab organis ſenſuum exteriorum, et demum " nervis ad cerebrum tranſvehi. Nec alia cauſa imagines iſtas fingere " eos impulit, niſi quod viderent mentem noſtram efficaciter pictura " excitari ad apprehendendum objectum illud, quod exhibet: ex hoc " enim judicarunt, illam eodem modo excitandam, ad apprehendenda " ea quæ ſenſus movent, per exiguas quaſdam imagines, in capite " noſtro delineatas. Sed nobis contra eſt advertendum, multa præter " imagines eſſe, quæ cogitationes excitant, ut exempli gratia, verba " et ſigna, nullo modo ſimilia iis quæ ſignificant."

Dioptric. cap. 4. § 6.

In

In his third meditation (which contains his celebrated argument for the exiſtence of a Deity) the following paſſage occurs.

" Sed hic præcipue de iis eſt quærendum quas tanquam a rebus " extra me exiſtentibus deſumptas conſidero, quænam me moveat " ratio ut illas iſtis rebus ſimiles eſſe exiſtimem; nempe ita videor " doctus a natura, et prætera experior illas non a mea voluntate " nec proinde a me ipſo pendere, ſæpe enim vel invito obſervantur, " ut jam, ſive velim ſive nolim, ſentio calorem, et ideo puto ſen- " ſum illum, ſive ideam coloris a re a me diverſa, nempe ab ignis, " cui aſſideo, calore mihi advenire, nihilque magis obvium eſt, quam " ut judicem iſtam rem ſuam ſimilitudinem potius, quam aliud quid " in me immittere; quæ rationes an ſatis firmæ ſint, jam videbo. " Cum hic dico me ita doctum eſſe a natura, intelligo tantum " ſpontaneo quodam impetu me ferri ad hoc credendum, non lu- " mine aliquo naturali mihi oſtendi eſſe verum, quæ duo multum " diſcrepant, nam quæcumque lumine naturali mihi oſtenduntur, " (ut quod ex eo quod dubitem ſequatur me eſſe, et ſimilia,) " nullo modo dubia eſſe poſſunt, quia nulla alia facultas eſſe poteſt, " cui æque fidam ac lumini iſti, quæque illa non vera poſſit do- " cere; ſed quantum ad impetus naturales, jam ſæpe olim judicavi " me ab illis in deteriorem partem fuiſſe impulſum cum de bono " eligendo ageretur, nec video cur iiſdem in ulla alia re magis fidam. " Deinde quamvis ideæ illæ a voluntate mea non pendeant, non ideo " conſtat ipſas a rebus extra me poſitis neceſſario procedere; ut enim " impetus illi, de quibus mox loquebar, quamvis in me ſint, a " voluntate tamen mea diverſi eſſe videntur, ita forte etiam aliqua " alia eſt in me facultas nondum mihi ſatis cognita iſtarum idearum " effectrix, ut hactenus ſemper viſum eſt illas, dum ſomnio, abſque " ulla rerum externarum ope in me formari; ac denique quamvis " a rebus a me diverſis procederent, non inde ſequitur illas rebus " iſtis ſimiles eſſe debere; quinimo in multis ſæpe magnum diſcrimen " videor deprehendiſſe; ſic, exempli cauſa, duas diverſas ſolis ideas

" apud

" apud me invenio, unam tanquam a ſenſibus hauſtam, et quæ " maxime inter illas quas adventitias exiſtimo eſt recenſenda, per " quam mihi valde parvus apparet; aliam vero ex rationibus aſtrono- " miæ deſumptam, hoc eſt ex notionibus quibuſdam mihi innatis " elicitam vel quocumque alio modo a me factam, per quam ali- " quoties major quam terra exhibetur; utraque profecto ſimilis eidem " ſoli extra me exiſtenti eſſe non poteſt, et ratio perſuadet illam ei " maxime eſſe diſſimilem, quæ quam proxime ab ipſo videtur " emanâſſe. Quæ omnia ſatis demonſtrant me non hactenus ex " certo judicio, ſed tantum ex cæco aliquo impulſu credidiſſe res " quaſdam a me diverſas exiſtere, quæ ideas ſive imagines ſuas per " organa ſenſuum, vel quolibet alio pacto mihi immittant."

Among other animadverſions upon this meditation ſent to Des Cartes by one of his correſpondents, it is objected;—" Videris vertere " in dubium non tantum utrum ideæ aliquæ procedant ex rebus ex- " ternis, ſed etiam utrum omnino ſint externæ res aliquæ." To which Des Cartes anſwers: " Notandum eſt, me non affirmâſſe " ideas rerum materialium ex mente deduci, ut non ſatis bona fide " hic fingis; expreſſe enim poſtea oſtendi ipſas a corporibus ſæpe " advenire, ac per hoc corporum exiſtentiam probari."

Vide Objectiones in Meditationes Renati Des Cartes, cum ejuſdem ad illas Reſponſionibus.

NOTE [C], page 71.

IN conſequence of the inferences which Mr. Hume has deduced from this doctrine concerning cauſe and effect, ſome later authors have been led to diſpute its truth; not perceiving that the fallacy of this part of Mr. Hume's ſyſtem does not conſiſt in his premiſes, but in the concluſion which he draws from them.

That the object of the phyſical inquirer is not to trace neceſſary connexions, or to aſcertain the efficient cauſes of phenomena, is a principle which has been frequently aſcribed to Mr. Hume as its author, both

both by his followers and by his opponents; but it is, in fact, of a much earlier date, and has been maintained by many of the moſt enlightened, and the leaſt ſceptical of our modern philoſophers: nor do I know that it was ever ſuſpected to have a dangerous tendency, till the publication of Mr. Hume's writings. "If we except" (ſays Dr. Barrow) "the mutual cauſality and dependence of the terms of "a mathematical demonſtration, I do not think that there is any other "cauſality in the nature of things, wherein a neceſſary conſequence "can be founded. Logicians do indeed boaſt of I do not know "what kind of demonſtrations from external cauſes either efficient or "final, but without being able to ſhew one genuine example of any "ſuch; nay, I imagine it is impoſſible for them ſo to do. For "there can be no ſuch connexion of an external efficient cauſe with "its effect," (at leaſt none ſuch can be underſtood by us,) "through "which, ſtrictly ſpeaking, the effect is neceſſarily ſuppoſed by the ſup-"poſition of the efficient cauſe, or any determinate cauſe by the ſup-"poſition of the effect." He adds afterwards, "Therefore there "can be no argumentation from an efficient cauſe to the effect, or "from an effect to the cauſe which is lawfully neceſſary."

Mathematical Lectures read at Cambridge.

Dr. Butler too, in his diſcourſe on the ignorance of man, has remarked, that "it is in general no more than effects that the moſt "knowing are acquainted with; for as to cauſes they are as entirely "in the dark as the moſt ignorant." "What are the laws," (he continues,) "by which matter acts on matter, but certain effects, "which ſome, having obſerved to be frequently repeated, have re-"duced to general rules?" BUTLER's *Sermons.*

"The laws of attraction and repulſion" (ſays Dr. Berkeley) "are to "be regarded as laws of motion, and theſe only as rules or methods "obſerved in the productions of natural effects, the efficient and final "cauſes whereof are not of mechanical conſideration. Certainly, if the "explaining a phenomenon be to aſſign its proper efficient and final "cauſe,

" cauſe, it ſhould ſeem the mechanical philoſophers never ex-
" plained any thing; their province being only to diſcover the laws
" of nature; that is, the general rules and methods of motion; and to
" account for particular phenomena, by reducing them under, or ſhew-
" ing their conformity to ſuch general rules." SIRIS: *or Philoſophical Inquiries concerning the Virtues of Tar Water*, p. 108.

" The words *attraction* and *repulſion* may, in compliance with
" cuſtom, be uſed where, accurately ſpeaking, motion alone is meant."
Ibid. p. 114.

" Attraction cannot produce, and in that ſenſe account, for the phe-
" nomena; being itſelf one of the phenomena produced and to be
" accounted for." *Ib.* p. 115.

" There is a certain analogy, conſtancy, and uniformity in the
" phenomena or appearances of nature, which are a foundation for ge-
" neral rules: and theſe are a grammar for the underſtanding of na-
" ture, or that ſeries of effects in the viſible world, whereby we
" are enabled to foreſee what will come to paſs in the natural
" courſe of things. Plotinus obſerves, in his third Ennead, that the
" art of preſaging, is in ſome ſort the reading of natural letters de-
" noting order, and that ſo far forth as analogy obtains in the uni-
" verſe, there may be vaticination. And in reality, he that foretells
" the motions of the planets, or the effects of medicines, or the
" reſult of chemical or mechanical experiments, may be ſaid to do
" it by natural vaticination." *Ib.* p. 120, 121.

" Inſtruments, occaſions, and ſigns, occur in, or rather make up,
" the whole viſible courſe of nature." *Ib.* p. 123.

The following very remarkable paſſage from Mr. Locke ſhews clearly, that this eminent philoſopher conſidered the connexion between impulſe and motion, as a *conjunction* which we learn from experience only, and not as a conſequence deducible from the conſideration of impulſe, by any reaſoning *a priori*. The paſſage is the

more curious, that it is this particular application of Mr. Hume's doctrine, that has been generally ſuppoſed to furniſh the ſtrongeſt objection againſt it.

" Another idea we have of body, is the power of communicating " motion by impulſe; and of our ſouls, the power of exciting mo- " tion by thought. Theſe ideas, the one of body, the other of " our minds, every day's experience clearly furniſhes us with: but if " here again we inquire how this is done, we are equally in the " dark. For in the communication of motion by impulſe, wherein " as much motion is loſt to one body, as is got to the other, " which is the ordinarieſt caſe, we can have no other conception, " but of the paſſing of motion out of the one into another; " which I think is as obſcure and inconceivable, as how our minds " move or ſtop our bodies by thought, which we every moment find " they do."

——" The communication of motion by thought, which we " aſcribe to ſpirit, is as evident as that of impulſe which we aſcribe " to body. Conſtant experience makes us ſenſible of both of theſe, " though our narrow underſtandings can comprehend neither."

—— " To conclude, ſenſation convinces us, that there are " ſolid extended ſubſtances; and reflection, that there are thinking " ones: experience aſſures us of the, exiſtence of ſuch beings; and " that the one hath a power to move body by impulſe, and the " other by thought.——If we would inquire farther into their na- " ture, cauſes, and manner, we perceive not the nature of extenſion " clearer than we do of thinking. If we would explain them any " farther, one is as eaſy as the other; and there is no more diffi- " culty to conceive, how a ſubſtance we know not, ſhould by thought " ſet body into motion, than how a ſubſtance we know not, ſhould by " impulſe ſet body into motion."

LOCKE, book ii. chap. 23. § 28, 29.

It is not indeed very eaſy to reconcile the foregoing obſervations, which are, in every reſpect, worthy of the ſagacity of this excellent philoſopher, with the paſſage quoted from him in page 81 of this work.

Some of Mr. Hume's reaſonings concerning the nature of the connexions among phyſical events, coincide perfectly with thoſe of Malebranche on the ſame ſubject; but they were employed by this laſt writer to ſupport a very different concluſion.

At a ſtill earlier period, Hobbes expreſſed himſelf with reſpect to phyſical connexions, in terms ſo nearly approaching to Mr. Hume's, that it is difficult to ſuppoſe that they did not ſuggeſt to him the language which he has employed on that ſubject. "What we call "experience," (he remarks,) "is nothing elſe but remembrance of "what antecedents have been followed by what conſequents."—"No man," (he continues,) can have in his mind a conception of the "future; for the future is not yet; but of our conceptions of the "paſt we make a future, or rather call paſt, future relatively. Thus "after a man hath been accuſtomed to ſee like antecedents followed by like conſequents, whenſoever he ſeeth the like come to "paſs to any thing he had ſeen before, he looks there ſhould follow it "the ſame that followed then.—When a man hath ſo often obſerved "like antecedents to be followed by like conſequents, that whenſoever he ſeeth the antecedent, he looketh again for the conſequent, or when he ſeeth the conſequent, maketh account there hath "been the like antecedent, then he calleth both the antecedent and the "conſequent ſigns of one another." HOBBES' *Tripos.*

I am doubtful whether I ſhould not add to theſe authorities, that of Lord Bacon, who, although he has no where formally ſtated the doctrine now under conſideration, has plainly taken it for granted in all his reaſonings on the method of proſecuting philoſophical inquiries; for if we could perceive in any inſtance the manner in which a cauſe produces its effect, we ſhould be able to deduce the effect from its cauſe by reaſoning *a priori*; the impoſſibility of which he

he every where ſtrongly inculcates. " Homo naturæ miniſter et in-
" terpres tantum facit et intelligit quantum de naturæ ordine re vel
" mente obſervaverit; nec amplius ſcit aut poteſt." I acknowledge, at the ſame time, that, from the general ſcope of lord Bacon's writings, as well as from ſome particular expreſſions in them with regard to cauſes, I am inclined to believe that his metaphyſical notions on the ſubject were not very accurate, and that he was led to perceive the neceſſity of recurring to obſervation and experiment in natural philoſophy, not from a ſpeculative conſideration of our ignorance concerning neceſſary connexions, but from a conviction, founded on a review of the hiſtory of ſcience, of the inſufficiency of thoſe methods of inquiry which his predeceſſors had purſued. The notion which the ancients had formed of the object of philoſophy, (which they conceived to be the inveſtigation of efficient cauſes,) was the principal circumſtance which miſled them in their reſearches: and the erroneous opinions of Des Cartes on the ſame ſubject, fruſtrated all the efforts of his great and inventive genius, in the ſtudy of phyſics. " Perſpicuum eſt," (ſays he, in one paſſage,) " optimam philoſophandi viam nos ſequutu-
" ros, ſi ex ipſius Dei cognitione rerum ab eo creatarum cognitionem
" deducere conemur, ut ita ſcientiam perfectiſſimam quæ eſt effectuum
" per cauſas acquiramus *."

The ſtrong prejudice which has been entertained of late againſt Mr. Hume's doctrine concerning the connexion among phyſical events, in conſequence of the dangerous concluſions to which it has erroneouſly been ſuppoſed to lead, will, I hope, be a ſufficient apology for multiplying ſo many authorities in ſupport of it.

NOTE [D], page 74.

THIS language has even been adopted by philoſophers, and by atheiſts as well as theiſts. The latter have repreſented natural events as parts of a great chain, the higheſt link of which is ſupported

* There is, I believe, reaſon to doubt if Des Cartes had ever read the works of Bacon.

by the Deity. The former have pretended, that there is no abſurdity in ſuppoſing the number of links to be infinite. Mr. Hume had the merit of ſhewing clearly to philoſophers, that our common language, with reſpect to cauſe and effect, is merely analogical; and that if there be any links among phyſical events, they muſt for ever remain inviſible to us. If this part of his ſyſtem be admitted; and if, at the ſame time, we admit the authority of that principle of the mind, which leads us to refer every change to an efficient cauſe; Mr. Hume's doctrine ſeems to be more favourable to theiſm, than even the common notions upon this ſubject; as it keeps the Deity always in view, not only as the firſt, but as the conſtantly operating efficient cauſe in nature, (either immediately, or by means of ſome intelligent inſtruments,) and as the great connecting principle among all the various phenomena which we obſerve. This, accordingly, was the concluſion which Malebranche deduced from premiſes very nearly the ſame with Mr. Hume's.

NOTE [E], *page* 119.

MR. LOCKE, in his Eſſay on Human Underſtanding, has taken notice of the quickneſs with which the operations of the mind are carried on, and has referred to the acquired perceptions of ſight, as a proof of it. The ſame Author has been ſtruck with the connexion between this claſs of facts and our habitual actions; but he does not ſtate the queſtion, whether ſuch actions are voluntary or not. I think it probable, from his mode of expreſſion, that his opinion on the ſubject was the ſame with mine. The following quotation contains all the remarks I recollect in his writings, that have any connexion with the doctrines of the preſent chapter:

"We are farther to conſider, concerning perception, that the ideas "we receive by ſenſation are often, in grown people, altered by the "judgment, without our taking notice of it. When we ſet before our "eyes a round globe, of any uniform colour, *e. g.* gold, alabaſter, or "jet, it is certain that the idea thereby imprinted in our mind is "of

" of a flat circle, variouſly ſhadowed, with ſeveral degrees of light and " brightneſs coming to our eyes. But we, having by uſe been ac- " cuſtomed to perceive what kind of appearance convex bodies are " wont to make in us, and what alterations are made in the reflexions of " light by the difference of the ſenſible figure of bodies; the judgment " preſently, by a habitual cuſtom, alters the appearances into their " cauſes; ſo that, from that which truly is variety of ſhadow or colour, " collecting the figure, it makes it paſs for a mark of figure, and " frames to itſelf the perception of a convex figure, and an uniform " colour; when the idea we receive from thence is only a plane vari- " ouſly coloured; as is evident in painting." Chap. ix. § 8.

" But this is not, I think, uſually in any of our ideas but thoſe " received by ſight; becauſe ſight, the moſt comprehenſive of all our " ſenſes, conveying to our minds the ideas of light and colours, which " are peculiar only to that ſenſe, and alſo the far different ideas of ſpace, " figure, and motion, the ſeveral varieties whereof change the appear- " ances of its proper object, viz. light and colours, we bring ourſelves " by uſe to judge of the one by the other. This, in many caſes, by " a ſettled habit in things whereof we have frequent experience, is " performed ſo conſtantly, and ſo quick, that we take that for the " perception of our ſenſation, which is an idea formed by our judg- " ment; ſo that one, viz. that of ſenſation, ſerves only to excite the " other, and is ſcarce taken any notice of itſelf; as a man who reads " or hears with attention and underſtanding, takes little notice of the " characters or ſounds, but of the ideas that are excited in him by " them.

" Nor need we wonder that this is done with ſo little notice, if we " conſider how very quick the actions of the mind are performed; for " as itſelf is thought to take up no ſpace, to have no extenſion, ſo its " actions ſeem to require no time, but many of them ſeem to be " crowded into an inſtant. I ſpeak this in compariſon to the actions " of the body. Any one may eaſily obſerve this in his own thoughts,

" who

" who will take the pains to reflect on them. How, as it were in an " inſtant, do our minds, with one glance, ſee all parts of a demon- " ſtration, which may very well be called a long one, if we conſider " the time it will require to put it into words, and ſtep by ſtep ſhew " it to another? Secondly, we ſhall not be much ſurpriſed that " this is done in us with ſo little notice, if we conſider how the facility " which we get of doing things by a cuſtom of doing, makes them " often paſs in us without our notice. Habits, eſpecially ſuch as are " begun very early, come at laſt to produce actions in us, which often " eſcape our obſervation. How frequently do we in a day cover our " eyes with our eye-lids, without perceiving that we are at all in the " dark? Men that by cuſtom have got the uſe of a bye-word, do " almoſt in every ſentence pronounce ſounds, which, though taken " notice of by others, they themſelves neither hear nor obſerve; and, " therefore, it is not ſo ſtrange that our mind ſhould often change the " idea of its ſenſation into that of its judgment, and make one ſerve " only to excite the other, without our taking notice of it."

Ibid. § 9, 10.

The habit mentioned by Locke, in this paragraph, of occaſionally winking with the eye-lids, (which is not accompanied with any memory of our being, in every ſuch inſtance, in a momentary ſtate of total darkneſs,) deſerves to be added to the caſes already mentioned, to ſhew the dependence of memory upon attention.

NOTE [F], page 165.

" ——PLATONI quid idea ſit, peculiari tractatione prolixe ex- " cuſſimus *, quæ conſuli ab iis debet, qui accurate totam " rei ſeriem pernoſcere cupiunt. Nos pro præſentis inſtituti modo

* Brucker here alludes to his work, intitled, *Hiſtoria Philoſophica de Ideis*; which I have never had an opportunity of ſeeing.

" paucis

" paucis notamus, Platoni ideam non eſſe illam, quæ ex contempla-
" tione objectorum ſingularium exſurgit notionem univerſalem reique
" alicujus generalem conceptum, quem recentiores ideam vocant, ille
" εἶδη vocavit et ab idea diſtinxit. Sed ideæ ſunt illi eſſentialia rerum
" omnium ſingularium exemplaria, αὐτοουσια gaudentia, ad quorum
" naturam indolemque res ſingulares formatæ ſunt, et quæ illis veram
" certamque atque ſtabilem eſſentiam largiuntur. Has ideas ex divina
" mente oriri, inque ea radicari, ſua autem propria ſubſtantia gaudere,
" et eſſe αὐτῶς καὶ ὀντως ὀντα ſtatuit, et circa earum cognitionem verſari
" intellectum humanum, in his rerum eſſentiis ſeparatim et extra ma-
" teriam exiſtentibus cognoſcendis cardinem verti totius philoſophiæ
" aſſeruit. Ridiculum id viſum Ariſtoteli, dari extra materiam ejuſ-
" modi eſſentias univerſales, quibus res omnes ſingulares eſſentialiter
" modificarentur, rato, eſſe hæc τερετισματα et nugas otioſi ingenii;
" Platonemque ſine cauſa rationeque ſufficienti hæc ſomnia ex ſcholis
" Pythagoreorum, quæ iſtis entibus perſonabant, recepiſſe, ſuoque in-
" tuliſſe ſyſtemati. Cum autem negare non auderet, eſſe in rebus
" formas eſſentiales, has ideas, ſive formas, qua voce Platonicum no-
" men exprimere maluit, materiæ ab æterno eſſe impreſſas, et in eo
" latere affirmavit, et ita demum ex rationibus iſtis formiſque femina-
" libus, materiam eſſe formatam ſtatuit."

BRUCK. *Hiſt. Phil.* iii. p. 905.

NOTE [G], page 166.

THE Stoics, who borrowed many of their doctrines from the other ſchools of philoſophy, ſeem, in particular, to have derived their notions on this ſubject from ſome of their predeceſſors. Stilpo, who was of the Megaric ſect, is ſaid to have held opinions approaching nearly to thoſe of the nominaliſts.

" Stilpo

" Stilpo univerſalia plane ſuſtulit. Dicebat enim: qui hominem " dicat eum neminem dicere, quod non hunc vel illum ea vox ſigni- " ficet, nec huic magis, quam alteri conveniat.——Scilicet ſupponebat " Stilpo, non dari hominem in abſtracto, adeoque has ſpecies et ge- " nera rerum non natura exiſtere; cum neque in hoc neque in alio " homine, ille homo univerſalis queat oſtendi. Inductione itaque " facta, cum neque hunc, neque illum, neque alium hominem eſſe " colligeret, inferebat nullum eſſe hominem, ſicque ludendo ambigua " hominis in genere ſive abſtracto, uti logici dicunt, & in individuo " ſive ſingulari conſiderati notione, incautos exagitabat. Altiora " tamen hic latere putat P. Bayle, et non in ſolo verborum luſu ſub- " ſtitiſſe Stilponem, ſed univerſalia ſive prædicabilia negaviſſe.——— " Neque prorſus eſt diſſimile, ſuiſſe Stilponem inter eos, qui univer- " ſalia præter nuda nomina nihil eſſe dicerent, quod et cynicos feciſſe " et alios, alibi docuimus: quorum partes poſtea ſuſceperunt Abælardi " ſequaces et tota nominalium ſecta." BRUCKER, vol. i. p. 619.

NOTE [H], page 169.

" SECULO XI. Roſcelinus vel Rucelinus ſacerdos et philoſophus " Compendienſis, ab Ariſtotele ſeceſſum fecit, et in Stoicorum " caſtra ita tranſiit, ut ſtatueret, univerſalia, nec ante rem, nec in " re exiſtere, nec ullam habere realem exiſtentiam, ſed eſſe nuda no- " mina et voces, quibus rerum ſingularium genera denotentur."

BRUCKER, *Hiſt. Phil.* vol. iii. p. 906.

" Dum Porphyrius prudenter quæſtionem; an univerſalia revera ex- " iſtant, omittendam eſſe cenſet, de quâ inter Platonicos et Stoicos " mire decertari noverat, occaſionem ſuppeditavit otioſo Roſcelini in- " genio, eam novo acumine ingenii aggrediendi definiendique."

Ibid. vol. iii. p. 674.

Roſcelinus was a native of Brittany, and canon of Compiegne. He is much celebrated, even by his adverſaries, for the acuteneſs and ſubtilty

ſubtilty of his genius, which he diſplayed both in ſcholaſtical and theological controverſy. He was condemned for Tritheiſm by a council aſſembled at Soiſſons in the year 1092. (*See* MOSHEIM's *Eccleſiaſtical Hiſtory.*) It does not appear that he ever taught in Paris, or that he gave public Lectures; but he had the honour to direct the ſtudies, and to form the philoſophical opinions of Abelard, by whoſe means the innovations he had introduced into Dialectics obtained a very wide and rapid circulation. (BRUCKER, vol. iii. p. 728.) He is mentioned as an Engliſhman by Mallet, in his life of Bacon, and by other Writers; a miſtake into which they have fallen, by confounding Britain with Bretagne. Very little is known of the particulars of his life. "Primum nominalium aiunt fuiſſe," ſays Leibnitz; "*neſcio quem* Ru-"celinum Britonem." *See his Diſſertation de Stylo Philoſophico Marii Nizolii.*

The opinion of Abelard concerning Univerſals, is ſaid to have differed, in ſome reſpects, from that of his maſter. "Alius conſiſtit in vocibus," ſays John of Saliſbury, who was a ſcholar of Abelard," "licet hæc "opinio cum Roſcelino ſuo fere omnino jam evanuerit: alius ſer-"mones intuetur, et ad illos detorquet, quicquid alicubi de univerſa-"libus meminit ſcriptum. In hac autem opinione deprehenſus eſt "Peripateticus Abelardus noſter." *Metalog.* lib. ii. c. 17.

Of this difference between the doctrines of Roſcelinus and Abelard I find myſelf perfectly unable to give any account; and I am glad to find that Morhoff acknowledges his ignorance upon the ſame ſubject. "Alii fuerunt, qui univerſalia quæſiverunt, non tam in vocibus quam "in ſermonibus integris; quod Joh. Sariſberienſis adſcribit Petro Abe-"lardo; quo quid intelligat ille, mihi non ſatis liquet."

Polybiſt. tom. ii. lib. i. cap. 13. § 2.

Abſurd as theſe controverſies may now appear, ſuch was the prevailing taſte of the twelfth century, that they ſeduced the young and aſpiring mind of Abelard from all the other purſuits which Europe

then preſented to his ambition. "Ut militaris gloriæ pompam," ſays he, "cum hæreditate et prærogativa primogenitorum meorum fratri-"bus derelinquens, Martis curiæ penitus abdicarem, ut Minervæ "gremio educarer." *Hiſt. Galam. Suar.* c. 1.

Among the literary men of this period, none ſeems to have riſen to ſuch an eminent ſuperiority above his age, in the liberality of his philoſophical views, as John of Saliſbury, the celebrated friend of archbiſhop Becket. In his youth he had ſtudied at Paris under Abelard and other eminent maſters, and had applied himſelf, with diſtinguiſhed ardour and ſucceſs, to the ſubtile ſpeculations which then occupied the ſchools. After a long abſence, when his mind was enlarged by more liberal and uſeful purſuits, and by an extenſive intercourſe with the world, he had the curioſity to reviſit the ſcene of his early ſtudies, and to compare his own acquiſitions with thoſe of his old companions. The account which he gives of this viſit is ſtrikingly characteriſtical, both of the writer and of his age: "Inventi ſunt, "qui fuerant, et ubi: neque enim ad palmam viſi ſunt proceſſiſſe "ad quæſtiones priſtinas dirimendas, neque propoſitiunculam unam "adjecerant. ——————— Expertus itaque ſum, quod liquido "colligi poteſt, quia ſicut dialectica alias expedit diſciplinas, ſic, ſi "ſola fuerit, jacet exſanguis et ſterilis, &c." *Metalog.* lib. ii. cap. 10. The ſame Author, ſpeaking of the controverſy between the Nominaliſts and the Realiſts, thus expreſſes himſelf: "Quæſtionem de "generibus et ſpeciebus in qua laborans mundus jam ſenuit, in qua "plus temporis conſumptum eſt quam in acquirendo et regendo orbis "imperio conſumſerit Cæſarea domus: plus effuſum pecuniæ, quam "in omnibus divitiis ſuis poſſederit Creeſus. Hæc enim tamdiu multos "tenuit, ut cum hoc unum tota vita quærerent, tandem nec iſtud, "nec aliud invenirent."

De Nugis Curialium, lib. vii. cap. 12.

NOTE

NOTE [I], page 186.

" SECTA nominalium, omnium inter ſcholaſticas profundiſſima, et hodiernæ reformatæ philoſophandi rationi congruentiſſima; quæ quum olim maximè floreret, nunc apud ſcholaſticos quidem, extincta eſt. Unde conjicias decrementa potiùs quàm augmenta acuminis. Quum autem ipſe Nizolius noſter ſe Nominalem exſertè profiteri non dubitet prope finem capitis ſexti, libri primi; et verò in realitate formalitatum et univerſalium evertenda nervus diſputationis ejus omnis potiſſimum contineatur, pauca quædam de Nominalibus ſubjicere operæ pretium duxi. Nominales ſunt, qui omnia putant eſſe nuda nomina præter ſubſtantias ſingulares, abſtractorum igitur et univerſalium realitatem prorſus tollunt. Primum autem nominalium aiunt fuiſſe neſcio quem Rucelinum Britonem, cujus occaſione cruenta certamina in academia Pariſienſi fuerunt excitata.

" Diu autem jacuit in tenebris ſecta nominalium, donec maximi vir ingenii, et eruditionis pro illo ævo ſummæ, Wilhelmus Occam Anglus, Scoti diſcipulus, ſed mox oppugnator maximus, de improviſo eam reſuſcitavit; conſenſere Gregorius Ariminenſis, Gabr. Biel, et plerique ordinis Auguſtinianorum, unde et in Martini Lutheri ſcriptis prioribus amor nominalium ſatis elucet, donec procedente tempore erga omnes monachos æqualiter affectus eſſe cœpit. Generalis autem regula eſt, qua nominales paſſim utuntur; entia non eſſe multiplicanda præter neceſſitatem. Hæc regula ab aliis paſſim oppugnatur, quaſi injuria in divinam ubertatem, liberalem potius quam parcam, et varietate ac copia rerum gaudentem. Sed, qui ſic objiciunt, non ſatis mihi nominalium mentem cepiſſe videntur, quæ, etſi obſcurius propoſita, huc redit: hypotheſin eo eſſe meliorem, quo ſimpliciorem, et in cauſis eorum quæ apparent reddendis eum optime ſe gerere, qui

" quam pauciſſima gratis ſupponat. Nam qui alite
" naturam, aût potius autorem ejus Deum ineptæ
" accuſat. Si quis aſtronomus rationem phenomenorum
" reddere poteſt paucis ſuppoſitis, meris nimirum motibu
" cibus circularibus, ejus certé hypotheſis ejus hypotheſi præferenda
" erit, qui multis orbibus varie implexis ad explicanda cœleſtia
" indiget. Ex hac jam regula nominales deduxerunt, omnia in
" rerum natura explicari poſſe, etſi univerſalibus et formalitatibus
" realibus prorſus careatur; qua ſententia nihil verius, nihil noſtri
" temporis philoſopho dignius, uſque adeo, ut credam ipſum Oc-
" camum non fuiſſe nominaliorem, quam nunc eſt Thomas Hobbes,
" qui, ut verum fatear, mihi, pluſquam nominalis videtur. Non
" contentus enim cum nominalibus univerſalia ad nomina reducere,
" ipſam rerum veritatem ait in nominibus conſiſtere, ac, quod
" majus eſt, pendere ab arbitrio humano, quia veritas pendeat a
" definitionibus terminorum, definitiones autem terminorum ab ar-
" bitrio humano. Hæc eſt ſententia viri inter profundiſſimos ſeculi
" cenſendi, qua, ut dixi, nihil poteſt eſſe nominalius."

This paſſage from Leibnitz has given riſe to a criticiſm of Morhoff, which appears to me to be extremely ill-founded.—" Ac-
" cenſet nominalibus" (ſays he,) " Leibnitzius Thomam Hobbeſium,
" quem ille ipſo Occamo nominaliorem, et pluſquam nominalem vo-
" cat, qui non contentus cum nominalibus univerſalia ad nomina
" reducere, ipſam rerum veritatem ait in nominibus conſiſtere, ac
" quod majus eſt, pendere ab arbitrio humano. Quæ bella ejus ſententia,
" quamquam laudat eam Leibnitzius, monſtri aliquid alit, ac plane
" nequam eſt. Immania enim ex uno ſummo paradoxo fluunt
" abſurda." MORHOF. *Polyhiſtor.* vol. ii. page 81.

I ſhall not at preſent enter into a particular examination of the doctrine here aſcribed to Hobbes, which I ſhall have occaſion to conſider afterwards under the article of Reaſoning. I cannot, however, help remarking that nothing but extreme inattention to the writings

writings of Leibnitz, could have led Morhoff to ſuppoſe, that he had given his ſanction to ſuch an opinion. In the very paſſage which has now been quoted, the expreſſion (" qui ut verum fatear, " mihi plus quam nominalis videtur") plainly implies a cenſure of Hobbes's philoſophy; and in another diſſertation, intitled, *Meditationes de Cognitione, Veritate, et Ideis*, he is at pains directly to refute this part of his ſyſtem:—" Atque ita habemus quoque diſ- " crimen inter definitiones nominales, quæ notas tantum rei ab " aliis diſcernendæ continent, et reales, ex quibus conſtat rem eſſe " poſſibilem, et hac ratione ſatisfit Hobbio qui veritates volebat eſſe " arbitrarias, qui ex definitionibus nominalibus penderent, non con- " ſiderans realitatem definitionis in arbitrio non eſſe, nec quaſlibet " notiones inter ſe poſſe conjungi. Nec definitiones nominales ſuf- " ficiunt ad perfectam ſcientiam, niſi quando aliunde conſtat rem " definitam eſſe poſſibilem, &c. &c."

LEIBNITZII *Opera, Edit. Dutens*, tom. ii. p. 16, 17.

NOTE [K], page 192.

" TO form a clear notion of truth, it is very neceſſary to conſider " truth of thought, and truth of words, diſtinctly one from an- " other: but yet it is very difficult to treat of them aſunder: be- " cauſe it is unavoidable, in treating of mental propoſitions, to make " uſe of words: and then the inſtances given of mental propoſitions " ceaſe immediately to be barely mental, and become verbal. For a " mental propoſition being nothing but a bare conſideration of the " ideas, as they are in our minds ſtripped of names, they loſe the " nature of purely mental propoſitions, as ſoon as they are put into " words.

" And that which makes it yet harder to treat of mental and " verbal propoſitions ſeparately, is that moſt men, if not all, in " their thinking and reaſonings within themſelves, make uſe of words

" inſtead

" inſtead of ideas, at leaſt when the ſubject of their meditation con-
" tains in it complex ideas." LOCKE, book iv. c. 5. § 3, 4.

" ——— But to return to the conſideration of truth. We muſt,
" I ſay, obſerve two ſorts of propoſitions, that we are capable of
" making.

" Firſt, mental, wherein the ideas in our underſtandings are
" without the uſe of words put together or ſeparated by the mind,
" perceiving or judging of their agreement or diſagreement.

" Secondly, verbal propoſitions, which are words, the ſigns of
" our ideas put together or ſeparated in affirmative or negative ſen-
" tences, &c." Ibid. § 5.

" Though the examining and judging of ideas by themſelves,
" their names being quite laid aſide, be the beſt and ſureſt way to
" clear and diſtinct knowledge; yet through the prevailing cuſtom
" of uſing ſounds for ideas, I think it is very ſeldom practiſed.
" Every one may obſerve, how common it is for names to be made
" uſe of, inſtead of the ideas themſelves, even when men think
" and reaſon within their own breaſts: eſpecially if the ideas be
" very complex, and made up of a great collection of ſimple ones.
" This makes the conſideration of words and propoſitions ſo ne-
" ceſſary a part of the treatiſe of knowledge, that it is very hard
" to ſpeak intelligibly of the one, without explaining the other.

" All the knowledge we have, being only of particular or of gene-
" ral truths, it is evident that whatever may be done in the former
" of theſe, the latter can never be well made known, and is very
" ſeldom apprehended, but as conceived and expreſſed in words."
Book iv. c. 6. § 1, 2.

From theſe paſſages it appears, that Locke conceived the uſe which we make of words in carrying on our reaſonings both with reſpect to particular and to general truths, to be chiefly the effect of cuſtom; and that the employment of language, however convenient, is not eſſential to our intellectual operations. His opinion therefore did

did not coincide with that which I have aſcribed to the Nominaliſts.

On the other hand, the following paſſage ſhews clearly, how widely his opinion differed from that of the Realiſts; and indeed it would have led us to believe that it was the ſame with Berkeley's, had not the foregoing quotations contained an explicit declaration of the contrary.

" To return to general words, it is plain, by what has been ſaid, " that general and univerſal belong not to the real exiſtence of things, " but are the inventions and creatures of the underſtanding, made " by it for its own uſe, and concern only ſigns, whether words or " ideas. Words are general, as has been ſaid, when uſed for ſigns " of general ideas, and ſo are applicable indifferently to many parti- " cular things; and ideas are general, when they are ſet up as the " repreſentatives of many particular things: but univerſality belongs " not to things themſelves, which are all of them particular in their " exiſtence; even thoſe words and ideas which in their ſignification are " general. When, therefore, we quit particulars, the generals that " reſt are only creatures of our own making; their general nature be- " ing nothing but the capacity they are put into by the underſtand- " ing, of ſignifying or repreſenting many particulars. For the ſignifi- " cation they have, is nothing but a relation that by the mind of man " is added to them." Book iii. c. 3. § 11.

On the whole, it is evident, that Mr. Locke was neither completely ſatisfied with the doctrine of the Nominaliſts, nor with that of the Realiſts; and therefore I think it is with good reaſon, that Dr. Reid has claſſed him with the Conceptualiſts. Indeed, Mr. Locke has put this matter beyond all doubt himſelf; for, in explaining the manner in which we conceive univerſals, he has ſtated his opinion in the ſtrongeſt and moſt paradoxical and moſt contradictory terms. The ridicule beſtowed on this part of his philoſophy by the Author

thor of Martinus Scriblerus, although cenſured for unfairneſs by Dr. Warburton, is almoſt juſtified by ſome of his expreſſions.

NOTE [L], page 201.

IN a letter from Leibnitz to a Scotch gentleman (Mr. Burnet of Kemney) dated in the year 1697, there is the following paſſage:

" J'ay conſideré avec attention le grand ouvrage du charactere " réel, et langage philoſophique de Monſieur Wilkins. Je trouve " qu'il y a mis une infinité de belles choſes, et nous n'avons jamais " eu une table des predicamens plus accomplie. Mais l'applica- " tion pour les characteres, et pour la langue, n'eſt point conforme " à ce qu'on pouvoit et devoit faire. J'avois conſideré cette ma- " tiere avant le livre de Monſieur Wilkins, quand j'etois un jeune " homme de dix neuf ans, dans mon petit livre *de arte combinatoria*, " et mon opinion eſt que ces characteres veritablement réels & phi- " loſophiques doivent repondre a l'analyſe des penſées. Il eſt vray " que ces characteres preſuppoſent la veritable philoſophie, et ce n'eſt " que preſentement que j'oſerois entrependre de les fabriquer. Les " objections de M. Dalgarus, et de M. Wilkins, contre la methode " veritablement philoſophique ne ſont que pour excuſer l'imperfection " de leurs eſſais, et marquent ſeulement les difficultés qui les en ont " rebutés."

The letter of which this is a part was publiſhed at the end of *A Defence of Dr.* CLARKE, (which I believe is commonly aſcribed to Dr. Gregory Sharpe,) and which was printed at London in 1744. The perſon mentioned by Leibnitz under the name of *M. Dalgarus*, was evidently *George Dalgarno*, a native of Aberdeen, and author of a ſmall and very rare book, intitled, " *Ars Signorum, vulgò character univer-* " *ſalis et lingua philoſophica, qua poterunt, homines diverſiſſimorum idio-* " *matum*

" *matum, ſpatio duarum ſeptimanarum, omnia animi ſui ſenſa, (de*
" *rebus familiaribus,) non minus intelligibiliter, ſive ſcribendo, ſive*
" *loquendo, mutuo communicare, quam linguis propriis vernaculis. Præ-*
" *terea, hinc etiam poterunt juvenes, philoſophiæ principia, et veram*
" *logicæ praxin, citius et facilius multo imbibere, quam ex vulgaribus*
" *philoſophorum ſcriptis.*"

It is very remarkable that this work of Dalgarno is never (at leaſt ſo far as I recollect) mentioned by Wilkins; although it appears from a letter of Charles I. prefixed to Dalgarno's book, that Wilkins was one of the perſons who had recommended him to the royal favour.

The treatiſe *de Arte Combinatoria* is publiſhed in the ſecond volume of Dutens' edition of Leibnitz's works, but it does not appear to me to throw much light on his views with reſpect to a philoſophical language.

I muſt requeſt the indulgence of the reader for adding to the length of this note, by quoting a paſſage from another performance of Leibnitz; in which he has fallen into a train of thought remarkably ſimilar to that of Mr. Hume and Dr. Campbell, in the paſſages already quoted from them in this ſection. The performance is entitled, *Meditationes de Cognitione, Veritate, & Ideis,* and is printed in the ſecond volume of Dutens' edition.

" Plerumque autem, præſertim in analyſi longiore, non totam
" ſimul naturam rei intuemur, ſed rerum loco ſignis utimur, quorum
" explicationem in præſenti aliqua cogitatione compendii cauſa ſolemus
" prætermittere, ſcientes, aut credentes nos eam habere in poteſtate:
" ita cum chiliogonum, ſeu polygonum mille æqualium laterum
" cogito, non ſemper naturam lateris, et æqualitatis, et millenarii
" (ſeu cubi a denario) conſidero, ſed vocabulis iſtis (quorum ſenſus
" obſcure ſaltem, atque imperfecte menti obverſatur) in animo utor
" loco idearum, quas de iis habeo, quoniam memini me ſignifica-
" tionem iſtorum vocabulorum habere, explicationem autem nunc

" judico neceſſariam non eſſe; qualem cogitationem cæcam, vel etiam
" ſymbolicam appellare ſoleo, qua et in algebra, et in arithmetica
" utimur, imo fere ubique. Et certe cum notio valde compoſita
" eſt, non poſſumus omnes ingredientes eam notiones ſimul cogi-
" tare: ubi tamen hoc liçet, vel ſaltem in quantum licet, cognitio-
" nem voco intuitivam. Notionis diſtinctæ primitivæ non alia datur
" cognitio, quam intuitiva, ut compoſitarum plerumque cogitatio non
" niſi ſymbolica eſt.

" Ex his jam patet, nos eorum quoque, quæ diſtincte cogno-
" ſcimus, ideas non percipere, niſi quatenus cogitatione intuitiva
" utimur. Et ſane contingit, ut nos ſæpe falſo credamus habere in
" animo ideas rerum, cum falſo ſupponimus aliquos terminos, qui-
" bus utimur, jam a nobis fuiſſe explicatos: nec verum aut certæ
" ambiguitati obnoxium eſt, quod aiunt aliqui, non poſſe nos de re
" aliqua dicere, intelligendo quod dicimus, quin ejus habeamus ideam.
" Sæpe enim vocabula iſta ſingula utcunque intelligimus, aut nos
" antea intellexiſſe meminimus, quia tamen hac cogitatione cæca
" contenti ſumus, et reſolutionem notionum non ſatis proſequimur,
" fit ut lateat nos contradictio, quam forte notio compoſita in-
" volvit."

NOTE [M], page 222.

AS the paſſage quoted in the text is taken from a work which is but little known in this country, I ſhall ſubjoin the original.

" Qu'il me ſoit permis de préſenter à ceux qui refuſent de croire
" à ces perfectionnemens ſucceſſifs de l'eſpece humaine un exemple
" pris dans les ſciences où la marche de la vérité eſt la plus
" ſûre, où elle peut être meſurée avec plus de préciſion. Ces
" vérités élémentaires de géométrie et d'aſtronomie qui avoient été
" dans l'Inde et dans l'Egypte une doctrine occulte, ſur laquelle des
" prêtres

" prêtres ambitieux avoient fondé leur empire, étoient dans la Grece,
" au temps d'Archimede ou d'Hipparque, des connoiſſances vulgaires
" enſeignées dans les écoles communes. Dans le ſiecle dernier, il
" ſuffiſoit de quelques années d'étude pour ſavoir tout ce qu' Archi-
" mede et Hipparque avoient pu connoître; et aujourd'hui deux
" années de l'enſeignement d'un profeſſeur vont au delà de ce que
" ſavoient Leibnitz ou Newton. Qu'on médite cet exemple, qu'on
" ſaiſiſſe cette chaîne qui s'étend d'un prêtre de Memphis à Euler, et
" remplit la diſtance immenſe qui les ſépare; qu'on obſerve à chaque
" époque le génie devançant le ſiecle preſent, et la médiocrité at-
" teignant à ce qu'il avoit découvert dans celui qui précédoit, on ap-
" prendra que la nature nous a donné les moyens d'épargner le
" temps et de ménager l'attention, et qu'il n'exiſte aucune raiſon de
" croire que ces moyens puiſſent avoir un terme. On verra qu'au
" moment où une multitude de ſolutions particulieres, de faits iſolés
" commencent à épuiſer l'attention, à fatiguer la mémoire, ces
" théories diſperſées viennent ſe perdre dans une méthode générale,
" tous les faits ſe réunir dans un fait unique, et que ces généraliſations,
" ces réunions répétées n'ont, comme les multiplications ſucceſſives
" d'un nombre par lui-même, d'autre limite qu'un infini auquel il
" eſt impoſſible d'atteindre."

Sur l'Inſtruction publique, par M. CONDORCET.

NOTE [N], page 250.

IT may be proper to remark, that under the title of *Oeconomiſts*, I comprehend not merely the diſciples of *Queſnai*, but all thoſe writers in France, who, about the ſame time with him, began to ſpeculate about the natural order of political ſocieties; or, in other words, about that order which a political ſociety would of itſelf gradually aſſume, on the ſuppoſition that law had no other object than to protect completely the natural rights of individuals, and left every man at liberty to purſue his own intereſt in his own way,

as long as he abſtained from violating the rights of others. The connexion between this natural order, and the improvement of mankind has been more inſiſted on by the biographers of Turgot than by any other authors; and the imperfect hints which they have given of the views of that truly great man upon this important ſubject, leave us much room to regret that he had not leiſure to execute a work, which he appears to have long meditated, on the principles of moral and political philoſophy. *Vie de M.* TURGOT. *Partie* ii. p. 53.

It is merely for want of a more convenient expreſſion that I have diſtinguiſhed theſe different writers by the title of *Oeconomiſts*. It is in this extenſive ſenſe that the word is commonly underſtood in this country; but I am ſenſible that it is ſomewhat ambiguous, and that, without the explanation which I have given, ſome of my obſervations might have been ſuppoſed to imply a higher admiration than I really entertain of the writings of M. Queſnai, and of the affected phraſeology employed by his ſect.

The connexion between M. Turgot and M. Queſnai, and the coincidence of their opinions about the moſt eſſential principles of legiſlation, will I hope juſtify me for ranking the former with the Oeconomiſts; although his views ſeem to have been much more enlarged than thoſe of his cotemporaries; and although he expreſsly diſclaimed an implicit acquieſcence in the opinions of any particular ſect.

" M. Turgot étudia la doctrine de M. Gournay et de M. " Queſnai, en profita, ſe la rendit propre; et la combinant avec " la connoiſſance qu'il avoit du Droit, & avec les grandes vues de " légiſlation civile & criminelle qui avoit occupé ſa tête & interéſſé " ſon cœur, parvint à en former ſur le gouvernement des nations " un corps de principes à lui, embraſſant les deux autres, et plus " complet encore."

Mémoires ſur la Vie et les Ouvrages de M. TURGOT, *par M.* DUPONT, p. 40, 41.

" Il

" Il a paſſé pour avoir été attaché à pluſieurs ſectes, ou à pluſieurs " ſociétés qu'on appelait ainſi; & les amis qu'il avait dans ces ſociétés " diverſes lui reprochaient ſans ceſſe de n'être pas de leur avis; & ſans " ceſſe il leur reprochait de ſon côté de vouloir faire communauté " d'opinions, & de ſe rendre ſolidaires les uns pour les autres. Il " croyait cette marche propre à retarder les progrès mêmes de leurs " découvertes." *Ibid.* p. 41, 42.

NOTE [O], page 339.

THE foregoing obſervations on the ſtate of the mind in ſleep, and on the phenomena of dreaming, were written as far back as the year 1772; and were read (nearly in the form in which they are now publiſhed) in the year 1773, in a private literary ſociety in this univerſity. A conſiderable number of years afterwards, at a time when I was occupied with very different purſuits, I happened, in turning over an old volume of the Scots Magazine, (the volume for the year 1749,) to meet with a ſhort eſſay on the ſame ſubject, which ſurpriſed me by its very ſtriking coincidence with ſome ideas which had formerly occurred to me. I have reaſon to believe that this eſſay is very little known, as I have never ſeen it referred to by any of the numerous writers who have ſince treated of the human mind; nor have even heard it once mentioned in converſation. I had ſome time ago the ſatisfaction to learn very accidentally, that the author was Mr. Thomas Melville, a gentleman who died at the early age of 27; and whoſe ingenious obſervations on light and colours (publiſhed in the Eſſays of the Edinburgh Philoſophical Society) are well known over Europe.

The paſſages which coincide the moſt remarkably with the doctrine I have ſtated, are the following. I quote the firſt with particular pleaſure, on account of the ſupport which it gives to an opinion which I formerly propoſed in the eſſay on Conception, and on

on which I have the misfortune to differ from ſome of my friends.

" When I am walking up the High-ſtreet of Edinburgh, the ob-
" jects which ſtrike my eyes and ears give me an idea of their pre-
" ſence; and this idea is lively, full, and permanent, as ariſing from
" the continued operation of light and ſound on the organs of
" ſenſe.

" Again, when I am abſent from Edinburgh, but *conceiving* or
" *imagining* myſelf to walk up the High-ſtreet, in relating, per-
" haps, what befel me on ſuch an occaſion, I have likewiſe in my
" mind an idea of what is uſually ſeen and heard in the High-
" ſtreet; and this idea of imagination is entirely ſimilar to thoſe of
" ſenſation, though not ſo ſtrong and durable.

" In this laſt inſtance, while the imagination laſts, be it ever ſo
" ſhort, it is evident that I *think* myſelf in the ſtreet of Edinburgh,
" as truly as when I *dream* I am there, or even as when I *ſee* and *feel*
" I am there. It is true, we cannot ſo well apply the word *belief* in
" this caſe; becauſe the *perception* is not clear or ſteady, being ever
" diſturbed, and ſoon diſſipated, by the ſuperior ſtrength of intruding
" *ſenſations*; yet nothing can be more abſurd than to ſay, that a
" man may, in the ſame individual inſtant, *believe* he is in one
" place, and *imagine* he is in another. No man can demonſtrate
" that the objects of ſenſe exiſt without him; we are conſcious of
" nothing but our own ſenſations: however, by the uniformity, re-
" gularity, conſiſtency, and ſteadineſs of the impreſſion, we are
" led to believe, that they have a real and durable cauſe without us;
" and we obſerve not any thing which contradicts this opinion. But
" the ideas of imagination, being tranſient and fleeting, can beget
" no ſuch opinion, or habitual belief; though there is as much per-
" ceived in this caſe, as in the former, namely, an idea of the ob-
" ject within the mind. It will be eaſily underſtood, that all this is
" intended to obviate an objection that might be brought againſt
" the

" the ſimilarity of dreaming and imagination, from our believing in " ſleep that all is real. But there is one fact, that plainly ſets them " both on a parallel, that in ſleep we often recollect that the ſcenes " which we behold are a mere dream, in the ſame manner as a per- " ſon awake is habitually convinced that the repreſentations of his " imagination are fictitious."

—— " In this eſſay we make no inquiry into the ſtate of the " body in ſleep."

—— " If the operations of the mind in ſleep can be fairly " deduced from the ſame cauſes as its operations when awake, we " are certainly advanced one conſiderable ſtep, though the cauſes " of theſe latter ſhould be ſtill unknown. The doctrine of gravi- " tation, which is the moſt wonderful and extenſive diſcovery in the " whole compaſs of human ſcience, leaves the deſcent of heavy bodies " as great a myſtery as ever. In philoſophy, as in geometry, the " whole art of inveſtigation lies in reducing things that are difficult, " intricate, and remote, to what is ſimpler and eaſier of acceſs, by " purſuing and extending the analogies of nature."

On looking over the ſame eſſay, I find an obſervation which I ſtated as my own in page 149 of this work. " The mere imagina- " tion of a tender ſcene in a romance, or drama, will draw tears " from the eyes of thoſe who know very well, when they recollect them- " ſelves, that the whole is fictitious. In the mean time they muſt " conceive it as real; and from this ſuppoſed reality ariſes all its in- " fluence on the human mind."

NOTE [P], page 341.

DR. REID has, with great truth, obſerved, that Des Cartes' reaſonings againſt the exiſtence of the ſecondary qualities of matter, owe all their plauſibility to the ambiguity of words.—When he affirms, for example, that the ſmell of a roſe is not in the flower but in the mind,

mind, his propoſition amounts only to this, that the roſe is not conſcious of the ſenſation of ſmell: but it does not follow from Des Cartes' reaſonings, that there is no quality in the roſe which excites the ſenſation of ſmell in the mind;—which is all that any perſon means when he ſpeaks of the ſmell of that flower. For the word *ſmell*, like the names of all ſecondary qualities, ſignifies two things, a ſenſation in the mind, and the unknown quality which fits it to excite that ſenſation *. The ſame remark applies to that proceſs of reaſoning by which Des Cartes attempts to prove that there is no heat in the fire.

All this, I think, will be readily allowed with reſpect to ſmells and taſtes, and alſo with reſpect to heat and cold; concerning which I agree with Dr. Reid, in thinking that Des Cartes' doctrine, when cleared of that air of myſtery, which it derives from the ambiguity of words, differs very little, if at all, from the commonly received notions. But the caſe ſeems to me to be different with reſpect to *colours*, of the nature of which the vulgar are apt to form a very confuſed conception, which the philoſophy of Des Cartes has a tendency to correct. Dr. Reid has juſtly diſtinguiſhed the *quality* of colour from what he calls the *appearance* of colour, which laſt can only exiſt in a mind †. Now I am

* Some judicious remarks on this ambiguity in the names of ſecondary qualities are made by Malebranche:

"It is only (ſays he) ſince the time of Des Cartes, that thoſe confuſed and indeterminate queſtions, whether fire is hot, graſs green, and ſugar ſweet, philoſophers are in uſe to anſwer by diſtinguiſhing the equivocal meaning of the words expreſſing ſenſible qualities. If by heat, cold, and ſavour, you underſtand ſuch and ſuch a diſpoſition of parts, or ſome unknown motion of inſenſible particles, then fire is hot, graſs green, and ſugar ſweet. But if by heat and other qualities you underſtand what I feel by fire, what I ſee in graſs, &c. fire is not hot, nor graſs green; for the heat I feel, and the colours I ſee, are only in the ſoul."

† Dr. Akenſide, in one of his Notes on his PLEASURES of IMAGINATION, obſerves, that colours *as apprehended by the mind* do not exiſt in the body. By this qualification he plainly means to diſtinguiſh what Dr. Reid calls the appearance of colour, from colour conſidered as a quality of matter.

diſpoſed

diſpoſed to believe, that when the vulgar ſpeak of colour, they commonly mean the *appearance* of colour; or rather they aſſociate the appearance and its cauſe ſo intimately together, that they find it impoſſible to think of them ſeparately *. The ſenſation of colour never forms one ſimple object of attention to the mind like thoſe of ſmell and taſte; but every time we are conſcious of it, we perceive at the ſame time extenſion and figure. Hence it is, that we find it impoſſible to conceive colour without extenſion, though certainly there is no more neceſſary connexion between them, than between extenſion and ſmell.

From this habit of aſſociating the two together, we are led alſo to aſſign them the ſame place, and to conceive the different colours, or (to uſe Dr. Reid's language) the *appearance* of the different colours as ſomething ſpread over the ſurfaces of bodies. I own that when we reflect on the ſubject with attention, we find this conception to be indiſtinct, and ſee clearly that the appearance of colour can exiſt only in a mind: but ſtill it is ſome confuſed notion of this ſort, which every man is diſpoſed to form, who has not been very fa-

* Dr. Reid is of opinion, that the vulgar always mean to expreſs by the word *colour*, a quality, and not a ſenſation. "Colour (ſays he) differs from other ſecondary "qualities in this, that whereas the name of the quality is ſometimes given to the "ſenſation which indicates it, and is occaſioned by it, we never, as far as I can "judge, give the name of *colour* to the ſenſation, but to the quality only." This queſtion it is of no conſequence for us to diſcuſs at preſent, as Dr. Reid acknowledges in the following paſſage, that the ſenſation and quality are ſo intimately united together in the mind, that they ſeem to form only one ſimple object of thought. "When we think "or ſpeak of any particular colour, however ſimple the notion may ſeem to be, which "is preſented to the imagination, it is really in ſome ſort compounded. It involves "an unknown cauſe and a known effect. The name of *colour* belongs indeed to the "cauſe only, and not to the effect. But as the cauſe is unknown, we can form no "diſtinct conception of it, but by its relation to the known effect. And therefore "both go together in the imagination, and are ſo cloſely united that they are miſ-"taken for one ſimple object of thought."

Inquiry into the Human Mind, chap. vi. ſect. 4.

miliarly converſant with philoſophical enquiries.—I find, at leaſt, that ſuch is the notion which moſt readily preſents itſelf to my own mind.

'Nor is this reference of the ſenſation, or appearance of colour, to an external object, a fact altogether ſingular in our conſtitution. It is extremely analogous to the reference which we always make of the ſenſations of touch to thoſe parts of the body, where the exciting cauſes of the ſenſations exiſt.—If I ſtrike my hand againſt a hard object, I naturally ſay, that I feel pain in my hand. The philoſophical truth is, that I perceive the cauſe of the pain to be applied to that part of my body. The ſenſation itſelf I cannot refer *in point of place* to the hand, without conceiving the ſoul to be ſpread over the body by diffuſion.

A ſtill more ſtriking analogy to the fact under our conſideration occurs in thoſe ſenſations of touch which we refer to a place *beyond the limits of the body*; as in the caſe of pain felt in an amputated limb.—

The very intimate combination to which the foregoing obſervations on the ſenſation of colour relate, is taken notice of by d'Alembert in the *Encyclopedie*, as one of the moſt curious phenomena of the human mind.

" Il eſt très évident que le mot *couleur* ne déſigne aucune pro-
" priété du corps, mais ſeulement une modification de notre ame;
" que la blancheur, par exemple, la rougeur, &c. n'exiſtent que
" dans nous, et nullement dans le corps auſquels nous les rapportons;
" néanmoins par une habitude priſe dès notre enfance, c'eſt une
" choſe très ſinguliere et digne de l'attention des metaphyſiciens,
" que ce penchant que nous avons à rapporter à une ſub-
" ſtance matérielle et diviſible, ce qui appartient réellement
" à une ſubſtance ſpirituelle et ſimple; et rien n'eſt peut-être
" plus extraordinaire dans les operations de notre ame, que de
" la voir tranſporter hors d'elle-même et étendre, pour ainſi dire, ſes
" ſenſations

" ſenſations ſur une ſubſtance à laquelle elles ne peuvent ap-
" partenir."

From the following paſſage in Condillac's Traité des Senſations, it appears that the phenomenon here remarked by d'Alembert, was in Condillac's opinion the natural and obvious effect of an early and habitual aſſociation of ideas. I quote it with the greater pleaſure, that it contains the beſt and moſt ſtriking illuſtration which I have ſeen of the doctrine which I have been attempting to explain.

" On pourroit faire une ſuppoſition, ou l'odorat apprendroit à
" juger parfaitement des grandeurs, des figures, des ſituations et des
" diſtances. Il ſuffiroit d'un côté de ſoumettre les corpuſcules odo-
" riférans aux loix de la dioptrique, et de l'autre, de conſtruire
" l'organe de l'odorat à peu près ſur le modele de celui de la vûe;
" enſorte que les rayons odoriférans, après s'être croiſés à l'ouverture,
" frappaſſent ſur une membrane intérieure autant de points diſtincts
" qu'il y en a ſur les ſurfaces d'où ils ſeroient réfléchis.

" En pareil cas, nous contracterions bientôt l'habitude d'étendre les
" odeurs ſur les objets, et les philoſophes ne manqueroient pas de
" dire, que l'odorat n'a pas beſoin des leçons du toucher pour apper-
" cevoir des grandeurs et des figures."

Oeuvres de CONDILLAC.—*Edit. Amſt.* vol. v. page 223.

NOTE [Q], page 343.

" VERUM quidem eſt, quod hodierni muſici ſic loqui ſoleant
"—(acutum in alto reputantes et grave in imo) quodque ex
" Græcis recentioribus nonnulli ſic aliquando (ſed raro) loquuti vi-
" deantur; apud quos ſenſim inolevit mos ſic loquendi.—Sed anti-
" quiores Græci plane contrarium (grave reputantes in alto et acutum
" in imo). Quod etiam ad Boethii tempora continuatum eſt, qui
" in ſchematiſmis ſuis, grave ſemper in ſummo ponit, et acutum in
" imo."

DAVID GREGORY *in Præfat. ad edit. ſuam Euclid. Op. Oxon.* 1703.

The aſſociation to which, in modern times, we are habituated from our infancy, between the ideas of acute and high, and between thoſe of grave and low, is accounted for by Dr. Smith in his harmonics, from the formation of the voice in ſinging, which Ariſtides Quintilianus thus deſcribes: Γινεται δε ἡ μεν βαρυτης, κατωθεν αναφερομενε τε "πνευματος, ἡ δ' οξυτης επιπολης προιεμενε, &c. Et quidem gra- "vitas fit, ſi ex inferiore parte (gutturis) ſpiritus ſurſum feratur, "acumen vero, ſi per ſummam partem prorumpat;" (as Meibomius tranſlates it in his notes.) *See* SMITH's *Harmonics*, p. 3.

Dr. Beattie, in his ingenious Eſſay on Poetry and Muſic, ſays, it is probable that the deepeſt or graveſt ſound was called *ſumma* by the Romans, and the ſhrilleſt or acuteſt *ima*; and he conjectures, that "this might have been owing to the conſtruction of their inſtruments; "the ſtring that ſounded the former being perhaps higheſt in place, "and that which ſounded the latter loweſt." If this conjecture could be verified, it would afford a proof from the fact, how liable the mind is to be influenced in this reſpect by caſual combinations.

NOTE [R], page 388.

THE difference between the effects of *aſſociation* and of *imagination*, (in the ſenſe in which I employ theſe words,) in heightening the pleaſure or the pain produced on the mind by external objects, will appear from the following remarks.

1. In ſo far as the aſſociation of ideas operates in heightening pleaſure or pain, the mind is paſſive: and accordingly, where ſuch aſſociations are a ſource of inconvenience, they are ſeldom to be cured by an effort of our volition, or even by reaſoning; but by the gradual formation of contrary aſſociations. Imagination is an active exertion of the mind; and although it may often be difficult to reſtrain it, it is plainly diſtinguiſhable in theory from the aſſociations now mentioned.

2. In every caſe in which the aſſociation of ideas operates, it is implied that ſome pleaſure or pain is recalled which was felt by the mind before. I viſit, for example, a ſcene where I have been once happy; and the ſight of it affects me, on that account, with a degree of pleaſure, which I ſhould not have received from any other ſcene equally beautiful. I ſhall not inquire, whether, in ſuch caſes, the aſſociated pleaſure ariſes *immediately* upon the ſight of the object, and without the intervention of any train of thought; or whether it is produced by the recollection and conception of former occurrences which the perception recals. On neither ſuppoſition does it imply the exerciſe of that creative power of the mind to which we have given the name of Imagination. It is true, that commonly, on ſuch occaſions, imagination is buſy; and our pleaſure is much heightened by the colouring which ſhe gives to the objects of memory. But the difference between the effects which ariſe from the operation of this faculty, and thoſe which reſult from aſſociation, is not, on that account, the leſs real.

The influence of imagination on happineſs is chiefly felt by cultivated minds. That of aſſociation extends to all ranks of men, and furniſhes the chief inſtrument of education; inſomuch that whoever has the regulation of the aſſociations of another from early infancy, is, to a great degree, the arbiter of his happineſs or miſery.

Some very ingenious writers have employed the word Aſſociation in ſo extenſive a ſenſe, as to comprehend, not only imagination, but all the other faculties of the mind. Wherever the pleaſing or the painful effect of an object does not depend ſolely on the object itſelf, but ariſes either wholly or in part from ſome mental operation to which the perception of it gives riſe, the effect is referred to aſſociation. And, undoubtedly, this language may be employed with propriety, if the word Aſſociation be applied to all the ideas and feelings which may ariſe in the mind, in conſequence of the exerciſe which the ſight of the object may

give

give to the imagination, to the reaſoning powers, and to the other principles of our nature. But in this work, and particularly in the ſecond part of chap. v. I employ the word Aſſociation in a much more limited ſenſe; to expreſs the effect which an object derives from ideas, or from feelings which it does not neceſſarily ſuggeſt, but which it uniformly recals to the mind, in conſequence of early and long-continued habits.

NOTE [S], page 406.

THE following paſſage from Malebranche will be a ſufficient ſpecimen of the common theories with reſpect to memory.

" In order to give an explanation of memory, it ſhould be called to " mind, that all our different perceptions are affixed to the changes " which happen to the fibres of the principal parts of the brain, wherein " the ſoul particularly reſides.

" This ſuppoſition being laid down, the nature of the memory is " explained: for as the branches of a tree, which have continued for ſome " time bent after a particular manner, preſerve a readineſs and facility " of being bent afreſh in the ſame manner; ſo the fibres of the brain, " having once received certain impreſſions from the current of the animal ſpirits, and from the action of the objects upon them, retain " for a conſiderable time ſome facility of receiving the ſame diſpoſitions. Now the memory conſiſts only in that promptneſs or facility; " ſince a man thinks upon the ſame things, whenever the brain receives " the ſame impreſſions *."

" The moſt conſiderable differences," ſays the ſame Author in another paſſage, " that are found in one and the ſame perſon, during " his whole life, are in his infancy, in his maturity, and in his old " age. The fibres in the brain in a man's childhood are ſoft, flexible, " and delicate; a riper age dries, hardens, and corroborates them; but

* Book ii. chap. 5. (Page 54 of TAYLOR's Tranſl.)

" in

" in old age they grow altogether inflexible, groſs, and intermixed with " ſuperfluous humours, which the faint and languiſhing heat of that " age is no longer able to diſperſe: for as we ſee that the fibres which " compoſe the fleſh harden by time, and that the fleſh of a young " partridge is without diſpute more tender than that of an old one, ſo " the fibres of the brain of a child, or a young perſon, muſt be more " ſoft and delicate than thoſe of perſons more advanced in years.

" We ſhall underſtand the ground and the occaſion of theſe changes, " if we conſider that the fibres are continually agitated by the animal " ſpirits, which whirl about them in many different manners: for as " the winds parch and dry the earth by their blowing upon it, ſo " the animal ſpirits, by their perpetual agitation, render by degrees " the greateſt part of the fibres of a man's brain more dry, more cloſe, " and ſolid; ſo that perſons more ſtricken in age muſt neceſſarily have " them almoſt always more inflexible than thoſe of a leſſer ſtanding. " And as for thoſe of the ſame age, drunkards, who for many years " together have drank to exceſs either wine, or other ſuch intoxicating " liquors, muſt needs have them more ſolid and more inflexible than " thoſe who have abſtained from the uſe of ſuch kind of liquors all " their lives *."

NOTE [T], page 471.

" THOUGH Sir Iſaac's memory was much decayed in the laſt " years of his life, I found he perfectly underſtood his own " writings, contrary to what I had frequently heard in diſcourſe from " many perſons. This opinion of theirs might ariſe, perhaps, from " his not being always ready at ſpeaking on theſe ſubjects, when it " might be expected he ſhould. But as to this it may be obſerved, " that great geniuſes are frequently liable to be abſent, not only in rela-

* Book ii. chap. 6. (Page 56 of TAYLOR's Tranſl.)

" tion

" tion to common life, but with regard to ſome of the parts of ſcience " they are the beſt informed of. Inventors ſeem to treaſure up in their " minds what they have found out, after another manner than thoſe do " the ſame things, who have not this inventive faculty. The former, " when they have occaſion to produce their knowledge, are, in ſome " meaſure, obliged immediately to inveſtigate part of what they want. " For this they are not equally fit at all times; ſo it has often hap- " pened, that ſuch as retain things chiefly by a very ſtrong memory, " have appeared off-hand more expert than the diſcoverers them- " ſelves."

Preface to PEMBERTON's *View of* NEWTON's *Philoſophy.*

NOTE [U], page 515.

" GOING over the theory of virtue in one's thoughts, talking " well, and drawing fine pictures of it; this is ſo far from ne- " ceſſarily or certainly conducing to form a habit of it, in him who " thus employs himſelf, that it may harden the mind in a contrary " courſe, and render it gradually more inſenſible; i. e. form a habit " of inſenſibility to all moral obligations. For, from our very faculty " of habits, paſſive impreſſions, by being repeated, grow weaker. " Thoughts, by often paſſing through the mind, are felt leſs ſenſibly: " being accuſtomed to danger, begets intrepidity, i. e. leſſens fear; " to diſtreſs, leſſens the paſſion of pity; to inſtances of others mortality, " leſſens the ſenſible apprehenſion of our own. And from theſe two " obſervations together, that practical habits are formed and ſtrength- " ened by repeated acts, and that paſſive impreſſions grow weaker by " being repeated upon us, it muſt follow, that active habits may be " gradually forming and ſtrengthening by a courſe of acting upon ſuch " and ſuch motives and excitements, whilſt theſe motives and excite- " ments themſelves are, by proportionable degrees, growing leſs " ſenſible,

" ſenſible, i. e. are continually leſs and leſs ſenſibly felt, even as the " active habits ſtrengthen. And experience confirms this: for active " principles, at the very time they are leſs lively in perception than " they were, are found to be, ſome how, wrought more thoroughly " into the temper and character, and become more effectual in influ- " encing our practice. The three things juſt mentioned may afford " inſtances of it. Perception of danger is a natural excitement of " paſſive fear and active caution: and by being inured to danger, " habits of the latter are gradually wrought, at the ſame time that " the former gradually leſſens. Perception of diſtreſs in others is a " natural excitement paſſively to pity, and actively to relieve it: but " let a man ſet himſelf to attend to, inquire out, and relieve diſtreſſed " perſons, and he cannot but grow leſs and leſs ſenſibly affected with " the various miſeries of life with which he muſt become acquainted; " when yet, at the ſame time, benevolence, conſidered not as a " paſſion, but as a practical principle of action, will ſtrengthen: and " whilſt he paſſively compaſſionates the diſtreſſed leſs, he will acquire a " greater aptitude actively to aſſiſt and befriend them. So alſo, at " the ſame time that the daily inſtances of men's dying around us, " give us daily a leſs ſenſible paſſive feeling or apprehenſion of our own " mortality, ſuch inſtances greatly contribute to the ſtrengthening a " practical regard to it in ſerious men; i. e. to forming a habit of acting " with a conſtant view to it." BUTLER's *Analogy*, page 122. 3d edit.

THE END.

ERRATA.

Page 14, line 25, *for* are *read* ſeem to be.
40, —— 17, *for* thoſe *read* theſe.
99, —— 17, *for* theſe *read* thoſe.
132, —— 2, *for* On *read* Of.
138, —— 24, *for* theſe *read* thoſe.
150, —— *penult. for* impracticable *read* inacceſſible.
262, —— 11, *for* progreſs *read* proſpects.
317, —— 1, *for* illii pſas *read* illi ipſas.
337, —— *antepenult. dele* nearly.
342, —— 11, *for* qualities *read* quantities.
355, —— 14, *for* no leſs great *read* not leſs.
389, —— 13, *for* naught *read* nought.