THE
ANALYSIS
OF
BEAUTY.
Written with a view of fixing the fluctuating Ideas of TASTE.

BY WILLIAM HOGARTH.

So vary'd he, and of his tortuous train
Curl'd many a wanton wreath, in sight of Eve,
To lure her eye.------- Milton.

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MDCCCLIII.
PREFACE.

If a preface was ever necessary, it may very likely be thought so to the following work; the title of which (in the proposals publish'd some time since) hath much amused, and raised the expectation of the curious, though not without a mixture of doubt, that its purport could ever be satisfactorily answered. For though beauty is seen and confessed by all, yet, from the many fruitless attempts to account for the cause of its being so, enquiries on this head have almost been given up; and the subject generally thought to be a matter of too high and too delicate a nature to admit of any true or intelligible discussion. Something therefore introductory ought to be said at the presenting a work with a face so entirely new; especially as it will naturally encounter with, and perhaps may overthrow, several long received and thorough establish'd opinions: and since controversies may arise how far, and after what manner this subject hath hitherto been consider'd and treated, it will also be proper to lay before the reader, what may be gathered concerning it, from the works of the ancient and modern writers and painters.

It is no wonder this subject should have so long been thought inexplicable, since the nature of many parts of it cannot possibly come within the reach of mere men of letters; otherwise those ingenious gentle-
men who have lately published treatises upon it (and who have written much more learnedly than can be expected from one who never took up the pen before) would not so soon have been bewilder'd in their accounts of it, and obliged so suddenly to turn into the broad, and more beaten path of moral beauty; in order to extricate themselves out of the difficulties they seem to have met with in this: and withal forced for the same reasons to amuse their readers with amazing (but often misapplied) encomiums on deceased painters and their performances; wherein they are continually discoursing of effects instead of developing causes; and after many prettinesses, in very pleasing language, do fairly set you down just where they first took you up; honestly confessing that as to grace, the main point in question, they do not even pretend to know any thing of the matter. And indeed how should they? when it actually requires a practical knowledge of the whole art of painting (sculpture alone not being sufficient) and that too to some degree of eminence, in order to enable any one to pursue the chain of this enquiry through all its parts: which I hope will be made to appear in the following work.

It will then naturally be asked, why the best painters within these two centuries, who by their works appear to have excelled in grace and beauty, should have been so silent in an affair of such seeming importance to the imitative arts and their own honour? to which I answer,
PREFACE.

fwer, that it is probable, they arrived at that excellence in their works, by the mere dint of imitating with great exactness the beauties of nature, and by often copying and retaining strong ideas of graceful antique statues; which might sufficiently serve their purposes as painters, without their troubling themselves with a farther enquiry into the particular causes of the effects before them. It is not indeed a little strange, that the great Leonardo da Vinci (amongst the many philosophical precepts which he hath at random laid down in his treatise on painting) should not have given the least hint of any thing tending to a system of this kind; especially, as he was cotemporary with Michael Angelo, who is said to have discover'd a certain principle in the trunk only of an antique statue, (well known from this circumstance by the name of Michael Angelo’s Torso, or Back, fig. *) which principle gave his works a grandeur of gusto equal to the best antiques. Relative to which tradition, Lamozzo who wrote about painting at the same time, hath this remarkable passage, vol. i. book i.

"And because in this place there falleth out a certain precept of Michael Angelo much for our purpose, I will not conceal it, leaving the farther interpretation and understanding thereof to the judicious reader. It is reported then that Michael Angelo upon a time gave this observation to the Painter Marcus de Sciena his scholler; that he should alwais make a figure Pyramidall, Serpentlike, and multiplied by one

* Fig. 64, P. 1.
"two and three. In which precept (in mine opinion) the whole mysterie of the arte consisteth. For the greatest grace and life that a picture can haue, is that it expressè Motion: which the Painters call the spirite of a picture: Nowe there is no forme so fitte to expressè this motion, as that of the flame of fire, which according to Aristotle and the other Philosophers, is an elemente most active of all others: because the forme of the flame thereof is most apt for motion: for it hath a Conus or sharpe pointe wherewith it seemeth to divide the aire, that so it may ascende to his proper sphere. So that a picture having this forme will bee most beautifull." *

Many writers since Lamozzo have in the same words recommended the observing this rule also; without comprehending the meaning of it: for unless it were known systematically, the whole busines of grace could not be understood.

Du Fresnoy, in his art of painting, says "large flowing, gliding outlines which are in waves, give not only a grace to the part, but to the whole body; as we see in the Antinous, and in many other of the antique figures: a fine figure and its parts ought always to have a serpent-like and flaming form: naturally"

* See Haydocks's translation printed at Oxford, 1598.
† See Dryden's translation of his Latin poem on Painting, verse 28, and the remarks on these very lines, page 155, which run thus, "It is difficult to say what this grace of painting is, it is to be conceiv'd, and
"those sort of lines have I know not what of life and "feeming motion in them, which very much resembles "the activity of the flame and of the serpent." Now if he had understood what he had said, he could not, speaking of grace, have expressed himself in the following contradictory manner.—"But to say the truth, this "is a difficult undertaking, and a rare present, which "the artist rather receives from the hand of heaven "than from his own industry and studies .” But De Piles, in his lives of the painters, is still more contradictory, where he says, “that a painter can only have it "(meaning grace) from nature, and doth not know "that he hath it, nor in what degree, nor how he "communicates it to his works: and that grace and "beauty are two different things; beauty pleases by "the rules, and grace without them.”

All the English writers on this subject have echo’d these passages; hence Je ne saï quoi, is become a fa-

{snip}

{snip}sionable phrase for grace.

By this it is plain, that this precept which Michael Angelo deliver’d so long ago in an oracle-like manner, hath remain’d mysterious down to this time, for ought that has appear’d to the contrary. The wonder that it should do so will in some measure lessen when we come to consider that it must all along have appeared as full of "and understood much more easy than to be expressed by words; it pro-
ceeds from the illuminations of an excellent mind, (but not to be ac-
quired) by which we give a certain turn to things, which makes them "pleasing."
of contradiction as the most obscure quibble ever deliver'd at Delphos, because, winding lines are as often the cause of deformity as of grace, the solution of which, in this place, would be an anticipation of what the reader will find at large in the body of the work.

There are also strong prejudices in favour of straight lines, as constituting true beauty in the human form, where they never should appear. A middling connoisseur thinks no profile has beauty without a very straight nose, and if the forehead be continued straight with it, he thinks it is still more sublime. I have seen miserable scratches with the pen, fell at a considerable rate for only having in them a side face or two, like that between fig. 22, and fig. 105, plate 1, which was made, and any one might do the same, with the eyes shut. The common notion that a person should be straight as an arrow, and perfectly erect is of this kind. If a dancing-mastre were to see his scholar in the easy and gracefully-turned attitude of the Antinous (fig. 6, plate 1,) he would cry shame on him, and tell him he looked as crooked as a ram's horn, and bid him hold up his head as he himself did. See fig. 7, plate 1.

The painters, in like manner, by their works, seem to be no less divided upon the subject than the authors. The French, except such as have imitated the antique, or the Italian school, seem to have studiously avoided the serpentine line in all their pictures, especially Anthony Coypel, history painter, and Rigaud, principal portrait painter to Lewis the 14th. Rubens,
Raphæl, from a straight and stiff manner, on a sudden changed his taste of lines at sight of Michael Angelo's works, and the antique statues; and so fond was he of the serpentine line, that he carried it into a ridiculous excess, particularly in his draperies: though his great observance of nature suffer'd him not long to continue in this mistake.

Peter de Cortone form'd a fine manner in his draperies of this line.

We see this principle no where better understood than in some pictures of Corregio, particularly his Juno and Ixion: yet the proportions of his figures are sometimes such as might be corrected by a common sign painter.

Whilst Albert Durer, who drew mathematically, never so much as deviated into grace, which he must sometimes have done in copying the life, if he had not been fetter'd with his own impracticable rules of proportion.
But that which may have puzzled this matter most, may be, that Vandyke, one of the best portrait painters in most respects ever known, plainly appears not to have had a thought of this kind. For there seems not to be the least grace in his pictures more than what the life chanced to bring before him. There is a print of the Duchess of Wharton (fig. 52, plate 2,) engraved by Van Gunst, from a true picture by him, which is thoroughly divested of every elegance. Now, had he known this line as a principle, he could no more have drawn all the parts of this picture so contrary to it, than Mr. Addison could have wrote a whole Spectator in false grammar; unless it were done on purpose. However, on account of his other great excellencies, painters choose to stile this want of grace in his attitudes, &c. simplicity, and indeed they do often very justly merit that epithet.

Nor have the painters of the present times been less uncertain and contradictory to each other, than the masters already mentioned, whatever they may pretend to the contrary: of this I had a mind to be certain, and therefore, in the year 1745, published a frontispiece to my engraved works, in which I drew a serpentine line lying on a painter's pallet, with these words under it, the line of beauty. The bait soon took; and no Egyptian hieroglyphic ever amused more than it did for a time, painters and sculptors came to me to know the meaning
meaning of it, being as much puzzled with it as other people, till it came to have some explanation; then indeed, but not till then, some found it out to be an old acquaintance of theirs, tho' the account they could give of its properties was very near as satisfactory as that which a day-labourer who constantly uses the leaver, could give of that machine as a mechanical power.

Others, as common face painters and copiers of pictures, denied that there could be such a rule either in art or nature, and asserted it was all stuff and madness; but no wonder that these gentlemen should not be ready in comprehending a thing they have little or no business with. For though the picture copier may sometimes to a common eye seem to vye with the original he copies, the artist himself requires no more ability, genius, or knowledge of nature, than a journeyman-weaver at the goblins, who in working after a piece of painting, bit by bit, scarcely knows what he is about, whether he is weaving a man or a horse, yet at last almost insensibly turns out of his loom a fine piece of tapestry, representing, it may be, one of Alexander's battles painted by Le Brun.

As the above-mention'd print thus involved me in frequent disputes by explaining the qualities of the line, I was extremely glad to find it (which I had conceiv'd as only part of a system in my mind) so well
supported by the above precept of Michael Angelo: which was first pointed out to me by Dr. Kennedy, a learned antiquarian and connoisseur, of whom I afterwards purchased the translation, from which I have taken several passages to my purpose.

Let us now endeavour to discover what light antiquity throws upon the subject in question.

Egypt first, and afterward Greece, have manifested by their works their great skill in arts and sciences, and among the rest painting, and sculpture, all which are thought to have issued from their great schools of philosophy. Pythagoras, Socrates, and Aristotle, seem to have pointed out the right road in nature for the study of the painters and sculptors of those times (which they in all probability afterwards followed through those nicer paths that their particular professions required them to pursue) as may be reasonably collected from the answers given by Socrates to Aristippus his disciple, and Parrhasius the painter, concerning fitness, the first fundamental law in nature with regard to beauty.

I am in some measure saved the trouble of collecting an historical account of these arts among the ancients, by accidentally meeting with a preface to a tract, call'd the Beau Ideal: this treatise* was written by Lambert Hermanson Ten Kate, in French, and translated into English by James Christopher le Blon; who in that preface says, speaking of the Author, "His superior

* Publisli'd in 1732, and sold by A. Millar.
knowledge that I am now publishing, is the product
of the Analogy of the ancient Greeks; or the true
key for finding all harmonious proportions in paint-
ing, sculpture, architecture, musick, &c. brought
home to Greece by Pythagoras. For after this great
philosopher had travel'd into Phœnia, Egypt and
Chaldea, where he convers'd with the learned; he
return'd into Greece about Anno Mundi 3484. Be-
fore the christian æra 520, and brought with him
many excellent discoveries and improvements for the
good of his countrymen, among which the Analogy
was one of the most considerable and useful.
After him the Grecians, by the help of this Ana-
logy, began (and not before) to excel other nations
in sciences and arts; for whereas before this time
they represented their Divinities in plain human fi-
gures, the Grecians now began to enter into the Beau
Ideal; and Pamphilus, (who flourish'd A. M. 3641,
before the christian æra 363, who taught, that no man
could excel in painting without mathematicks) the
scholar of Paufias and master of Apelles, was the first
who artfully apply'd the said Analogy to the art of
painting; as much about the same time the sculp-
turers, the architects, &c. began to apply it to their
several arts, without which science, the Grecians had
remain'd as ignorant as their forefathers.

They
The words in this quotation "It is also an infinite variety of parts," seem at first to have some meaning in them, but it is entirely destroy'd by the rest of the paragraph, and all the other pages are filled, according to custom, with descriptions of pictures.

Now, as every one has a right to conjecture what this discovery of the ancients might be, it shall be my business to shew it was a key to the thorough knowledge of variety both in form, and movement. Shakespeare, who had the deepest penetration into nature, has sum'd up all the charms of beauty in two words, INFINITE
INFINITE VARIETY; where, speaking of Cleopatra's power over Anthony, he says,

Nor custom stale

Her infinite variety:—— Act 2. Scene 3.

It has been ever observed, that the ancients made their doctrines mysterious to the vulgar, and kept them secret from those who were not of their particular sects, and societies, by means of symbols; and hieroglyphics. Lamozzo says, chap. 29, book 1. "The Grecians in imitation of antiquity searched out the truly renowned proportion, wherein the exact perfection of most exquisite beauty and sweetness appeareth; dedicating the same in a triangular glass unto Venus the goddess of divine beauty, from whence all the beauty of inferior things is derived."

If we suppose this passage to be authentic, may we not also imagine it probable, that the symbol in the triangular glass, might be similar to the line Michael Angelo recommended; especially, if it can be proved, that the triangular form of the glass, and the serpentine line itself, are the two most expressive figures that can be thought of to signify not only beauty and grace, but the whole order of form.

There is a circumstance in the account Pliny gives of Apelles's visit to Protogenes, which strengthens this supposition. I hope I may have leave to repeat the story. Apelles having heard of the fame of Protogenes, went to
to Rhodes to pay him a visit, but not finding him at home asked for a board, on which he drew a line, telling the servant maid, that line would signify to her master who had been to see him; we are not clearly told what sort of a line it was that could so particularly signify one of the first of his profession: if it was only a stroke (tho' as fine as a hair as Pliny seems to think) it could not possibly, by any means, denote the abilities of a great painter. But if we suppose it to be a line of some extraordinary quality, such as the serpentine line will appear to be, Apelles could not have left a more satisfactory signature of the complement he had paid him. Protogenes when he came home took the hint, and drew a finer or rather more expressive line within it, to shew Apelles if he came again, that he understood his meaning. He, soon returning, was well-pleased with the answer Protogenes had left for him, by which he was convinced that fame had done him justice, and so correcting the line again, perhaps by making it more precisely elegant, he took his leave. The story thus may be reconcil'd to common sense, which, as it has been generally receiv'd, could never be understood but as a ridiculous tale.

Let us add to this, that there is scarce an Egyptian, Greek, or Roman deity, but hath a twisted serpent, twisted cornucopia, or some symbol winding in this manner to accompany it. The two small heads (over the busto
buto to the Hercules, (fig. 4, in plate r.) of the goddess His, one crowned with a globe between two horns, the other with a lily *, are of this kind. Harpocrates, the god of silence, is still more remarkably so, having a large twisted horn growing out of the side of his head, one cornucopia in his hand, and another at his feet, with his finger placed on his lips, indicating secrecy: (see Montfaucon's antiquities) and it is as remarkable, that the deities of barbarous and gothic nations never had, nor have to this day, any of these elegant forms belonging to them. How absolutely void of these turns are the pagods of China, and what a mean taste runs through most of their attempts in painting and sculpture, notwithstanding they finish with such excessive neatness; the whole nation in these matters seem to have but one eye: this mischief naturally follows from the prejudices they imbibe by copying one another's works, which the ancients seem seldom to have done.

Upon the whole, it is evident, that the ancients studied these arts very differently from the moderns: Lamozzo seems to be partly aware of this, by what he says in the division of his work, page 9, "There is a " two-folde proceeding in all artes and sciences: the " one is called the order of nature, and the other of

* The leaves of this flower as they grow, twist themselves various ways in a pleasing manner, as may be better seen by figure 43, in plate r, but there is a curious little flower called the Autumn Syclamen, fig. 47, the leaves of which elegantly twist one way only.
teaching. Nature proceedeth ordinarily, beginning
with the unperfect, as the particulars, and ending with
the perfect, as the universals. Now if in searching
out the nature of things, our understanding shall
proceed after that order, by which they are brought
forth by nature, doubtlesse it will be the most abso-
lute and ready method that can bee imagined. For
we beginne to know things by their first and imme-
diate principles, &c. and this is not only mine opi-
nion but Aristotles also," yet, mistaking Aristotle's
meaning, and absolutely deviating from his advice, he
afterwards says, "all which if we could comprehend
within our understanding, we should be most wise;
but it is impossible," and after having given some dark
reasons why he thinks so, he tells you "he resolves to
" follow the order of teaching," which all the writers
on painting have in like manner since done.
Had I observed the foregoing passage, before I un-
dertook this essay, it probably would have put me to a
stand, and deterred me from venturing upon what Le-
mozzo calls an impossible task: but observing in the
foremention'd controversies that the torrent generally
ran against me; and that several of my opponents had
turn'd my arguments into ridicule, yet were daily avail-
ing themselves of their use, and venting them even to
my face as their own; I began to wish the publication
of something on this subject; and accordingly applied
myself
myself to several of my friends, whom I thought capable of taking up the pen for me, offering to furnish them with materials by word of mouth: but finding this method not practicable, from the difficulty of one man’s expressing the ideas of another, especially on a subject which he was either unacquainted with, or was new in its kind, I was therefore reduced to an attempt of finding such words as would best answer my own ideas; being now too far engaged to drop the design. Hereupon, having digested the matter as well as I could, and thrown it into the form of a book, I submitted it to the judgment of such friends whose sincerity and abilities I could best rely on, determining on their approbation or dislike to publish or destroy it: but their favourable opinion of the manuscript being publicly known, it gave such a credit to the undertaking, as soon changed the countenances of those, who had a better opinion of my pencil, than my pen, and turn’d their sneers into expectation: especially when the same friends had kindly made me an offer of conducting the work through the press. And here I must acknowledge myself particularly indebted to one gentleman for his corrections and amendment of at least a third part of the wording. Through his absence and avocations, several sheets went to the press without any assistance, and the rest had the occasional inspection of one or two other friends. If any inaccuracies shall be found in the
the writing, I shall readily acknowledge them all my own, and am, I confess, under no great concern about them, provided the matter in general may be found useful and answerable in the application of it to truth and nature; in which material points, if the reader shall think fit to rectify any mistakes, it will give me a sensible pleasure, and be doing great honour to the work.

ADVERTISEMENT.

For the more easy finding the figures referred to in the two prints belonging to this work, the references are for the most part placed in the margin. Fig. T. p. 1. signifies the top of plate 1. L. p. 1. the left side. R. p. 1. the right side. B. p. 1. the bottom. And where a figure is referred to in the middle of either print, it is only mark'd thus, fig. p. 1. or fig. p. 2.
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**Introduction.** The use and advantage of considering solid objects as only thin shells composed of lines, like the outer-coat of an onion.

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ERRATA.

Page 15, line 25, the reference to fig. 4. p. 1. omitted.
17, line 11, for 87 read 47, and add plate 1.
27, line 5, for circumference read circularity.
31, margin line 3, the reference to fig. 16. plate 1. omitted.
31, line 11, dele T. in the margin.
44, margin line 8, for fig. 40. read fig. 41.
ditto line 22, for fig. 41. read fig. 40.
56, for then is the human body composed, read then are the muscles and bones
60, line 14, for fig. 60. read fig. 65. plate 1.
of the human body composed.
84, line 7, for as the brightest yellow, read as for example, the brightest yel-
86, line 15, for apartment read palace.
91, line 14, for spoke read spoken.
94, line 14, read succedaneum.
111, line 7, to fig. 86. read also fig. 92, and 93.
112, line 21, for the object read the light and shade.
124, line 9, after 97 read B. p. 1.
133, after line 3, read figure 115, T. p. 1. which represents three dif-
different fizes of the pupil of the eye; the leaft, was exactly taken from the eye of a large-
featur'd man, aged 105, the biggest, from one of twenty, who had this part larger
than ordinary, and the other is the common fize. If this part of the eye in the
pictures of Charles II. and James II. painted by Vandyke at Kensington, were to
be measured with a pair of compasles, and compared with their pictures painted by
Lilly when they were men, the diameters would be found in both pictures respectivly.
the fame.

Page 137, line 27, for fig. 79. read 75, and for p. 1. read p. 2.
150, line 25, for answer read answers.
INTRODUCTION.

NOW offer to the public a short essay, accompanied with two explanatory prints, in which I shall endeavour to shew what the principles are in nature, by which we are directed to call the forms of some bodies beautiful, others ugly; some graceful, and others the reverse; by considering more minutely than has hitherto been done, the nature of those lines, and their different combinations, which serve to raise in the mind the ideas of all the variety of forms imaginable. At first, perhaps, the whole design, as well as the prints, may seem rather intended to trifle and confound, than to entertain and inform: but I am persuaded that when the examples in nature, refer'd to in this essay, are duly consider'd and examined upon the principles laid down in it, it will be thought worthy of a careful and attentive perusal: and the prints themselves too will, I make no doubt, be examined as attentively, when it is found, that almost every figure in them (how odly forever they may seem to be group'd together) is refer'd to singly in the essay, in order to assist the reader's
reader's imagination, when the original examples in art, or nature, are not themselves before him.

And in this light I hope my prints will be consider'd, and that the figures refer'd to in them will never be imagined to be placed there by me as examples themselves, of beauty or grace, but only to point out to the reader what sorts of objects he is to look for and examine in nature, or in the works of the greatest masters. My figures, therefore, are to be consider'd in the same light, with those a mathematician makes with his pen, which may convey the idea of his demonstration, tho' not a line in them is either perfectly straight, or of that peculiar curvature he is treating of. Nay, so far was I from aiming at grace, that I purposely chose to be least accurate, where most beauty might be expected, that no stress might be laid on the figures to the prejudice of the work itself. For I must confess, I have but little hopes of having a favourable attention given to my design in general, by those who have already had a more fashionable introduction into the mysteries of the arts of painting, and sculpture. Much less do I expect, or in truth desire, the countenance of that set of people, who have an interest in exploding any kind of doctrine, that may teach us to see with our own eyes.

It may be needless to observe, that some of the last-mention'd, are not only the dependents on, but often the only instructors and leaders of the former; but in what
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what light they are so consider'd abroad, may be partly seen by † a burlesque representation of them, taken from a print publish'd by Mr. Pond, design'd by Cavr. Ghezzi at Rome.

To those, then, whose judgments are unprejudiced, this little work is submitted with most pleasure; because it is from such that I have hitherto received the most obligations, and now have reason to expect most candour.

Therefore I would fain have such of my readers be assured, that however they may have been aw'd, and over-born by pompous terms of art, hard names, and the parade of seemingly magnificent collections of pictures and statues; they are in a much fairer way, ladies, as well as gentlemen, of gaining a perfect knowledge of the elegant and beautiful in artificial, as well as natural forms, by considering them in a systematical, but at the same time familiar way, than those who have been possessed by dogmatic rules, taken from the performances of art only: nay, I will venture to say, sooner, and more rationally, than even a tolerable painter, who has imbibed the same prejudices.

The more prevailing the notion may be, that painters and connoisseurs are the only competent judges of things of this sort; the more it becomes necessary to clear up and confirm, as much as possible, what has only been asserted in the foregoing paragraph: that no one may be deter'd, by the want of such previous knowledge, from entering into this enquiry.

† Fig. 1.  
T p 1.
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The reason why gentlemen, who have been inquisitive after knowledge in pictures, have their eyes less qualified for our purpose, than others, is because their thoughts have been entirely and continually employ'd and incumber'd with considering and retaining the various manners in which pictures are painted, the histories, names, and characters of the masters, together with many other little circumstances belonging to the mechanical part of the art; and little or no time has been given for perfecting the ideas they ought to have in their minds, of the objects themselves in nature: for by having thus espoused and adopted their first notions from nothing but imitations, and becoming too often as bigotted to their faults, as their beauties, they at length, in a manner, totally neglect, or at least disregard the works of nature, merely because they do not tally with what their minds are so strongly preposess'd with.

Were not this a true state of the case, many a reputed capital picture, that now adorns the cabinets of the curious in all countries, would long ago have been committed to the flames: nor would it have been possible for the Venus and Cupid, represented by the figure †, to have made its way into the principal apartment of a palace.

† Under Fig. 49.

It is also evident that the painter's eye may not be a bit better fitted to receive these new impressions, who is in like manner too much captivated with the works of art; for he also is apt to pursue the shadow, and drop the
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This mistake happens chiefly to those who go to Rome for the accomplishment of their studies, as they naturally will, without the utmost care, take the infectious turn of the connoisseur, instead of the painter: and in proportion as they turn by those means bad proficients in their own arts, they become the more considerable in that of a connoisseur. As a confirmation of this seeming paradox, it has ever been observ'd at all auctions of pictures, that the very worst painters sit as the most profound judges, and are trusted only, I suppose, on account of their disinterestedness.

I apprehend a good deal of this will look more like resentment, and a design to invalidate the objections of such as are not likely to set the faults of this work in the most favourable light; than merely for the encouragement, as was said above, of such of my readers, as are neither painters, nor connoisseurs: and I will be ingenuous enough to confess something of this may be true; but, at the same time, I cannot allow that this alone would have been a sufficient motive to have made me risk giving offence to any; had not another consideration, besides that already alluded to, of more consequence to the purpose in hand, made it necessary. I mean the setting forth, in the strongest colours, the surprising alterations objects seemingly undergo through the prepossessions and prejudices contracted by the mind. Fallacies, strongly to be guarded against by such as would learn to see objects truly!

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Altho' the instances already given are pretty flagrant, yet it is certainly true, (as a farther confirmation of this, and for the consolation of those, who may be a little piqued at what has been said) that painters of every condition are stronger instances of the almost unavoidable power of prejudice, than any people whatever.

What are all the manners, as they are call'd, of even the greatest masters, which are known to differ so much from one another, and all of them from nature, but so many strong proofs of their inviolable attachment to falsehood, converted into establish'd truth in their own eyes, by self-opinion? Rubens would, in all probability, have been as much disgusted at the dry manner of Poussin, as Poussin was at the extravagant of Rubens. The prejudices of inferior proficients in favour of the imperfections of their own performances, is still more amazing.------Their eyes are so quick in discerning the faults of others, at the same time they are so totally blind to their own! Indeed it would be well for us all, if one of Gulliver's flappers could be placed at our elbows to remind us at every stroke how much prejudice and self-opinion perverts our sight.

From what has been said, I hope it appears that those, who have no bias of any kind, either from their own practice, or the lessons of others, are fittest to examine into the truth of the principles laid down in the following pages. But as every one may not have had an opportunity of being sufficiently acquainted with the instances
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instances, that have been given: I will offer one of a familiar kind, which may be a hint for their observing a thousand more. How gradually does the eye grow reconciled even to a disagreeable dress, as it becomes more and more the fashion, and how soon return to its dislike of it, when it is left off, and a new one has taken possession of the mind?—so vague is taste, when it has no solid principles for its foundation!

Notwithstanding I have told you my design of considering minutely the variety of lines, which serve to raise the ideas of bodies in the mind, and which are undoubtedly to be consider'd as drawn on the faces only of solid or opake bodies: yet the endeavouring to conceive, as accurate an idea as is possible, of the inside of those surfaces, if I may be allow'd the expression, will be a great assistance to us in the pursuit of our present enquiry.

In order to my being well understood, let every object under our consideration, be imagined to have its inward contents scoop'd out so nicely, as to have nothing of it left but a thin shell, exactly corresponding both in its inner and outer surface, to the shape of the object itself: and let us likewise suppose this thin shell to be made up of very fine threads, closely connected together, and equally perceptible, whether the eye is supposed to observe them from without, or within; and we shall find the ideas of the two surfaces of this shell will naturally coincide. The very word, shell, makes us seem to see both surfaces alike.
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The use of this conceit, as it may be call'd by some, will be seen to be very great, in the process of this work: and the oftner we think of objects in this shell-like manner, we shall facilitate and strengthen our conception of any particular part of the surface of an object we are viewing, by acquiring thereby a more perfect knowledge of the whole, to which it belongs: because the imagination will naturally enter into the vacant space within this shell, and there at once, as from a center, view the whole form within, and mark the opposite corresponding parts so strongly, as to retain the idea of the whole, and make us masters of the meaning of every view of the object, as we walk round it, and view it from without.

Thus the most perfect idea we can possibly acquire of a sphere, is by conceiving an infinite number of straight rays of equal lengths, issuing from the center, as from the eye, spreading every way alike; and circumscribed or wound about at their other extremities with close connected circular threads, or lines, forming a true spherical shell.

But in the common way of taking the view of any opake object, that part of its surface, which fronts the eye, is apt to occupy the mind alone, and the opposite, nay even every other part of it whatever, is left unthought of at that time: and the least motion we make to reconnoitre any other side of the object, confounds our first idea, for want of the connexion of the two ideas,
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ideas, which the complete knowledge of the whole would naturally have given us, if we had considered it in the other way before.

Another advantage of considering objects thus merely as shells composed of lines, is, that by these means we obtain the true and full idea of what is call’d the out-lines of a figure, which has been confin’d within too narrow limits, by taking it only from drawings on paper; for in the example of the sphere given above, every one of the imaginary circular threads has a right to be consider’d as an out-line of the sphere, as well as those which divide the half, that is seen, from that which is not seen; and if the eye be supposed to move regularly round it, these threads will each of them as regularly succeed one another in the office of out-lines, (in the narrow and limited sense of the word:) and the instant any one of these threads, during this motion of the eye, comes into sight on one side, its opposite thread is lost, and disappears on the other. He who will thus take the pains of acquiring perfect ideas of the distances, bearings, and oppositions of several material points and lines in the surfaces of even the most irregular figures, will gradually arrive at the knack of recalling them into his mind when the objects themselves are not before him: and they will be as strong and perfect as those of the most plain and regular forms, such as cubes and spheres; and will be of infinite service to those who invent and draw from fancy, as well as enable those to be more correct who draw from the life.
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In this manner, therefore, I would desire the reader to afloat his imagination as much as possible, in considering every object, as if his eye were placed within it. As straight lines are easily conceiv'd, the difficulty of following this method in the most simple and regular forms will be less than may be first imagined; and its use in the more compounded will be greater: as will be more fully shewn when we come to speak of composition.

But as fig. † may be of singular use to young designers in the study of the human form, the most complex and beautiful of all, in shewing them a mechanical way of gaining the opposite points in its surface, which never can be seen in one and the same view; it will be proper to explain the design of it in this place, as it may at the same time add some weight to what has been already said.

It represents the trunk of a figure cast in soft wax, with one wire pass'd perpendicularly through its center, another perpendicularly to the first, going in before and coming out in the middle of the back, and as many more as may be thought necessary, parallel to and at equal distances from these, and each other; as is mark'd by the several dots in the figure.---Let these wires be so loose as to be taken out at pleasure, but not before all the parts of them, which appear out of the wax, are carefully painted close up to the wax, of a different colour from those, that lie within it. By these means the
the horizontal and perpendicular contents of these parts of the body (by which I mean the distances of opposite points in the surface of these parts) through which the wires have pass’d, may be exactly known and compared with each other; and the little holes, where the wires have pierced the wax, remaining on its surface, will mark out the corresponding opposite points on the external muscles of the body; as well as assist and guide us to a readier conception of all the intervening parts. These points may be mark’d upon a marble figure with calibers properly used.

The known method, many years made use of, for the more exactly and expeditiously reducing drawings from large pictures, for engravings; or for enlarging designs, for painting ceilings and cupolas, (by striking lines perpendicular to each other, so as to make an equal number of squares on the paper design’d for the copy, that hath been first made on the original; by which means, the situation of every part of the picture is mechanically seen, and easily transferred) may truly be said to be somewhat of the same kind with what has been here proposed, but that one is done upon a flat surface, the other upon a solid; and that the new scheme differs in its application, and may be of a much more useful and extensive nature than the old one.

But it is time now to have done with the introduction: and I shall proceed to consider the fundamental principles, which are generally allowed to give
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Elegance and beauty, when duly blended together, to compositions of all kinds whatever; and point out to my readers, the particular force of each, in those compositions in nature and art, which seem most to please and entertain the eye, and give that grace and beauty, which is the subject of this enquiry. The principles I mean, are fitness, variety, uniformity, simplicity, intricacy, and quantity; all which co-operate in the production of beauty, mutually correcting and restraining each other occasionally.
It

a considerable time acquainted with it, and even begins to be pleas'd, especially after it has been not for the eye grows insensible of its want of beauty, or equally beautiful, that on all other considerations, it be the mind; on account of this kind of value in a form, the mind, on account of this kind of value in a form, either by art or nature, is first to be consider'd, as it is of the every individual thing is form'd, either by art or

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It is well known on the other hand, that forms of great elegance often disgust the eye by being improperly applied. Thus twisted columns are undoubtedly ornamental; but as they convey an idea of weakness, they always displease, when they are improperly made use of as supports to any thing that is bulky, or appears heavy.

The bulks and proportions of objects are govern'd by fitness and propriety. It is this that has establish'd the size and proportion of chairs, tables, and all sorts of utensils and furniture. It is this that has fix'd the dimensions of pillars, arches, &c. for the support of great weight, and so regulated all the orders in architecture, as well as the sizes of windows and doors, &c. Thus though a building were ever so large, the steps of the stairs, the seats in the windows must be continued of their usual heights, or they would lose their beauty with their fitness: and in ship-building the dimensions of every part are confin'd and regulated by fitness for sailing. When a vessel sails well, the sailors always call her a beauty; the two ideas have such a connexion!

The general dimensions of the parts of the human body are adapted thus to the uses they are design'd for. The trunk is the most capacious on account of the quantity of its contents, and the thigh is larger than the leg, because it has both the leg and foot to move, the leg only the foot, &c.
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Fitness of parts also constitutes and distinguishes in a great measure the characteristics of objects; as for example, the race-horse differs as much in quality, or character, from the war-horse, as to its figure, as the Hercules from the Mercury.

The race-horse, having all its parts of such dimensions as best fit the purposes of speed, acquires on that account a consistent character of one sort of beauty. To illustrate this, suppose the beautiful head and gracefully-turn’d neck of the war-horse were placed on the shoulders of the race-horse, instead of his own awkward straight one: it would disgust, and deform, instead of adding beauty; because the judgment would condemn it as unfit.

The Hercules, by Glicon +, hath all its parts finely fitted for the purposes of the utmost strength, the texture of the human form will bear. The back, breast and shoulders have huge bones, and muscles adequate to the supposed active strength of its upper parts; but as less strength was required for the lower parts, the judicious sculptor, contrary to all modern rule of enlarging every part in proportion, lessen’d the size of the muscles gradually down towards the feet; and for the same reason made the neck larger in circumference than any part of the head; otherwise the figure would have been burden’d with an unnecessary weight, which would have been a drawback from his strength, and in consequence of that, from its characteristic beauty.

These
These seeming faults, which shew the superior anatomical knowledge as well as judgment of the ancients, are not to be found in the leaden imitations of it near Hyde-park. These saturnine genius's imagin'd they knew how to correct such apparent disproportions.

These few examples may be sufficient to give an idea of what I mean, (and would have understood) by the beauty of fitness, or propriety.

CHAP. II.

Of VARIETY.

How great a share variety has in producing beauty may be seen in the ornamental part of nature.

The shapes and colours of plants, flowers, leaves, the paintings in butterflies wings, shells, &c. seem of little other intended use, than that of entertaining the eye with the pleasure of variety.

All the senses delight in it, and equally are averse to sameness. The ear is as much offended with one even continued note, as the eye is with being fix'd to a point, or to the view of a dead wall.

Yet when the eye is glutted with a succession of variety, it finds relief in a certain degree of sameness; and even plain space becomes agreeable, and properly introduced, and contrasted with variety, adds to it more variety.

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I mean here, and everywhere indeed, a composed variety; for variety uncomposed, and without design, is confusion and deformity.

Observe, that a gradual lessening is a kind of varying that gives beauty. The pyramid diminishing from its basis to its point, and the scroll or voluta, gradually lessening to its center, are beautiful forms. So also objects that only seem to do so, though in fact they do not, have equal beauty: thus perspective views, and particularly those of buildings, are always pleasing to the eye.

The little ship, between figure ⁷ and ⁸, suppos'd moving along the shore even with the eye, might have its top and bottom bounded by two lines at equal distances all the way, as A; but if the ship puts out to sea, these lines at top and bottom would seem to vary and meet each other by degrees, as B, in the point C, which is in the line where the sky and water meets, call'd the horizon. Thus much of the manner of perspectives adding beauty, by seemingly varying otherwise unvaried forms, I thought, might be acceptable to those, who have not learnt perspective.

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CHAP. III.

Of Uniformity, Regularity, or Symmetry.

It may be imagined that the greatest part of the effects of beauty results from the symmetry of parts in the object, which is beautiful: but I am very well persuaded, this prevailing notion will soon appear to have little or no foundation.

It may indeed have properties of greater consequence, such as propriety, fitness, and use; and yet but little serve the purposes of pleasing the eye, merely on the score of beauty.

We have, indeed, in our nature a love of imitation from our infancy, and the eye is often entertained, as well as surprized, with mimicry, and delighted with the exactness of counterparts: but then this always gives way to its superior love of variety, and soon grows tiresom.

If the uniformity of figures, parts, or lines were truly the chief cause of beauty, the more exactly uniform their appearances were kept, the more pleasure the eye would receive: but this is so far from being the case, that when the mind has been once satisfied, that the parts answer one another, with so exact an uniformity, as to preserve to the whole the character of fitness to stand, to move, to sink, to swim, to fly, &c. without losing the balance: the eye is rejoiced to see the object turn'd,
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turn'd, and shifted, so as to vary these uniform appearances. Thus the profile of most objects, as well as faces, are rather more pleasing than their full fronts.

Whence it is clear, the pleasure does not arise from seeing the exact resemblance, which one side bears the other, but from the knowledge that they do so on account of fitness, with design, and for use. For when the head of a fine woman is turn’d a little to one side, which takes off from the exact similarity of the two halves of the face, and somewhat reclining, so varying still more from the straight and parallel lines of a formal front face: it is always look’d upon as most pleasing. This is accordingly said to be a graceful air of the head.

It is a constant rule in composition in painting to avoid regularity. When we view a building, or any other object in life, we have it in our power, by shifting the ground, to take that view of it which pleases us best; and in consequence of this, the painter if he is left to his choice, takes it on the angle rather than in front, as most agreeable to the eye; because the regularity of the lines is taken away by their running into perspective, without losing the idea of fitness: and when he is of necessity obliged to give the front of a building, with all its equalities and parallelisms, he generally breaks (as it is term’d) such disagreeable appearances, by throwing a tree before it, or the shadow of an
imaginary cloud, or some other object that may answer the same purpose of adding variety, which is the same with taking away uniformity.

If uniform objects were agreeable, why is there such care taken to contrast, and vary all the limbs of a statue?

The picture of Henry the eighth †, would be preferable to the finely contrasted figures of Guido or Correggio; and the Antinous's easy sway ‡, must submit to the stiff and straight figure of the dancing master *; and the uniform out-lines of the muscles in the || figure taken from Albert Dürar's book of proportions, would have more taste in them than those in the famous part of an antique § figure from which Michael Angelo acquired so much of his skill in grace:

In short, whatever appears to be fit, and proper to answer great purposes, ever satisfies the mind, and pleases on that account. Uniformity is of this kind. We find it necessary, in some degree, to give the idea of rest and motion, without the possibility of falling. But when any such purposes can be as well effected by more irregular parts, the eye is always better pleased on the account of variety.

How pleasingly is the idea of firmness in standing convey'd to the eye by the three elegant claws of a table, the three feet of a tea-lamp, or the celebrated tripod of the ancients?

Thus you see regularity, uniformity, or symmetry, please only as they serve to give the idea of fitness.
CHAP. IV.

Of Simplicity, or Distinctness.

Simplicity, without variety, is wholly insipid, and at best does only not displease; but when variety is join'd to it, then it pleases, because it enhances the pleasure of variety, by giving the eye the power of enjoying it with ease.

There is no object composed of straight lines, that has so much variety, with so few parts, as the pyramid: and it is its constantly varying from its base gradually upwards, in every situation of the eye, (without giving the idea of sameness, as the eye moves round it) that has made it been esteem'd in all ages, in preference to the cone, which in all views appears nearly the same, being varied only by light and shade.

Steeples, monuments, and most compositions in painting and sculpture are kept within the form of the cone or pyramid, as the most eligible boundary on account of their simplicity and variety. For the same reason equestrian statues please more than the single figures.

The authors (for there were three concern'd in the work) of as fine a group of figures in sculpture, as ever was made, either by ancients or moderns, (I mean Laocoön and his two sons) chose to be guilty of the absurdity of making the sons of half the father's size, tho' they
they have every other mark of being design'd for men, rather than not bring their composition within the boundary of a pyramid. Thus if a judicious workman were employ'd to make a case of wood, for preserving it from the injuries of the weather, or for the convenience of carriage; he would soon find by his eye, the whole composition would readily fit and be easily pack'd up, in one of a pyramidal form.

Steeples, &c. have generally been varied from the cone, to take off from their too great simplicity, and instead of their circular bases, polygons of different, but even numbers of sides, have been substituted, I suppose for the sake of uniformity. These forms however may be said to have been chosen by the architect, with a view to the cone, as the whole compositions might be bounded by it.

Yet, in my mind, odd numbers have the advantage over the even ones, as variety is more pleasing than uniformity, where the same end is answer'd by both; as in this case, where both polygons may be circumscrib'd by the same circle, or in other words, both compositions bounded by the same cone.

And I can't help observing, that nature in all her works of fancy, if I may be allow'd the expression, where it seems immaterial whether even or odd numbers of divisions were prefer'd, most frequently employs the odd; as for example, in the indenting of leaves, flowers, blossoms, &c.
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The oval also, on account of its variety with simplicity, is as much to be prefer'd to the circle, as the triangle to the square, or the pyramid to the cube; and this figure lessen'd at one end, like the egg, thereby being more varied, is singled out by the author of all variety, to bound the features of a beautiful face.

When the oval has a little more of the cone added to it than the egg has, it becomes more distinctly a compound of those two most simple varied figures: This is the shape of the pine-apple †, which nature has particularly distinguish'd by bestowing ornaments of rich mosaic upon it, composed of contrasted serpentine lines, and the pips ‡, as the gardiners call them, are still varied by two cavities and one round eminence in each.

Could a more elegant simple form than this have been found; it is probable that judicious architect, Sir Christopher Wren, would not have chosen the pine-apples for the two terminations of the sides of the front of St. Paul's: and perhaps the globe and cross, tho' a finely varied figure, which terminates the dome, would not have had the preference of situation, if a religious motive had not been the occasion.

Thus we see simplicity gives beauty even to variety, as it makes it more easily understood, and should be ever studied in the works of art, as it serves to prevent perplexity in forms of elegance; as will be shewn in the next chapter.
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CHAP. V.

Of INTRICACY.

The active mind is ever bent to be employ'd. Pursuing is the business of our lives; and even abstracted from any other view, gives pleasure. Every arising difficulty, that for a while attends and interrupts the pursuit, gives a sort of spring to the mind, enhances the pleasure, and makes what would else be toil and labour, become sport and recreation.

Wherein would consist the joys of hunting, shooting, fishing, and many other favourite diversions, without the frequent turns and difficulties, and disappointments, that are daily met with in the pursuit?—how joyless does the sportsman return when the hare has not had fair play? how lively, and in spirits, even when an old cunning one has baffled, and out-run the dogs!

This love of pursuit, merely as pursuit, is implanted in our natures, and design'd, no doubt, for necessary, and useful purposes. Animals have it evidently by instinct. The hound dislikes the game he so eagerly pursues; and even cats will risk the losing of their prey to chase it over again. It is a pleasing labour of the mind to solve the most difficult problems; allegories and riddles, trifling as they are, afford the mind amusement: and with what delight does it follow the well-connected thread of a play, or novel, which ever increases,
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creases as the plot thickens; and ends most pleas’d, when that is most distinctly unravell’d?

The eye hath this sort of enjoyment in winding walks, and serpentine rivers, and all sorts of objects, whose forms, as we shall see hereafter, are composed principally of what, I call, the waving and serpentine lines.

Intricacy in form, therefore, I shall define to be that peculiarity in the lines, which compose it, that leads the eye a wanton kind of chase, and from the pleasure that gives the mind, intitles it to the name of beautiful: and it may be justly said, that the cause of the idea of grace more immediately resides in this principle, than in the other five, except variety; which indeed includes this, and all the others.

That this observation may appear to have a real foundation in nature, every help will be requir’d, which the reader himself can call to his assistance, as well as what will here be suggested to him.

To set this matter in somewhat a clearer light, the familiar instance of a common jack, with a circular fly, may serve our purpose better than a more elegant form: preparatory to which, let the figure be consider’d, which represents the eye, at a common reading distance viewing a row of letters, but fix’d with most attention to the middle letter A.

Now as we read, a ray may be supposed to be drawn from the center of the eye to that letter it looks at first, E  

† Fig. 14. T p 1.
and to move successively with it from letter to letter, the whole length of the line: but if the eye stops at any particular letter, A, to observe it more than the rest, these other letters will grow more and more imperfect to the sight, the farther they are situated on either side of A, as is express'd in the figure: and when we endeavour to see all the letters in a line equally perfect at one view, as it were, this imaginary ray must course it to and fro with great celerity. Thus though the eye, strictly speaking, can only pay due attention to these letters in succession, yet the amazing ease and swiftness, with which it performs this task, enables us to see considerable spaces with sufficient satisfaction at one sudden view.

Hence, we shall always suppose some such principal ray moving along with the eye, and tracing out the parts of every form, we mean to examine in the most perfect manner: and when we would follow with exactness the course any body takes, that is in motion, this ray is always to be supposed to move with the body.

In this manner of attending to forms, they will be found whether at rest, or in motion, to give movement to this imaginary ray; or, more properly speaking, to the eye itself, affecting it thereby more or less pleasingly, according to their different shapes and motions. Thus, for example, in the instance of the jack, whether the eye (with this imaginary ray) moves slowly down the line,
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line, to which the weight is fix'd, or attends to the slow motion of the weight itself, the mind is equally fa-
tigu'd: and whether it swiftly courses round the circu-
lar rim of the flyer, when the jack stands; or nimbly follows one point in its circumference whilst it is whir-
ing about, we are almost equally made giddy by it.

But our sensation differs much from either of these un-
pleasant ones, when we observe the curling worm, into which the worm-wheel is fixt †: for this is always pleasing, either at rest or in motion, and whether that motion is slow or quick.

That it is accounted so, when it is at rest, appears by the ribbon, twisted round a stick (represented on one side of this figure) which has been a long-establish'd ornament in the carvings of frames, chimney-pieces, and door-cases; and call'd by the carvers, the stick and ribbon ornament: and when the stick, through the middle is omitted, it is call'd the ribbon edge; both to be seen in almost every house of fashion.

But the pleasure it gives the eye is still more lively when in motion. I never can forget my frequent strong attention to it, when I was very young, and that its beguiling movement gave me the same kind of sensation then, which I since have felt at seeing a country-dance; tho' perhaps the latter might be somewhat more engaging; particularly when my eye eagerly pursu'd a favourite dancer, through all the windings of the figure, who then was bewitching to the sight, as the imaginary
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ray, we were speaking of, was dancing with her all the time.

This single example might be sufficient to explain what I mean by the beauty of a composed intricacy of form; and how it may be said, with propriety, to lead the eye a kind of chase.

But the hair of the head is another very obvious instance, which, being design'd chiefly as an ornament, proves more or less so, according to the form it naturally takes, or is put into by art. The most amiable in itself is the flowing curl; and the many waving and contrasted turns of naturally intermingling locks ravish the eye with the pleasure of the pursuit, especially when they are put in motion by a gentle breeze. The poet knows it, as well as the painter, and has described the wanton ringlets waving in the wind.

And yet to shew how excess ought to be avoided in intricacy, as well as in every other principle, the very same head of hair, wisp'd, and matted together, would make the most disagreeable figure; because the eye would be perplex'd, and at a fault, and unable to trace such a confused number of uncomposed and entangled lines; and yet notwithstanding this, the present fashion the ladies have gone into, of wearing a part of the hair of their heads braided together from behind, like intertwisted serpents, arising thickest from the bottom, lessening as it is brought forward, and naturally conforming
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forming to the shape of the rest of the hair it is pin'd over, is extremely picturesque. Their thus interlacing the hair in distinct varied quantities is an artful way of preserving as much of intricacy, as is beautiful.

C H A P. VI.

Of QUANTITY.

FORMS of magnitude, although ill-shaped, will however, on account of their vastness, draw our attention and raise our admiration.

Huge shapeless rocks have a pleasing kind of horror in them, and the wide ocean awes us with its vast contents; but when forms of beauty are presented to the eye in large quantities, the pleasure increases on the mind, and horror is soften'd into reverence.

How solemn and pleasing are groves of high grown trees, great churches, and palaces? has not even a single spreading oak, grown to maturity, acquir'd the character of the venerable oak?

Windsor castle is a noble instance of the effect of quantity. The hugeness of its few distinct parts strikes the eye with uncommon grandeur at a distance, as well as nigh. It is quantity, with simplicity, which makes it one of the finest objects in the kingdom, tho' void of any regular order of architecture.

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The Façade of the old Louvre at Paris is also remarkable for its quantity. This fragment is allow'd to be the finest piece of building in France, tho' there are many equal, if not superior, to it in all other respects, except that of quantity.

Who does not feel a pleasure when he pictures in his mind the immense buildings which once adorn'd the lower Egypt, by imagining the whole complete, and ornamented with colossal statues?

Elephants and whales please us with their unwieldy greatness. Even large personages, merely for being so, command respect: nay, quantity is an addition to the person which often supplies a deficiency in his figure.

The robes of state are always made large and full, because they give a grandeur of appearance, suitable to the offices of the greatest distinction. The judge's robes have an awful dignity given them by the quantity of their contents, and when the train is held up, there is a noble waving line descending from the shoulders of the judge to the hand of his train-bearer. So when the train is gently thrown aside, it generally falls into a great variety of folds, which again employ the eye, and fix its attention.

The grandeur of the Eastern dress, which so far surpasses the European, depends as much on quantity as on costliness.

In a word, it is quantity which adds greatness to grace. But then excess is to be avoided, or quantity will become clumsy, heavy, or ridiculous.
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The full-bottom wig, like the lion's mane, hath something noble in it, and adds not only dignity, but sagacity to the countenance: but were it to be worn as large again, it would become a burlesque; or was an improper person to put it on, it would then too be ridiculous.

When improper, or incompatible excesses meet, they always excite laughter; more especially when the forms of those excesses are inelegant, that is, when they are composed of unvaried lines.

For example, the figure refer'd to in the margin †, represents a fat grown face of a man, with an infant's cap on, and the rest of the child's dress stuff'd, and so well placed under his chin, as to seem to belong to that face. This is a contrivance I have seen at Bartholomew-fair, and always occasion'd a roar of laughter. The next ‡ is of the same kind, a child with a man's wig and cap on. In these, you see the ideas of youth and age jumbled together, in forms without beauty.

So a Roman general *, dress'd by a modern tailor and peruke-maker, for tragedy, is a comic figure.----The dresses of the times are mix'd, and the lines which compose them are straight or only round.

Dancing-masters, representing deities, in their grand ballets on the stage, are no less ridiculous. See the Jupiter §.

Nevertheless, custom and fashion will, in length of time, reconcile almost every absurdity whatever, to the eye, or make it over-look'd.

† Fig. 17. Kp 1.
‡ Fig. 18. Kp 1.
* Fig. 19. Kp 1.
§ Fig. 20. Kp 1.
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It is from the same joining of opposite ideas that makes us laugh at the owl and the afs, for under their awkward forms, they seem to be gravely musing and meditating, as if they had the sense of human beings.

A monkey too whose figure, as well as most of his actions, so oddly resembles the human, is also very comical; and he becomes more so when a coat is put on him, as he then becomes a greater burlesque on the man.

There is something extremely odd and comical in the rough shock dog. The ideas here connected are the inelegant and inanimate figure of a thrum mop, or muff, and that of a sensible, friendly animal; which is as much a burlesque of the dog, as the monkey when his coat is on, is of the man.

What can it be but this inelegance of the figure, join'd with impropriety, that makes a whole audience burst into laughter, when they see the miller's sack, in Dr. Faustus, jumping cross the stage? was a well-shap'd vase to do the same, it would equally surprize, but not make every body laugh, because the elegance of the form would prevent it.

For when the forms, thus join'd together, are each of them elegant, and composed of agreeable lines, they will be so far from making us laugh, that they will become entertaining to the imagination, as well as pleasing to the eye. The sphinx and siren have been admired and accounted ornamental in all ages. The former
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former represents strength and beauty join'd; the latter, beauty and swiftness, in pleasing and graceful forms.

The griffin, a modern hieroglyphic, signifying strength and swiftness, united in the two noble forms of the lion and eagle, is a grand object. So the antique centaur hath a savage greatness as well as beauty.

These may be said to be monsters, it's true, but then they convey such noble ideas, and have such elegance in their forms as greatly compensates for their being unnaturally join'd together.

I shall mention but one more instance of this sort, and that the most extraordinary of all, which is an infant's head of about two years old, with a pair of duck's wings placed under its chin, supposed always to be flying about, and singing psalms†.

A painter's representation of heaven would be nothing without swarms of these little inconsistent objects, flying about, or perching on the clouds; and yet there is something so agreeable in their form, that the eye is reconciled and overlooks the absurdity, and we find them in the carving and painting of almost every church. St. Paul's is full of them.

As the foregoing principles are the very ground work of what is to follow; we will, in order to make them the more familiar to us, just speak of them in the way they are daily put in practice, and may be seen, in every dress

† Fig. 22.
dresses that is worn; and we shall find not only that ladies of fashion, but that women of every rank, who are said to dress prettily, have known their force, without considering them as principles.

Fitness is first considered by them, as knowing that their dresses should be useful, commodious, and fitted to their different ages; or rich, airy, and loose, agreeable to the character they would give out to the public by their dress.

II. Uniformity is chiefly complied with in dress on account of fitness, and seems to be extended not much farther than dressing both arms alike, and having the shoes of the same colour. For when any part of dress has not the excuse of fitness or propriety for its uniformity of parts, the ladies always call it formal.

For which reason, when they are at liberty to make what shapes they please in ornamenting their persons, those of the best taste choose the irregular as the more engaging; for example, no two patches are ever chosen of the same size; or placed at the same height; nor a single one in the middle of a feature, unless it be to hide a blemish. So a single feather, flower, or jewel is generally placed on one side of the head; or if ever put in front, it is turn'd awry to avoid formality.

It was once the fashion to have two curls of equal size, stuck at the same height close upon the forehead, which pro-
probably took its rise from seeing the pretty effect of curls falling loosely over the face.

A lock of hair falling thus cross the temples, and by that means breaking the regularity of the oval, has an effect too alluring to be strictly decent, as is very well known to the loose and lowest class of women: but being pair'd in so stiff a manner, as they formerly were, they lost the desired effect, and ill deserv'd the name of favourites.

III. Variety in dress, both as to colour and form, is the constant study of the young and gay—- But then,

IV. That taudrines may not destroy the proper effect of variety, simplicity is call'd in to restrain its superfluities, and is often very artfully made use of to set native beauty off to more advantage. I have not known any set of people, that have more excell'd in this principle of simplicity, or plainness, than the Quakers.

V. Quantity, or fulness in dress has ever been a darling principle; so that sometimes those parts of dress, which would properly admit of being extended to a great degree, have been carried into such strange excesses, that in the reign of Queen Elizabeth a law was made to put a stop to the growth of ruffs: nor is the enormous size of the hoops at present, a less sufficient proof of the extra-
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ordinary love of quantity in dress, beyond that of convenience or elegance.

VI. The beauty of intricacy lies in contriving winding shapes, such as the antique lappets belonging to the head of the sphinx *, or as the modern lappet when it is brought before. Every part of dress, that will admit of the application of this principle, has an air (as it is term'd) given to it thereby; and altho' it requires dexterity and a taste to execute these windings well, we find them daily practised with success.

This principle also recommends modesty in dress, to keep up our expectations, and not suffer them to be too soon gratified. Therefore the body and limbs should all be cover'd, and little more than certain hints be given of them thro' the cloathing.

The face indeed will bear a constant view, yet always entertain and keep our curiosity awake, without the assistance either of a mask, or veil; because vast variety of changing circumstances keeps the eye and the mind in constant play, in following the numberless turns of expression it is capable of. How soon does a face that wants expression, grow insipid, tho' it be ever so pretty?

The rest of the body, not having these advantages in common with the face, would soon satiate the eye, were it to be as constantly exposed, nor would it have more effect than a marble statue. But when it is artfully cloath'd and decorated, the mind at every turn resumes...
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its imaginary pursuits concerning it. Thus, if I may be allow'd a simile, the angler chooses not to see the fish he angles for, until it is fairly caught.

CHAP. VII.

Of LINES.

It may be remember'd that in the introduction, the reader is desired to consider the surfaces of objects as so many shells of lines, closely connected together, which idea of them it will now be proper to call to mind, for the better comprehending not only this, but all the following chapters on composition.

The constant use made of lines by mathematicians, as well as painters, in describing things upon paper, hath establish'd a conception of them, as if actually existing on the real forms themselves. This likewise we suppose, and shall set out with saying in general--That the straight line, and the circular line, together with their different combinations, and variations, &c. bound, and circumscribe all visible objects whatsoever, thereby producing such endless variety of forms, as lays us under the necessity of dividing, and distinguishing them into general classes; leaving the intervening mixtures of appearances to the reader's own farther observation.

First, * objects composed of straight lines only, as the cube, or of circular lines, as the sphere, or of both together, as cylinders and cones, &c.

Secondly,
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3.8

Secondly, † those composed of straight lines, circular lines, and of lines partly straight, and partly circular, as the capitals of columns, and vases, &c.

Thirdly, ‡ those composed of all the former together with an addition of the waving line, which is a line more productive of beauty than any of the former, as in flowers, and other forms of the ornamental kind: for which reason we shall call it the line of beauty.

Fourthly, † those composed of all the former together with the serpentine line, as the human form, which line hath the power of super-adding grace to beauty. Note, forms of most grace have least of the straight line in them.

It is to be observed, that straight lines vary only in length, and therefore are least ornamental.

That curved lines as they can be varied in their degrees of curvature as well as in their lengths, begin on that account to be ornamental.

That straight and curv'd lines join'd, being a compound line, vary more than curves alone, and so become somewhat more ornamental.

That the waving line, or line of beauty, varying still more, being composed of two curves contrasted, becomes still more ornamental and pleasing, insomuch that the hand takes a lively movement in making it with pen or pencil.

And that the serpentine line, by its waving and winding at the same time different ways, leads the eye in a pleasing
pleasing manner along the continuity of its variety, if I may be allowed the expression; and which by its twisting so many different ways, may be said to inclose (tho' but a single line) varied contents; and therefore all its variety cannot be express'd on paper by one continued line, without the assistance of the imagination, or the help of a figure; see * where that sort of proportion'd, winding line, which will hereafter be call'd the precise serpentine line, or line of grace, is represent'd by a fine wire, properly twisted round the elegant and varied figure of a cone.

CHAP. VIII.

Of what sort of Parts, and how pleasing Forms are composed.

Thus far having endeavoured to open as large an idea as possible of the power of variety, by having partly shewn that those lines which have most variety in themselves, contribute most towards the production of beauty; we will next shew how lines may be put together, so as to make pleasing figures or compositions.

In order to be as clear as possible, we will give a few examples of the most familiar and easy sort, and let them serve as a clue to be pursued in the imagination: I say in the imagination chiefly, for the following method is not meant always to be put in practice, or follow'd in every case, for indeed that could hardly be, and
and in some it would be ridiculously losing time if it could—Yet there may be cases where it may be necessary to follow this method minutely; as for example, in architecture.

I am thoroughly convinc'd in myself, however it may startle some, that a completely new and harmonious order of architecture in all its parts, might be produced by the following method of composing, but hardly with certainty without it; and this I am the more apt to believe, as upon the strictest examination, those four orders of the ancients, which are so well established for beauty and true proportion, perfectly agree with the scheme we shall now lay down.

This way of composing pleasing forms, is to be accomplished by making choice of variety of lines, as to their shapes and dimensions; and then again by varying their situations with each other, by all the different ways that can be conceived: and at the same time (if a solid figure be the subject of the composition) the contents or space that is to be inclosed within those lines, must be duly consider'd and vary'd too, as much as possible, with propriety. In a word, it may be said, the art of composing well is the art of varying well. It is not expected that this should at first be perfectly comprehended, yet I believe it will be made sufficiently clear by the help of the examples following.

The figure †, represents the simple and pleasing figure of a bell; this shell, as we may call it, is composed of waving
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waving lines, encompassing, or bounding within it, the varied space marked with dotted lines: here you see the variety of the space within is equal to the beauty of its form without; and if the space, or contents, were to be more varied, the outward form would have still more beauty.

As a proof, see a composition of more parts, and a way by which those parts may be put together by a certain method of varying: i.e. how the one half of the socket of the candlestick A*, may be varied as the other half B. Let a convenient and fit height be first given for a candlestick, as †; then let the necessary size of the socket be determined, as at (a) ‡ after which, in order to give it a better form, let every distance or length of divisions differ from the length of the socket, as also vary in their distances from each other, as is seen by the points on the line under the socket (a); that is let any two points, signifying distance, be plac’d farthest from any other two near points, observing always that there should be one distance or part larger than all the rest; and you will readily see that variety could not be so complete without it.--In like manner, let the horizontal distances (always keeping within the bounds of fitness) be varied both as to distances and situations, as on the opposite side of the same figure (b); then unite and join all the several distances into a complete shell, by applying several parts of curves and straight lines; varying them also by making them of different sizes, as (c): and apply them as at (d) in the same figure, and you have the

* Fig. 30.
† Fig. 31.
‡ Fig. 32.
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* Fig. 35. T. p. 1.

the candlestick *, and with still more variations on the other side. If you divide the candlestick into many more parts, it will appear crowded, as + it will want distinctness of form on a near view, and lose the effect of variety at a distance: this the eye will easily distinguish on removing pretty far from it.

Simplicity in composition, or distinctness of parts, is ever to be attended to, as it is one part of beauty, as has been already said: but that what I mean by distinctness of parts in this place, may be better understood, it will be proper to explain it by an example.

When you would compose an object of a great variety of parts, let several of those parts be distinguish’d by themselves, by their remarkable difference from the next adjoining, so as to make each of them, as it were, one well-shap’d quantity or part, as is marked by the dotted lines in figure ‡ (these are like what they call passages in music, and in writing paragraphs) by which means, not only the whole, but even every part, will be better understood by the eye: for confusion will hereby be avoided when the object is seen near, and the shapes will seem well varied, tho’ fewer in number, at a distance; as figure † supposed to be the same as the former, but removed so far off that the eye loses sight of the smaller members.

‡ Fig. 35. T. p. 1.

§ Fig. 37. T. p. 1.

The parsley-leaf §, in like manner, from whence a beautiful foliage in ornament was originally taken, is divided into three distinct passages; which are again divided into
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into other odd numbers; and this method is observ'd, for the generality, in the leaves of all plants and flowers; the most simple of which are the trefoil and cinquefoil. Light and shade, and colours, also must have their distinctness to make objects completely beautiful; but of these in their proper places—only I will give you a general idea of what is here meant by the beauty of distinctness of forms, lights, shades, and colours, by putting you in mind of the reverse effects in all them together.

Observe the well-composed nosegay how it loses all its distinctness when it dies; each leaf and flower then shrivels and loses its distinct shape; and the firm colours fade into a kind of sameness: so that the whole gradually becomes a confused heap.

If the general parts of objects are preserv'd large at first, they will always admit of farther enrichments of a small kind, but then they must be so small as not to confound the general masses or quantities.—thus you see variety is a check upon itself when overdone, which of course begets what is call'd a petit taste and a confusion to the eye.

It will not be amiss next to shew what effects an object or two will have that are put together without, or contrary to these rules of composing variety. Figure *, is taken from one of those branches fixt to the sides of common old-fashion'd stove-grates by way of ornament, wherein you see how the parts have been varied by fancy

* Fig. 38. L. p. 1.
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Fancy only, and yet pretty well: close to which is another, with about the like number of parts; but as the shapes, neither are enough varied as to their contents, nor in their situations with each other, but one shape follows its exact likeness: it is therefore a disagreeable and tasteless figure, and for the same reason the candlestick, fig. † is still worse, as there is less variety in it. Nay, it would be better to be quite plain, as figure ‡, than with such poor attempts at ornament.

These few examples, well understood, will, I imagine, be sufficient to put what was said at the beginning of this chapter out of all doubt, viz. that the art of composing well is no more than the art of varying well; and to shew, that the method which has been here explain'd, must consequently produce a pleasing proportion amongst the parts; as well as that all deviations from it will produce the contrary. Yet to strengthen this latter assertion, let the following figures, taken from the life, be examin'd by the above rules for composing, and it will be found that the Indian-fig or torch-thistle, figure †, as well as all that tribe of uncouth shaped exotics, have the same reasons for being ugly, as the candlestick, fig. 40; as also that the beauties of the Lily § and the calcidonian Iris † proceed from their being composed with great variety, and that the loss of variety, to a certain degree, in the imitations of those flowers underneath them (fig. 45 and 46) is the cause of the meanness of their shapes, tho' they retain enough to be call'd by the same names.

Hitherto
Hitherto, with regard to composition, little else but forms made up of straight and curv'd lines have been spoken of, and though these lines have but little variety in themselves, yet by reason of the great diversifications that they are capable of in being join'd with one another; great variety of beauty of the more useful sort is produced by them, as in necessary utensils and building: but in my opinion, buildings as I before hinted, might be much more varied than they are, for after fitness hath been strictly and mechanically complied with, any additional ornamental members, or parts, may, by the foregoing rules, be varied with equal elegance; nor can I help thinking, but that churches, palaces, hospitals, prisons, common houses and summer houses, might be built more in distinct characters than they are, by contriving orders suitable to each; whereas were a modern architect to build a palace in Lapland, or the West-Indies, Paladio must be his guide, nor would he dare to stir a step without his book.

Have not many gothic buildings a great deal of consistent beauty in them? perhaps acquired by a series of improvements made from time to time by the natural persuasion of the eye, which often very near answers the end of working by principles; and sometimes begets them. There is at present such a thirst after variety, that even paltry imitations of Chinese buildings have a kind of vogue, chiefly on account of their novelty: but not only these, but any other new-invented characters of building
building might be regulated by proper principles. The
mere ornaments of buildings, to be sure, at least might
be allow'd a greater latitude than they are at present;
as capitals, frizes, &c. in order to increase the beauty
of variety.

Nature, in shells and flowers, &c. affords an infinite
choice of elegant hints for this purpose; as the original
of the Corinthian capital was taken from nothing more,
as is said, than some dock-leaves growing up against a
basket. Even a capital composed of the awkward and
confin'd forms of hats and periwigs, as fig. + in a
skilful hand might be made to have some beauty.

However, tho' the moderns have not made many
additions to the art of building, with respect to mere
beauty or ornament, yet it must be confess'd, they have
carried simplicity, convenience, and neatness of work-
manship, to a very great degree of perfection, particu-
larly in England; where plain good sense hath prefer'd
these more necessary parts of beauty, which every body
can understand, to that richness of taste which is so
much to be seen in other countries, and so often sub-
stituted in their room.

St. Paul's cathedral is one of the noblest instances
that can be produced of the most judicious application
of every principle that has been spoken of. There you
may see the utmost variety without confusion, simplic-
city without nakedness, richness without taudrines, dis-
tinctness without hardness, and quantity without ex-
ceed.
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Whence the eye is entertain'd throughout with the charming variety of all its parts together; the noble projecting quantity of a certain number of them, which presents bold and distinct parts at a distance, when the lesser parts within them disappear; and the grand few, but remarkably well-varied parts that continue to please the eye as long as the object is discernable, are evident proofs of the superior skill of Sir Christopher Wren, so justly esteem'd the prince of architects.

It will scarcely admit of a dispute, that the outside of this building is much more perfect than that of St. Peter's at Rome: but the inside, though as fine and noble, as the space it stands on, and our religion will allow of, must give way to the splendor, shew, and magnificence of that of St. Peter's, on account of the sculptures and paintings, as well as the greater magnitude of the whole, which makes it excel as to quantity.

There are many other churches of great beauty, the work of the same architect, which are hid in the heart of the city, whose steeples and spires are raised higher than ordinary, that they may be seen at a distance above the other buildings; and the great number of them dispers'd about the whole city, adorn the prospect of it, and give it an air of opulency and magnificence: on which account their shapes will be found to be particularly beautiful. Of these, and perhaps of any in Europe, St. Mary-le-bow is the most elegantly varied. St. Bride's in Fleet-street diminishes sweetly by elegant degrees,
degrees, but its variations, tho' very curious when you are near them, not being quite so bold and distinct, as those of Bow, it too soon loses variety at a distance. Some gothic spires are finely and artfully varied, particularly the famous steeple of Strasburg.

Westminster-Abbey is a good contrast to St. Paul's, with regard to simplicity and distinctness, the great number of its filigrean ornaments, and small divided and subdivided parts appear confused when near, and are totally lost at a moderate distance; yet there is nevertheless such a consistency of parts altogether in a gothic taste, and such propriety relative to the gloomy ideas, they were then calculated to convey, that they have at length acquir'd an establish'd and distinct character in building. It would be look'd upon as an impropriety and as a kind of profanation to build places for mirth and entertainment in the same taste.

C H A P. IX.

Of Composition with the Waving-Line.

THERE is scarce a room in any house whatever, where one does not see the waving-line employ'd in some way or other. How inelegant would the shapes of all our moveable be without it? how very plain and unornamental the mouldings of cornices, and chimney-pieces, without the variety introduced by the *ogee* member, which is entirely composed of waving-lines.

Though
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Though all sorts of waving-lines are ornamental, when properly applied; yet, strictly speaking, there is but one precise line, properly to be called the line of beauty, which in the scale of them * is number 4: the lines 5, 6, 7, by their bulging too much in their curvature becoming gross and clumsy; and, on the contrary, 3, 2, 1, as they straighten, becoming mean and poor; as will appear in the next figure † where they are applied to the legs of chairs.

A still more perfect idea of the effects of the precise waving-line, and of those lines that deviate from it, may be conceived by the row of stays, figure ‡, where number 4 is composed of precise waving-lines, and is therefore the best shaped stay. Every whale-bone of a good stay must be made to bend in this manner: for the whole stay, when put close together behind, is truly a shell of well-varied contents, and its surface of course a fine form; so that if a line, or the lace were to be drawn, or brought from the top of the lacing of the stay behind, round the body, and down to the bottom peak of the stomacher; it would form such a perfect, precise, serpentine-line, as has been shewn, round the cone, figure 26 in plate 1.—For this reason all ornaments obliquely contrasting the body in this manner, as the ribbons worn by the knights of the garter, are both genteel and graceful. The numbers 5, 6, 7, and 3, 2, 1, are deviations into stiffness and meanness on one hand, and clumsiness and deformity on the other. The

reasons
reasons for which disagreeable effects, after what has been already said, will be evident to the meanest capacity.

It may be worth our notice however, that the stay, number 2, would better fit a well-shaped man than number 4; and that number 4, would better fit a well-form'd woman, than number 2; and when on considering them, merely as to their forms, and comparing them together as you would do two vases, it has been shewn by our principles, how much finer and more beautiful number 4 is, than number 2: does not this our determination enhance the merit of these principles, as it proves at the same time how much the form of a woman's body surpasses in beauty that of a man?

From the examples that have been given, enough may be gathered to carry on our observations from them to any other objects that may chance to come in our way, either animate or inanimate; so that we may not only lineally account for the ugliness of the toad, the hog, the bear and the spider, which are totally void of this waving-line, but also for the different degrees of beauty belonging to those objects that possess it.

C H A P. X.

Of Compositions with the Serpentine-Line.

The very great difficulty there is in describing this line, either in words, or by the pencil (as was hinted before, when I first mention'd it) will make it necessary for
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for me to proceed very slowly in what I have to say in this chapter, and to beg the reader's patience whilst I lead him step by step into the knowledge of what I think the sublime in form, so remarkably display'd in the human body; in which, I believe, when he is once acquainted with the idea of them, he will find this species of lines to be principally concern'd.

First, then, let him consider fig. †, which represents a straight horn, with its contents, and he will find, as it varies like the cone, it is a form of some beauty, merely on that account.

Next let him observe in what manner, and in what degree the beauty of this horn is increas'd, in fig. *, where it is supposed to be bent two different ways.

And lastly, let him attend to the vast increase of beauty, even to grace and elegance, in the same horn, fig. ‡, where it is supposed to have been twisted round, at the same time, that it was bent two different ways, (as in the last figure.)

In the first of these figures, the dotted line down the middle expresses the straight lines of which it is composed; which, without the assistance of curve lines, or light and shade, would hardly shew it to have contents.

The same is true of the second, tho' by the bending of the horn, the straight dotted line is changed into the beautiful waving-line.
But in the last, this dotted line, by the twisting as well as the bending of the horn, is changed from the waving into the serpentine-line; which, as it dips out of sight behind the horn in the middle, and returns again at the smaller end, not only gives play to the imagination, and delights the eye, on that account; but informs it likewise of the quantity and variety of the contents.

I have chosen this simple example, as the easiest way of giving a plain and general idea of the peculiar qualities of these serpentine-lines, and the advantages of bringing them into compositions, where the contents you are to express, admit of grace and elegance.

And I beg the same things may be understood of these serpentine-lines, that I have said before of the waving-lines. For as among the vast variety of waving-lines that may be conceiv'd, there is but one that truly deserves the name of the line of beauty, so there is only one precise serpentine-line that I call the line of grace. Yet, even when they are made too bulging, or too tapering, though they certainly lose of their beauty and grace, they do not become so wholly void of it, as not to be of excellent service in compositions, where beauty and grace are not particularly design'd to be express'd in their greatest perfection.

Though I have distinguish'd these lines so particularly as to give them the titles of the lines of beauty and grace, I mean that the use and application of them should still be
be confined by the principles I have laid down for composition in general; and that they should be judiciously mixt and combined with one another, and even with those I may term plain lines, (in opposition to these) as the subject in hand requires. Thus the cornu-copia, fig. †, is twisted and bent after the same manner, as the last figure of the horn; but more ornamented, and with a greater number of other lines of the same twisted kind, winding round it with as quick returns as those of a screw.

This sort of form may be seen with yet more variations, (and therefore more beautiful) in the goat's horn, from which, in all probability, the ancients originally took the extreme elegant forms they have given their cornu-copias:

There is another way of considering this last figure of the horn I would recommend to my reader, in order to give him a clearer idea of the use both of the waving and serpentine-lines in composition.

This is to imagine the horn, thus bent and twisted, to be cut length-ways by a very fine saw into two equal parts; and to observe one of these in the same position the whole horn is represented in; and these two observations will naturally occur to him. First, that the edge of the saw must run from one end to the other of the horn in the line of beauty; so that the edges of this half of the horn will have a beautiful shape: and, secondly, that wherever the dotted serpentine-line on the surface
surface of the whole horn dips behind, and is lost to the eye, it immediately comes into sight on the hollow surface of the divided horn.

The use I shall make of these observations will appear very considerable in the application of them to the human form, which we are next to attempt.

It will be sufficient, therefore, at present only to observe, first, that the whole horn acquires a beauty by its being thus gently bent two different ways; secondly, that whatever lines are drawn on its external surface become graceful, as they must all of them, from the twist that is given the horn, partake in some degree or other, of the shape of the serpentine-line: and, lastly, when the horn is split, and the inner, as well as the outward surface of its shell-like form is exposed, the eye is peculiarly entertained and relieved in the pursuit of these serpentine-lines, as in their twistings their concavities and convexities are alternately offered to its view. Hollow forms, therefore, composed of such lines are extremely beautiful and pleasing to the eye; in many cases more so, than those of solid bodies.

Almost all the muscles, and bones, of which the human form is composed, have more, or less of these kind of twists in them; and give in a less degree, the same kind of appearance to the parts which cover them, and are the immediate object of the eye: and for this reason it is that I have been so particular in describing these forms of the bent, and twisted, and ornamented horn.

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There is scarce a straight bone in the whole body. Almost all of them are not only bent different ways, but have a kind of twist, which in some of them is very graceful; and the muscles annex’d to them, tho’ they are of various shapes, appropriated to their particular uses, generally have their component fibres running in these serpentine-lines, surrounding and conforming themselves to the varied shape of the bones they belong to; more especially in the limbs. Anatomists are so satisfied of this, that they take a pleasure in distinguishing their several beauties. I shall only instance in the thigh-bone, and those about the hips.

The thigh-bone fig. *, has the waving and twisted turn of the horn, 58: but the beautiful bones adjoining, call’d the ossea innominata †, have, with greater variety, the same turns and twists of that horn when it is cut; and its inner and outward surfaces are exposed to the eye.

How ornamental these bones appear, when the prejudice we conceive against them, as being part of a skeleton, is taken off, by adding a little foliage to them, may be seen in fig. ||—such shell-like winding forms, mixt with foliage, twisting about them, are made use of in all ornaments; a kind of composition calculated merely to please the eye. Divest these of their serpentine twinings and they immediately lose all grace, and return to the poor gothic taste they were in an hundred years ago §.  

* Fig. 62.  
† Fig. 60.  
‡ Fig. 61.  
§ Fig. 63.
Fig. * is meant to represent the manner, in which most of the muscles, (those of the limbs in particular) are twisted round the bones, and conform themselves to their length and shape; but with no anatomical exactness. As to the running of their fibres, some anatomists have compared them to skains of thread, loose in the middle, and tight at each end, which, when they are thus consider'd as twisted contrary ways round the bone, gives the strongest idea possible of a composition of serpentine-lines.

Of these fine winding forms then is the human body composed, and which, by their varied situations with each other, become more intricately pleasing, and form a continued waving of winding forms from one into the other, as may be best seen by examining a good anatomical figure, part of which you have here represented, in the muscular leg and thigh, fig. †: which shews the serpentine forms and varied situations of the muscles, as they appear when the skin is taken off. It was drawn from a plaster of paris figure cast off nature, the original of which was prepared for the mould by Cowper, the famous anatomist. In this last figure, as the skin is taken off the parts are too distinctly traced by the eye, for that intricate delicacy which is necessary to the utmost beauty; yet the winding figures of the muscles, with the variety of their situations, must always be allow'd elegant forms: however, they lose in the imagination some of the beauty, which they really have, by the idea of
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of their being flayed; nevertheless, by what has already been shewn both of them and the bones, the human frame hath more of its parts composed of serpentine-lines than any other object in nature; which is a proof both of its superior beauty to all others, and, at the same time, that its beauty proceeds from those lines: for although they may be required sometimes to be bulging in their twists, as in the thick swelling muscles of the Hercules, yet elegance and greatness of taste is still preserved; but when these lines lose so much of their twists as to become almost straight, all elegance of taste vanishes.

Thus fig. *, was also taken from nature, and drawn in the same position, but treated in a more dry, stiff, and what the painters call, *sticky manner*, than the nature of flesh is ever capable of appearing in, unless when its moisture is dried away: it must be allowed, that the parts of this figure are of as right dimensions, and as truly situated, as in the former; it wants only the true twist of the lines to give it taste.

To prove this further, and to put the mean effect of these plain or unvaried lines in a stronger light, see fig. †, where, by the uniform, unvaried shapes and situation of the muscles, without so much as a waving-line in them, it becomes so wooden a form, that he that can fashion the leg of a joint-stool may carve this figure as well as the best sculptor. In the same manner, divest one of the best antique statues of all its serpentine winding parts, and it becomes from an

* Fig. 66. P. 1.
† Fig. 67. P. 1.
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exquisite piece of art, a figure of such ordinary lines and unvaried contents, that a common stone-mason or carpenter, with the help of his rule, calipers, and compasses, might carve out an exact imitation of it: and were it not for these lines a turner, in his lathe, might turn a much finer neck than that of the grecian Venus, as according to the common notion of a beautiful neck, it would be more truly round. For the same reason, legs much swoln with disease, are as easy to imitate as a post, having lost their drawing, as the painters call it; that is, having their serpentine-lines all effaced, by the skin's being equally puffed up, as figure *.

If in comparing these three figures one with another, the reader, notwithstanding the prejudice his imagination may have conceiv'd against them, as anatomical figures, has been enabled only to perceive that one of them is not so disagreeable as the others; he will easily be led to see further, that this tendency to beauty in one, is not owing to any greater degree of exactness in the proportions of its parts, but merely to the more pleasing turns, and intertwistings of the lines, which compose its external form; for in all the three figures the same proportions have been observ'd, and, on that account, they have all an equal claim to beauty.

And if he pursues this anatomical enquiry but a very little further, just to form a true idea of the elegant use that is made of the skin and fat beneath it, to con-
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ceal from the eye all that is hard and disagreeable, and at the same time to preserve to it whatever is necessary in the shapes of the parts beneath, to give grace and beauty to the whole limb: he will find himself insensibly led into the principles of that grace and beauty which is to be found in well-turn'd limbs, in fine, elegant, healthy life, or in those of the best antique statues; as well as into the reason why his eye has so often unknowingly been pleased and delighted with them.

Thus, in all other parts of the body, as well as these, wherever, for the sake of the necessary motion of the parts, with proper strength and agility, the insertions of the muscles are too hard and sudden, their swellings too bold, or the hollows between them too deep, for their out-lines to be beautiful; nature most judiciously softens these hardnesses, and plumps up these vacancies with a proper supply of fat, and covers the whole with the soft, smooth, springy, and, in delicate life, almost transparent skin, which, conforming itself to the external shape of all the parts beneath, expresses to the eye the idea of its contents with the utmost delicacy of beauty and grace.

The skin, therefore, thus tenderly embracing, and gently conforming itself to the varied shapes of every one of the outward muscles of the body, soften'd underneath by the fat, where, otherwise, the same hard lines and furrows would appear, as we find come on with age in the face, and with labour, in the limbs, is evidently
dently a shell-like surface (to keep up the idea I set out with) form'd with the utmost delicacy in nature; and therefore the most proper subject of the study of every one, who desires to imitate the works of nature, as a master should do, or to judge of the performances of others as a real connoisseur ought.

I cannot be too long, I think, on this subject, as so much will be found to depend upon it; and therefore shall endeavour to give a clear idea of the different effect such anatomical figures have on the eye, from what the same parts have, when cover'd by the fat and skin; by supposing a small wire (that has lost its spring and so will retain every shape it is twisted into) to be held fast to the out-side of the hip (figure 60) and thence brought down the other side of the thigh obliquely over the calf of the leg, down to the outward ancle (all the while press'd so close as to touch and conform itself to the shape of every muscle it passes over) and then to be taken off. If this wire be now examined it will be found that the general uninterrupted flowing twist, which the winding round the limbs would otherwise have given to it, is broke into little better than so many separate plain curves, by the sharp indentures it every where has receiv'd on being closely press'd in between the muscles.

Suppose, in the next place, such a wire was in the same manner twisted round a living well-shaped leg and thigh, or those of a fine statue; when you take it off you will find no such sharp indentures, nor any of those
those regular engravings (as the heralds express it) which displeased the eye before. On the contrary, you will see how gradually the changes in its shape are produced; how imperceptibly the different curvatures run into each other, and how easily the eye glides along the varied wavings of its sweep. To enforce this still further, if a line was to be drawn by a pencil exactly where these wires have been supposed to pass, the point of the pencil, in the muscular leg and thigh, would perpetually meet with stops and rubs, whilst in the others it would flow from muscle to muscle along the elastic skin, as pleasantly as the lightest skiff dances over the gentlest wave.

This idea of the wire, retaining thus the shape of the parts it passes over, seems of so much consequence, that I would by no means have it forgot; as it may properly be consider'd as one of the threads (or outlines) of the shell (or external surface) of the human form: and the frequently recurring to it will assist the imagination in its conceptions of those parts of it, whose shapes are most intricately varied: for the same sort of observations may be made, with equal justice, on the shapes of ever so many such wires twisted in the same manner in ever so many directions over every part of a well made man, woman, or statue.

And if the reader will follow in his imagination the most exquisite turns of the chisel in the hands of a master, when he is putting the finishing touches to a statue;
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statue; he will soon be led to understand what it is the real judges expect from the hand of such a master, which the Italians call, the little more, il poco piu, and which in reality distinguishes the original master-pieces at Rome from even the best copies of them.

An example or two will sufficiently explain what is here meant; for as these exquisite turns are to be found, in some degree of beauty or other, all over the whole surface of the body and limbs: we may by taking any one part of a fine figure (though so small a one that only a few muscles are express'd in it) explain the manner in which so much beauty and grace has been given to them, as to convince a skilful artist, almost at first, that it must have been the work of a master.

I have chosen, for this purpose, a small piece of the body of a statue, fig. *, representing part of the left side under the arm, together with a little of the breast, (including a very particular muscle, which, from the likeness its edges bear to the teeth of a saw, is, if consider'd by itself, void of beauty) as most proper to the point in hand, because this its regular shape more peculiarly requires the skill of the artist to give it a little more variety than it generally has, even in nature.

First, then, I will give you a representation of this part of the body, from an anatomical figure †, to show what a sameness there is in the shapes of all the teeth-like insertions of this muscle; and how regularly the fibres, which compose it, follow the almost parallel outlines of the ribs they partly cover.
From what has been said before of the use of the natural covering of the skin, &c. the next figure * will easily be understood to mean so tame a representation of the same part of the body, that tho' the hard and stiff appearance of the edges of this muscle is taken off by that covering, yet enough of its regularity and sameness remains to render it disagreeable.

Now as regularity and sameness, according to our doctrine, is want of elegance and true taste, we shall endeavour in the next place to shew how this very part (in which the muscles take so very regular a form) may be brought to have as much variety as any other part of the body whatever. In order to this, though some alteration must be made in almost every part of it, yet it should be so inconsiderable in each, that no remarkable change may appear in the shape and situation of any.

Thus, let the parts mark'd 1, 2, 3, 4, (which appear so exactly similar in shape, and parallel in situation in the the muscular figure 77) and not much mended in fig. 78, be first varied in their sizes, but not gradually from the uppermost to the lowest, as in fig. †, nor alternately one long and one short, as in fig. §, for in either of these cases there would still remain too great a formality. We should therefore endeavour, in the next place, to vary them every way in our power, without losing entirely the true idea of the parts themselves. Suppose them then to have changed their situations

* Fig. 78.
T. p. 2.
† Fig. 79.
T. p. 2.
§ Fig. 80.
T. p. 2.
tions a little, and flip'd beside each other irregularly, (some how as is represented in fig. §, merely with regard to their situation) and the external appearance of the whole piece of the body, now under our consideration, will assume the more varied and pleasing form, represented in fig. 76; easily to be discern'd by comparing the three figures 76, 77, 78, one with another; and it will as easily be seen, that were lines to be drawn, or wires to be bent, over these muscles, from one to the other, and so on to the adjoining parts; they would have a continued waving flow, let them pass in any direction whatever.

The unskilful, in drawing these parts after the life, as their regularities are much more easily seen and copied than their fine variations, seldom fail of making them more regular and poor than they really appear even in a consumptive person.

The difference will appear evident by comparing fig. 78, purposely drawn in this tasteless manner, with fig. 76. But will be more perfectly understood by examining this part in the Torso of Michael Angelo †, whence this figure was taken.

Note, there are casts of a small copy of that famous trunk of a body to be had at almost every plaster-figure makers, wherein what has been here described may be sufficiently seen, not only in the part which figure 76 was taken from, but all over that curious piece of antiquity.
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I must here again press my reader to a particular attention to the windings of these superficial lines, even in their passing over every joint, what alterations forever may be made in the surface of the skin by the various bendings of the limbs: and tho' the space allow'd for it, just in the joints, be ever so small, and consequently the lines ever so short, the application of this principle of varying these lines, as far as their lengths will admit of, will be found to have its effect as gracefully as in the more lengthen'd muscles of the body.

It should be observ'd in the fingers, where the joints are but short, and the tendons straight; and where beauty seems to submit, in some degree, to use, yet not so much but you trace in a full-grown taper finger, these little winding lines among the wrinkles, or in (what is more pretty because more simple) the dimples of the nuckles. As we always distinguish things best by seeing their reverse set in opposition with them; if fig. *, by the straightness of its lines, shews fig. †, to have some little taste in it, tho' it is so slightly sketch'd; the difference will more evidently appear when you in like manner compare a straight coarse finger in common life with the taper dimpled one of a fine lady.

There is an elegant degree of plumpness peculiar to the skin of the softer sex, that occasions these delicate dimplings in all their other joints, as well as these of the fingers; which so perfectly distinguishes them from those even of a graceful man; and which, assisted by

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the more soften'd shapes of the muscles underneath, presents to the eye all the varieties in the whole figure of the body, with gentler and fewer parts more sweetly connected together, and with such a fine simplicity as will always give the turn of the female frame, represented in the Venus †, the preference to that of the Apollo *.

Now whoever can conceive lines thus constantly flowing, and delicately varying over every part of the body even to the fingers' ends, and will call to his remembrance what led us to this last description of what the Italians call, Il poco piu (the little more that is expected from the hand of a master) will, in my mind, want very little more than what his own observation on the works of art and nature will lead him to, to acquire a true idea of the word Tafle, when applied to form; however inexplicable this word may hitherto have been imagined.

We have all along had recourse chiefly to the works of the ancients, not because the moderns have not produced some as excellent; but because the works of the former are more generally known: nor would we have it thought, that either of them have ever yet come up to the utmost beauty of nature. Who but a bigot, even to the antiques, will say that he has not seen faces and necks, hands and arms in living women, that even the Grecian Venus doth but coarsely imitate?

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And what sufficient reason can be given why the fame may not be said of the rest of the body?

CHAP. XI.

OF PROPORTION.

If any one should ask, what it is that constitutes a fine-proportion'd human figure? how ready and seemingly decisive is the common answer: a just symmetry and harmony of parts with respect to the whole. But as probably this vague answer took its rise from doctrines not belonging to form, or idle schemes built on them, I apprehend it will cease to be thought much to the purpose after a proper enquiry has been made.

Preparatory to which, it becomes necessary in this place, to mention one reason more which may be added to those given in the introduction, for my having persuaded the reader to consider objects scoop'd out like thin shells; which is, that partly by this conception, he may be the better able to separate and keep asunder the two following general ideas, as we will call them, belonging to form; which are apt to coincide and mix with each other in the mind, and which it is necessary (for the sake of making each more fully and particularly clear) should be kept apart, and consider'd singly.

First, the general ideas of what hath already been discussed in the foregoing chapters, which only comprehends the surface of form, viewing it in no other light than merely as being ornamental or not.

Secondly,
Secondly, that general idea, now to be discussed, which we commonly have of form altogether, as arising chiefly from a fitness to some design’d purpose or use.

Hitherto our main drift hath been to establish and illustrate the first idea only, by shewing, first the nature of variety, and then its effects on the mind; with the manner how such impressions are made by means of the different feelings given to the eye, from its movements in tracing and coursing over surfaces of all kinds.

The surface of a piece of ornament, that hath every turn in it that lines are capable of moving into, and at the same time no way applied, nor of any manner of use, but merely to entertain the eye, would be such an object as would answer to this first idea alone.

The figure like a leaf, at the bottom of plate 1, near to fig. 67, is something of this kind; it was taken from an ash-tree, and was a sort of Lusus naturæ, growing only like an excreffence, but so beautiful in the lines of its shell-like windings, as would have been above the power of a Gibbons to have equalled, even in its own materials; nor could the graver of an Edlinck, or Drevet, have done it justice on copper.

Note, the present taste of ornaments seems to have been partly taken from productions of this sort, which are to be found about autumn among plants, particularly asparagus, when it is running to seed.

1 See Chap. 5, page 25.
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I shall now endeavour to explain what is included in what I have called for distinction sake, the second general idea of form, in a much fuller manner than was done in chapter I. of Fitness. And begin with observing, that though surfaces will unavoidably be still included, yet we must no longer confine ourselves to the particular notice of them as surfaces only, as we heretofore have done; we must now open our view to general, as well as particular bulk and solidity; and also look into what may have filled up, or given rise thereto, such as certain given quantities and dimensions of parts, for inclosing any substance, or for performing of motion, purchase, steadfastness, and other matters of use to living beings, which, I apprehend, at length, will bring us to a tolerable conception of the word proportion.

As to these joint-sensations of bulk and motion, do we not at first sight almost, even without making trial, seem to feel when a leaver of any kind is too weak, or not long enough to make such or such a purchase? or when a spring is not sufficient? and don't we find by experience what weight, or dimension should be given, or taken away, on this or that account? if so, as the general as well as particular bulks of form, are made up of materials moulded together under mechanical directions, for some known purpose or other; how naturally, from these considerations, shall we fall into a judgment of fit proportion; which is one part of beauty to the mind tho' not always so to the eye.

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Our necessities have taught us to mould matter into various shapes, and to give them fit proportions for particular uses, as bottles, glassses, knives, dishes, &c. Hath not offence given rise to the form of the sword, and defence to that of the shield? And what else but proper fitness of parts hath fix'd the different dimensions of pistols, muskets, great guns, fowling-pieces and blunderbusses; which differences as to figure, may as properly be called the different characters of firearms, as the different shapes of men are called characters of men.

We find also that the profuse variety of shapes, which present themselves from the whole animal creation, arise chiefly from the nice fitness of their parts, designed for accomplishing the peculiar movements of each.

And here I think will be the proper place to speak of a most curious difference between the living machines of nature, in respect of fitness, and such poor ones, in comparison with them, as men are only capable of making; by means of which distinction, I am in hopes of shewing what particularly constitutes the utmost beauty of proportion in the human figure.

A clock, by the government's order, has been made, and another now making, by Mr. Harrison, for the keeping of true time at sea; which perhaps is one of the most exquisite movements ever made. Happy the ingenious contriver! although the form of the whole, or of every part of this curious machine, should be ever so confused,
or displeasingly shaped to the eye; and although even its movements should be disagreeable to look at, provided it answers the end proposed. An ornamental composition was no part of his scheme, otherwise than as a polish might be necessary. If ornaments are required to be added to mend its shape, care must be taken that they are no obstruction to the movement itself, and the more as they would be superfluous, as to the main design.---But in nature's machines, how wonderfully do we see beauty and use go hand in hand!

Had a machine for this purpose been nature's work, the whole and every individual part would have had exquisite beauty of form without danger of destroying the exquisiteness of its motion, even as if ornament had been the sole aim; its movements too would have been graceful, without one superfluous tittle added for either of these lovely purposes.---Now this is that curious difference between the fitness of nature's machines (one of which is man) and those made by mortal hands; which distinction is to lead us to our main point proposed; I mean, to the shewing what constitutes the utmost beauty of proportion.

There was brought from France some years ago, a little clock-work machine, with a duck's head and legs fixt to it, which was so contrived as to have some resemblance of that animal standing upon one foot, and stretching back its leg, turning its head, opening and shutting its bill, moving its wings, and shaking its tail; all
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all of them the plainest and easiest directions in living movements: yet for the poorly performing of these few motions, this silly, but much extoll'd machine, being uncover'd, appeared a most complicated, confused and disagreeable object: nor would its being covered with a skin closely adhering to its parts, as that of a real duck's doth, have much mended its figure; at best, a bag of hob-nails, broken hinges, and patten-rings, would have looked as well, unless by other means it had been stuffed out to bring it into form.

Thus again you see, the more variety we pretend to give to our trifling movements, the more confused and unornamental the forms become; nay chance but seldom helps them.---How much the reverse are nature's! the greater the variety her movements have, the more beautiful are the parts that cause them.

The finny race of animals, as they have fewer motions than other creatures, so are their forms less remarkable for beauty. It is also to be noted of every species, that the handsomest of each move best: birds of a clumsy make seldom fly well, nor do lumpy fish glide so well through the water as those of a neater make; and beasts of the most elegant form, always excel in speed; of this, the horse and greyhound are beautiful examples: and even among themselves, the most elegantly made seldom fail of being the swiftest.

The war-horse is more equally made for strength than the race-horse, which surplus of power in the former,
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former, if suppos'd added to the latter, as it would throw more weight into improper parts for the business of mere speed, so of course it would lessen, in some degree, that admirable quality, and partly destroy that delicate fitness of his make; but then a quality in movement, superior to that of speed, would be given to him by the addition, as he would be render'd thereby more fit to move with ease in such varied, or graceful directions, as are so delightful to the eye in the carriage of the fine manag'd war-horse; and as at the same time, something stately and graceful would be added to his figure, which before could only be said to have an elegant neatness. This noble creature stands foremost amongst brutes; and it is but consistent with nature's propriety, that the most useful animal in the brute-creation, should be thus signalized also for the most beauty.

Yet, properly speaking, no living creatures are capable of moving in such truly varied and graceful directions, as the human species; and it would be needless to say how much superior in beauty their forms and textures likewise are. And surely also after what has been said relating to figure and motion, it is plain and evident that nature has thought fit to make beauty of proportion, and beauty of movement, necessary to each other: so that the observation before made on animals, will hold equally good with regard to man: i. e. that he who is most exquisitely well-proportion'd is most capable of exquisite movements, such as ease and grace in deportment, or in dancing.
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It may be a sort of collateral confirmation of what has been said of this method of nature's working, as well as otherwise worth our notice, that when any parts belonging to the human body are conceal'd, and not immediately concern'd in movement, all such ornamental shapes, as evidently appear in the muscles and bones 1, are totally neglected as unnecessary, for nature doth nothing in vain! this is plainly the case of the intestines, none of them having the least beauty, as to form, except the heart; which noble part, and indeed kind of first mover, is a simple and well-varied figure; conformable to which, some of the most elegant Roman urns and vases have been fashion'd.

Now, thus much being kept in remembrance, our next step will be to speak of, first, general measurements; such as the whole height of the body to its breadth, or the length of a limb to its thickness: and, secondly, of such appearances of dimensions as are too intricately varied to admit of a description by lines.

The former will be confined to a very few straight lines, crossing each other, which will easily be understood by every one; but the latter will require somewhat more attention, because it will extend to the precision of every modification, bound, or limit, of the human figure.

To be somewhat more explicit. As to the first part, I shall begin with shewing what practicable sort of mea-

1 See chap. ix. on Compositions with the Serpentine-line,
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If any may be used in order to produce the most proper variety in the proportions of the parts of any body. I say, practicable, because the vast variety of intricately situated parts, belonging to the human form, will not admit of measuring the distances of one part by another, by lines or points, beyond a certain degree or number, without great perplexity in the operation itself, or confusion to the imagination. For instance, say, a line representing one breadth and an half of the wrist, would be equal to the true breadth of the thickest part of the arm above the elbow; may it not then be ask'd, what part of the wrist is meant? for if you place a pair of calipers a little nearer or further from the hand, the distance of the points will differ, and so they will if they are moved close to the wrist all round, because it is flatter one way than the other; but suppose, for argument sake, one certain diameter should be fix'd upon; may it not again be ask'd, how is it to be apply'd, if to the flattest side of the arm or the roundest, and how far from the elbow, and must it be when the arm is extended or when it is bent? for this also will make a sensible difference, because in the latter position, the muscle, call'd the biceps, in the front of that part of the arm, swells up like a ball one way, and narrows itself another; nay all the muscles shift their appearances in different movements, so that whatever may have been pretended by some authors, no exact mathematical measurements by lines, can be given for the true proportion of a human body.
It comes then to this, that no longer than whilst we suppose all the lengths and breadths of the body, or limbs, to be as regular figures as cylinders, or as the leg, figure 68 in plate 1, which is as round as a rolling-stone, are the measures of lengths to breadths practicable, or of any use to the knowledge of proportion: so that as all mathematical schemes are foreign to this purpose, we will endeavour to root them quite out of our way: therefore I must not omit taking notice, that Albert Durer, Lamozzo, (see two tasteless figures taken from their books of proportion) and some others, have not only puzzled mankind with a heap of minute unneces- 
sary divisions, but also with a strange notion that those divisions are govern'd by the laws of music; which mistake they seem to have been led into, by having seen certain uniform and consonant divisions upon one string produce harmony to the ear, and by persuading themselves, that similar distances in lines belonging to form, would, in like manner, delight the eye. The very reverse of which has been shewn to be true, in chap. 3, on Uniformity. "The length of the foot, say they, in "respect to the breadth, makes a double suprabipartient, "a diapason and a diatefferon 1:" which, in my opinion, would have been full as applicable to the ear, or to a plant,

1 Note, these authors assure you, that this curious method of mea-
uring, will produce beauty far beyond any nature doth afford. Lamozzo, recommends also another scheme, with a triangle, to correct the poverty of nature, as they express themselves. These nature-menders put one in mind
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plant, or to a tree, or any other form whatsoever; yet these sort of notions have so far prevail'd by time, that the words, harmony of parts, seem as applicable to form, as to music.

Notwithstanding the absurdity of the above schemes, such measures as are to be taken from antique statues, may be of some service to painters and sculptors, especially to young beginners, but nothing nigh of such use to them, as the measures, taken the same way, from ancient buildings, have been, and are, to architects and builders; because the latter have to do with little else but plain geometrical figures: which measures, however, serve only in copying what has been done before.

The few measures I shall speak of, for the setting out the general dimensions of a figure, shall be taken by straight lines only, for the more easy conception of what may indeed be properly call'd, gaging the contents of the body, supposing it solid like a marble statue, as the wires were described to do + in the introduction: by which plain method, clear ideas may be acquir'd of what alone seem to me to require measuring, of what certain lengths to what breadths make the most eligible proportions in general.

The most general dimensions, of a body, or limbs, are lengths, breadths or thicknesses: now the whole gentility

mind of Gulliver's tailor at Laputa, who, having taken measure of him for a suit of clothes, with a rule, quadrant and compasses, after a considerable time spent, brought them home ill made.
gentility of a figure, according to its character, depends upon the first proportioning these lines or wires (which are its measures) properly one to another; and the more varied these lines are, with respect to each other, the more may the future divisions be varied likewise, that are to be made on them; and of course the less varied these lines are, the parts influenced by them, as they must conform themselves to them, must have less variety too. For example, the exact cross * of two equal lines, cutting each other in the middle, would confine the figure of a man, drawn conformable to them, to the disagreeable character of his being as broad as he is long. And the two lines crossing each other, to make the height and breadth of a figure, will want variety a contrary way, by one line being very short in proportion to the other, and therefore, also incapable of producing a figure of tolerable variety. To prove this, it will be very easy for the reader to make the experiment, by drawing a figure or two (tho’ ever so imperfectly) confin’d within such limits.

There is a medium between these, proper for every character, which the eye will easily and accurately determine.

Thus, if the lines, fig. †, were to be the measure of the extreme length and breadth, set out either for the figure of a man or a vase, the eye soon sees the longest of these is not quite sufficiently so, in proportion to the other, for a genteel man; and yet it would make a vase too
too taper to be elegant; no rule or compasses would decide this matter either so quickly or so precisely as a good eye. It may be observed, that minute differences in great lengths, are of little or no consequence as to proportion, because they are not to be discerned; for a man is half an inch shorter when he goes to bed at night, than when he rises in the morning, without the possibility of its being perceived. In case of a wager the application of a rule or compasses may be necessary, but seldom on any other occasion.

Thus much I apprehend is sufficient for the consideration of general lengths to breadths. Where, by the way, I apprehend I have plainly shewn, that there is no practicable rule, by lines, for minutely setting out proportions for the human body, and if there were, the eye alone must determine us in our choice of what is most pleasing to itself.

Thus having dispatch'd general dimension, which we may say is almost as much of proportion, as is to be seen when we have our cloaths on: I shall in the second, and more extensive method proposed for considering it, set out in the familiar path of common observation, and appeal as I go on to our usual feeling, or joint-sensation, of figure and motion.

Perhaps by mentioning two or three known instances it will be found that almost every one is farther advanced in the knowledge of this speculative part of proportion than he imagines; especially he who hath been used to observe naked
naked figures doing bodily exercise, and more especially if he be any way interested in the success of them; and the better he is acquainted with the nature of the exercise itself, still the better judge he becomes of the figure that is to perform it. For this reason, no sooner are two boxers stript to fight, but even a butcher, thus skill'd, shews himself a considerable critic in proportion; and on this sort of judgment, often gives, or takes the odds, at bare fight only of the combatants. I have heard a blacksmith harangue like an anatomist, or sculptor, on the beauty of a boxer's figure, tho' not perhaps in the same terms; and I firmly believe, that one of our common proficients in the athletic art, would be able to instruct and direct the best sculptor living, (who hath not seen, or is wholly ignorant of this exercise) in what would give the statue of an English-boxer, a much better proportion, as to character, than is to be seen, even in the famous group of antique boxers, (or as some call them, Roman wrestlers) so much admired to this day.

Indeed, as many parts of the body are so constantly kept cover'd, the proportion of the whole cannot be equally known; but as stockings are so close and thin a covering, every one judges of the different shapes and proportions of legs with great accuracy. The ladies always speak skilfully of necks, hands and arms; and often will point out such particular beauties or defects in their make, as might easily escape the observation of a man of science.

Surely
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Surely, such determinations could not be made and pronounced with such critical truth, if the eye were not capable of measuring or judging of thicknesses by lengths, with great preciseness. Nay more, in order to determine so nicely as they often do, it must also at the same time, trace with some skill those delicate windings upon the surface which have been described in page 64 and 65, which altogether may be observ'd to include the two general ideas mention'd at the beginning of this chapter.

If so, certainly it is in the power of a man of science, with as observing an eye, to go still further, and conceive, with a very little turn of thought, many other necessary circumstances concerning proportion, as of what size and in what manner the bones help to make up the bulk, and support the other parts; as well as what certain weights or dimensions of muscles are proper (according to the principle of the steelyard) to move such or such a length of arm with this or that degree of swiftness or force.

But though much of this matter, may be easily understood by common observation, assist'd by science, still I fear it will be difficult to raise a very clear idea of what constitutes, or composes the utmost beauty of proportion; such as is seen in the Antinous; which is allowed to be the most perfect in this respect, of any of the antique statues; and tho' the lovely likewise seems to have been as much the sculptor's aim, as in the Venus; yet
yet a manly strength in its proportion is equally express’d from head to foot in it.

Let us try, however, and as this master-piece of art is so well known, we will set it up before us as a pattern, and endeavour to fabricate, or put together in the mind, such kind of parts as shall seem to build another figure like it. In doing which, we shall soon find that it is chiefly to be effected by means of the nice sensation we naturally have of what certain quantities or dimensions of parts, are fittest to produce the utmost strength for moving, or supporting great weights; and of what are most fit for the utmost light agility, as also for every degree, between these two extremes.

He who hath best perfected his ideas of these matters by common observations, and by the assistance of arts relative thereto, will probably be most precisely just and clear, in conceiving the application of the various parts and dimensions, that will occur to him, in the following descriptive manner of disposing of them, in order to form the idea of a fine-proportion’d figure.

Having set up the Antinous as our pattern, we will suppose there were placed on one side of it, the unwieldy elephant-like figure of an Atlas, made up of such thick bones and muscles, as would best fit him for supporting a vast weight, according to his character of ex-

1 If the scale of either of these proportions were to exceed six foot in the life, the quality of strength in one, and agility in the other, would gradually decrease, the larger the person grew. There are sufficient proofs of this, both from mechanical reasonings and common observation.
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extreme heavy strength. And, on the other side, imagine the slim figure of a Mercury, everywhere neatly formed for the utmost light agility, with slender bones and taper muscles fit for his nimble bounding from the ground. -- Both these figures must be supposed of equal height, and not exceeding six foot.

Our extremes thus placed, now imagine the Atlas throwing off by degrees, certain portions of bone and muscle, proper for the attainment of light agility, as if aiming at the Mercury's airy form and quality, whilst on the other hand, see the Mercury augmenting his taper figure by equal degrees, and growing towards an Atlas in equal time, by receiving to the like places from whence they came, the very quantities that the other had been casting off, when, as they approach each other in weight, their forms of course may be imagined to grow more and more alike, till at a certain point of time, they meet in just similitude; which being an exact medium between the two extremes, we may thence conclude it to be the precise form of exact proportion, fittest for perfect active strength or graceful movement; such as the Antinous we proposed to imitate and figure in the mind.

I am apprehensive that this part of my scheme, for explaining exact proportion, may not be thought so suf

--- The jockey who knows to an ounce what flesh or bone in a horse is fittest for speed or strength, will as easily conceive the like process between the strongest dray-horse and the fleetest racer, and soon conclude, that the fine war-horse must be the medium between the two extremes.
sufficiently determinate as could be wished: be this as it will, I must submit it to the reader, as my best re-source in so difficult a case: and shall therefore beg leave to try to illustrate it a little more, by observing, that, in like manner, any two opposite colours in the rainbow, form a third between them, by thus imparting to each other their peculiar qualities; as the brightest yellow, and the lively blue that is placed at some distance from it, visibly approach, and blend by inter-changable degrees, and, as above, temper rather than destroy each other’s vigour, till they meet in one firm compound; whence, at a certain point, the sight of what they were originally, is quite lost; but in their stead, a most pleasing green is found, which colour nature hath chose for the vestment of the earth, and with the beauty of which the eye is never tired.

From the order of the ideas which the description of the above three figures may have raised in the mind, we may easily compose between them, various other proportions. And as the painter, by means of a certain order in the arrangement of the colours upon his pallet, readily mixes up what kind of tint he pleases, so may we mix up and compound in the imagination such fit parts as will be consistent with this or that particular character, or at least be able thereby to discover how such characters are composed when we see them either in art or nature.
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But perhaps even the word character, as it relates to form, may not be quite understood by every one, tho' it is so frequently used; nor do I remember to have seen it explained any where. Therefore on this account—and also as it will farther shew the use of thinking of form and motion together, it will not be improper to observe,—that notwithstanding a character, in this sense, chiefly depends on a figure being remarkable as to its form, either in some particular part, or altogether; yet surely no figure, be it ever so singular, can be perfectly conceived as a character, till we find it connected with some remarkable circumstance or cause, for such particularity of appearance; for instance, a fat bloated person doth not call to mind the character of a Silenus, till we have joined the idea of voluptuousness with it; so likewise strength to support, and clumsiness of figure, are united, as well in the character of an Atlas as in a porter.

When we consider the great weight chairmen often have to carry, do we not readily consent that there is a propriety and fitness in the tuscann order of their legs, by which they properly become characters as to figure?

Watermen too, are of a distinct cast, or character, whose legs are no less remarkable for their smallness: for as there is naturally the greatest call for nutriment to the parts that are most exercised, so of course these that lye so much stretched out, are apt to dwindle, or not grow to their full size. There is scarcely a waterman
man that rows upon the Thames, whose figure doth not confirm this observation. Therefore were I to paint the character of a Charon, I would thus distinguish his make from that of a common man’s; and, in spite of the word low, venture to give him a broad pair of shoulders, and spindle shanks, whether I had the authority of an antique statue, or basso-relievo, for it or not.

May be, I cannot throw a stronger light on what has been hitherto said of proportion, than by animadverting on a remarkable beauty in the Apollo-belvedere; which hath given it the preference even to the Antinous: I mean a super-addition of greatness, to at least as much beauty and grace, as is found in the latter.

These two master-pieces of art, are seen together in the same apartment at Rome, where the Antinous fills the spectator with admiration only, whilst the Apollo strikes him with surprisè, and, as travellers express themselves, with an appearance of something more than human; which they of course are always at a loss to describe: and, this effect, they say, is the more astonishing, as upon examination its disproportion is evident even to a common eye. One of the best sculptors we have in England, who lately went to see them, confirm’d to me what has been now said, particularly as to the legs and thighs being too long, and too large for the upper parts. And Andrea Sacchi, one of the great Italian painters, seems to have been of the same opinion, or he would hardly have given his Apollo, crowning Pasquillini
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the musician, the exact proportion of the Antinous, (in a famous picture of his now in England) as otherwise it seems to be a direct copy from the Apollo.

Although in very great works we often see an inferior part neglected, yet here it cannot be the case, because in a fine statue, just proportion is one of its essential beauties: therefore it stands to reason, that these limbs must have been lengthened on purpose, otherwise it might easily have been avoided.

So that if we examine the beauties of this figure thoroughly, we may reasonably conclude, that what has been hitherto thought so unaccountably excellent in its general appearance, hath been owing to what hath seem'd a blemish in a part of it: but let us endeavour to make this matter as clear as possible, as it may add more force to what has been said.

Statues by being bigger than life (as this is one, and larger than the Antinous) always gain some nobleness in effect, according to the principle of quantity 1 but this alone is not sufficient to give what is properly to be called, greatness in proportion; for were figures 17 and 18, in plate 1, to be drawn or carved by a scale of ten feet high, they would still be but pigmy proportions, as, on the other hand, a figure of but two inches, may represent a gigantic height.

Therefore greatness of proportion must be considered, as depending on the application of quantity to those parts of the body where it can give more scope to its 1 See chap. 6.
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grace in movement, as to the neck for the larger and swan-like turns of the head, and to the legs and thighs, for the more ample sway of all the upper parts together.

By which we find that the Antinous's being equally magnified to the Apollo's height, would not sufficiently produce that superiority of effect, as to greatness, so evidently seen in the latter. The additions necessary to the production of this greatness in proportion, as it there appears added to grace, must then be, by the proper application of them, to the parts mention'd only.

I know not how further to prove this matter than by appealing to the reader's eye, and common observation, as before.

The Antinous being allowed to have the justest proportion possible, let us see what addition, upon the principle of quantity, can be made to it, without taking away any of its beauty.

If we imagine an addition of dimensions to the head, we shall immediately conceive it would only deform---if to the hands or feet, we are sensible of something gross and ungentle,----if to the whole lengths of the arms, we feel they would be dangling and awkward----if by an addition of length or breadth to the body, we know it would appear heavy and clumsy----there remains then only the neck, with the legs and thighs to speak of; but, to these we find, that not only certain additions may be admitted without causing any disagreeable effect, but
but that thereby greatness, the last perfection as to proportion, is given to the human form; as is evidently express'd in the Apollo: and may still be further confirmed by examining the drawings of Parmigianino, where these particulars are seen in excess; yet on this account his works are said, by all true connoisseurs, to have an inexpressible greatness of taste in them, though otherwise very incorrect.

Let us now return to the two general ideas we fat out with at the beginning of this chapter, and recollect that under the first, on surface, I have shewn in what manner, and how far human proportion is measureable, by varying the contents of the body, conformable to the given proportion of two lines. And that under the second and more extensive general idea of form, as arising from fitness for movement, &c. I have endeavour'd to explain, by every means I could devise, that every particular and minute dimension of the body, should conform to such purposes of movement, &c. as have been first properly considered and determined: on which conjunctively, the true proportion of every character must depend; and is found so to do, by our joint-sensation of bulk and motion. Which account of the proportion of the human body, however imperfect, may possibly stand its ground, till one more plausible shall be given.

As the Apollo * has been only mention'd on account of the greatness of its proportion, I think in justice to so fine a performance; and also as it is not foreign to

\* Fig. 12.

P. 1.
the point we have been upon, we may subjoin an Ob-
servation or two on its perfections.

Besides, what is commonly allow'd, if we consider it
by the rules here given for constituting or composing
character, it will discover the author's great sagacity, in
choosing a proportion for this deity, which has served
two noble purposes at once; in that these very dimen-
sions which appear to have given it so much dignity,
are the same that are best fitted to produce the utmost
speed. And what could characterise the god of day,
either so strongly or elegantly, to be expressive in a sta-
tue, as superior swiftness, and beauty dignify'd? and how
poetically doth the action it is put into, carry on the
allusion to speed, 1 as he is lightly stepping forward,
and seeming to shoot his arrows from him; if the ar-
rows may be allowed to signify the sun's rays? This at
least may as well be supposed as the common surmise,
that he is killing the dragon, Python; which certainly
is very inconsistent with so erect an attitude, and benign
an aspect. 2

Nor are the inferior parts neglected: the drapery also
that depends from his shoulders, and folds over his ex-
tended arm, hath its treble office. As first, it assists in
keeping the general appearance within the boundary of
a pyramid, which being inverted, is, for a single figure,
rather

1 — the sun: which cometh forth as a bridegroom out of his
chamber, and rejoiceth as a giant to run his course. Psalm xix. 5.

2 The accounts given, in relation to this statue, make it so highly
probable that it was the great Apollo of Delphos, that, for my own part,
I make no manner of doubt of its being so.
rather more natural and genteel than one upon its base. Secondly, it fills up the vacant angle under the arm, and takes off the straightness of the lines the arm necessarily makes with the body in such an action; and, lastly, spreading as it doth, in pleasing folds, it helps to satisfy the eye with a noble quantity in the composition altogether, without depriving the beholder of any part of the beauties of the naked: in short, this figure might serve, were a lecture to be read over it, to exemplify every principle that hath been hitherto advanced. We shall therefore close not only all we have to say on proportion with it, but our whole lineal account of form, except what we have particularly to offer as to the face; which it will be proper to defer, till we have spoke of light and shade and colour.

As some of the ancient statues have been of such singular use to me, I shall beg leave to conclude this chapter with an observation or two on them in general.

It is allowed by the most skilful in the imitative arts, that tho' there are many of the remains of antiquity, that have great excellencies about them; yet there are not, moderately speaking, above twenty that may be justly called capital. There is one reason, nevertheless, besides the blind veneration that generally is paid to antiquity, for holding even many very imperfect pieces in some degree of estimation: I mean that peculiar taste of elegance which so visibly runs through them all, down to the most incorrect of their basso-relievos:
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which taste, I am persuaded, my reader will now conceive to have been entirely owing to the perfect knowledge the ancients must have had of the use of the precise serpentine-line.

But this cause of elegance not having been since sufficiently understood, no wonder such effects should have appear'd mysterious, and have drawn mankind into a sort of religious esteem, and even bigotry, to the works of antiquity.

Nor have there been wanting of artful people, who have made good profit of those whose unbounded admiration hath run them into enthusiasm. Nay there are, I believe, some who still carry on a comfortable trade in such originals as have been so defaced and maimed by time, that it would be impossible, without a pair of double-ground connoisseur-spectacles, to see whether they have ever been good or bad: they deal also in cook'd-up copies, which they are very apt to put off for originals. And whoever dares be bold enough to detect such impositions, finds himself immediately branded, and given out as one of low ideas, ignorant of the true sublime, self-conceited, envious, &c.

But as there are a great part of mankind that delight most in what they least understand; for ought I know, the emolument may be equal between the bubler and the bubled: at least this seems to have been Butler's opinion:

Doubtless the pleasure is as great
In being cheated, as to cheat.  

CHAP.
Of Light and Shade, and the manner in which objects are explained to the eye by them.

Although both this and the next chapter may seem more particularly relative to the art of painting, than any of the foregoing; yet, as hitherto, I have endeavour’d to be understood by every reader, so here also I shall avoid, as much as the subject will permit, speaking of what would only be well-conceived by painters.

There is such a subtile variety in the nature of appearances, that probably we shall not be able to gain much ground by this enquiry, unless we exert and apply the full use of every sense, that will convey to us any information concerning them.

So far as we have already gone, the sense of feeling, as well as that of seeing, hath been apply’d to; so that perhaps a man born blind, may, by his better touch than is common to those who have their sight, together with the regular process that has been here given of lines, so feel out the nature of forms, as to make a tolerable judgment of what is beautiful to sight.

Here again our other senses must assist us, notwithstanding in this chapter we shall be more confined to what is communicated to the eye by rays of light; and tho’ things must now be consider’d as appearances only; pro-
produced and made out merely by means of lights, shades, and colours.

By the various circumstances of which, every one knows we have represented on the flat surface of the looking-glass, pictures equal to the originals reflected by it. The painter too, by proper dispositions of lights, shades, and colours on his canvas, will raise the like ideas. Even prints, by means of lights and shades alone, will perfectly inform the eye of every shape and distance whatsoever, in which even lines must be consider'd as narrow parts of shade, a number of them, drawn or engrav'd neatly side by side, called hatching, serve as shades in prints, and when they are artfully managed, are a kind of pleasing succedanum to the delicacy of nature's.

Could mezzo-tinto prints be wrought as accurately as those with the graver, they would come nearest to nature, because they are done without strokes or lines.

I have often thought that a landscape, in the process of this way of representing it, doth a little resemble the first coming on of day. The copper-plate it is done upon, when the artist first takes it into hand, is wrought all over with an edg'd-tool, so as to make it print one even black, like night: and his whole work after this, is merely introducing the lights into it; which he does by scraping off the rough grain according to his design, artfully smoothing it most where light is most required: but as he proceeds in burnishing the lights, and clear-
ing up the shades, he is obliged to take off frequent impressions to prove the progress of the work, so that each proof appears like the different times of a foggy morning, till one becomes so finish'd as to be distinct and clear enough to imitate a day-light piece. I have given this description because I think the whole operation, in the simplest manner, shews what lights and shades alone will do.

As light must always be supposed, I need only speak of such privations of it as are called shades or shadows, wherein I shall endeavour to point out and regularly describe a certain order and arrangement in their appearance, in which order we may conceive different kinds of softnings and modulations of the rays of light which are said to fall upon the eye from every object it sees, and to cause those more or less-pleasing vibrations of the optic nerves, which serve to inform the mind concerning every different shape or figure that presents itself.

The best light for seeing the shadows of objects truly, is, that which comes in at a common sized window, where the sun doth not shine; I shall therefore speak of their order as seen by this kind of light: and shall take the liberty in the present and following chapter, to consider colours but as variegated shades, which together with common shades, will now be divided into two general parts or branches.
The first we shall call prime tints, by which is meant any colour or colours on the surfaces of objects; and the use we shall make of these different hues will be to consider them as shades to one another. Thus gold is a shade to silver, &c. exclusive of those additional shades which may be made in any degree by the privation of light.

The second branch may be called retiring shades, which gradate or go off by degrees, as fig. *. These shades, as they vary more or less, produce beauty, whether they are occasioned by the privation of light, or made by the pencilings of art or nature.

When I come to treat of colouring, I shall particularly shew in what manner the gradating of prime tints serve to the making a beautiful complexion; in this place we shall only observe how nature hath by these gradating shades ornamented the surfaces of animals; fish generally have this kind of shade from their backs downward; birds have their feathers enriched with it; and many flowers, particularly the rose, shew it by the gradually-increasing colours of their leaves.

The sky always gradates one way or other, and the rising or setting sun exhibits it in great perfection, the imitating of which was Claud. de Lorain's peculiar excellence, and is now Mr. Lambert's: there is so much of what is called harmony to the eye to be produced by this shade, that I believe we may venture to say, in

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* Fig. 34. T. p. 2.
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In art it is the painter's gamut, which nature has sweetly pointed out to us in what we call the eyes of a peacock's tail: and the nicest needle-workers are taught to weave it into every flower and leaf, right or wrong, as if it was as constantly to be observed as it is seen in flames of fire; because it is always found to entertain the eye. There is a sort of needle-work called Irish-stitch, done in these shades only; which pleases still, tho' it has long been out of fashion.

There is so strict an analogy between shade and sound, that they may well serve to illustrate each other's qualities: for as sounds gradually decreasing and increasing give the idea of progression from, or to the ear, just so do retiring shades shew progression, by figuring it to the eye. Thus, as by objects growing still fainter, we judge of distances in prospects, so by the decreasing noise of thunder, we form the idea of its moving further from us. And, with regard to their similitude in beauty, like as the gradating shade pleases the eye, so the increasing, or swelling note, delights the ear.

I have call'd it the retiring shade, because by the successive, or continual change in its appearance, it is equally instrumental with converging lines, in shewing how much objects, or any parts of them, retire or recede from the eye; without which, a floor, or horizontal-plane, would often seem to stand upright like

1 See p. 7. The two converging lines from the ship, to the point C, under fig. 47, plate 1.
a wall. And notwithstanding all the other ways by which we learn to know at what distances things are from us, frequent deceptions happen to the eye on account of deficiencies in this shade: for if the light chances to be so disposed on objects as not to give this shade its true gradating appearance, not only spaces are confounded, but round things appear flat, and flat ones round.

But although the retiring shade hath this property, when seen with converging lines, yet if it describes no particular form, as none of those do in fig. 94, on top of plate 2, it can only appear as a flat-pencil'd shade; but being inclosed within some known boundary or out-line, such as may signify a wall, a road, a globe, or any other form in perspective where the parts retire, it will then shew its retiring quality: as for example, the retiring shade on the floor, in plate 2, which gradates from the dog's feet to those of the dancer's, shews, that by this means a level appearance is given to the ground: so when a cube is put into true perspective on paper, with lines only, which do but barely hint the directions every face of it is meant to take, these shades make them seem to retire just as the perspective lines direct; thus mutually compleating the idea of those recessions which neither of them alone could do.

Moreover, the out-line of a globe is but a circle on the paper; yet, according to the manner of filling up the space within it, with this shade, it may be made to
to appear either flat, globular, or concave, in any of its positions with the eye; and as each manner of filling up the circle for those purposes must be very different, it evidently shews the necessity of distinguishing this shade into as many species or kinds, as there are classes or species of lines, with which they may have a correspondence.

In doing which, it will be found, that, by their correspondency with, and conformity to objects, either composed of straight, curved, waving, or serpentine lines, they of course take such appearances of variety as are adequate to the variety made by those lines; and by this conformity of shades we have the same ideas of any of the objects composed of the above lines in their front aspects, as we have of them by their profiles; which otherwise could not be without feeling them.

Now instead of giving engraved examples of each species of shade, as I have done of lines, I have found that they may be more satisfactorily pointed out and described by having recourse to the life.

But in order to the better and more precisely fixing upon what may be there seen, as the distinct species, of which all the shades of the retiring kind in nature partake, in some degree or other, the following scheme is offered, and intended as an additional means of making such simple impressions in the mind, as may be thought adequate to the four species of lines described in chapter 27. Wherein we are to suppose imperceptible degrees of shade
shade gradating from one figure to another. The first species to be represented by, 1, 2, 3, 4, 5.
the second by, 5, 4, 3, 2, 1, 2, 3, 4, 5.
and the third by, 5, 4, 3, 2, 1, 2, 3, 4, 5.
gradating from the dots underneath, repeated either way.

As the first species varies or gradates but one way, it is therefore least ornamental, and equal only to straight lines.

The second gradating contrary ways, doubling the others variety, is consequently twice as pleasing, and thereby equal to curved lines.

The third species gradating doubly contrary ways, is thereby still more pleasing in proportion to that quadruple variety which makes it become capable of conveying to the mind an equivalent in shade, which expresses the beauty of the waving line, when it cannot be seen as a line.

The retiring shade, adequate to the serpentine line, now should follow; but as the line itself could not be expressed on paper, without the figure of a cone †, so neither can this shade be described without the assistance of a proper form, and therefore must be deferred a little longer.

When only the ornamental quality of shades is spoken of, for the sake of distinguishing them from retiring shades, let them be considered as pencilings only; whence another advantage will arise, which is, that then all

† See Fig. 26. p. 1.
all the intervening mixtures, with their degrees of beauty between each species, may be as easily conceived, as those have been between each class of lines.

And now let us have recourse to the experiments in life, for such examples as may explain the retiring power of each species; since, as has been before observed, they must be considered together with their proper forms, or else their properties cannot be well distinguished.

All the degrees of obliquity that planes, or flat surfaces are capable of moving into, have their appearances of recession perfected by the first species of retiring shades, which may evidently be seen by setting opposite a door, as it is opening outwards from the eye, and fronting one light.

But it will be proper to premise, that when it is quite shut, and flat or parallel to the eye and window, it will only have a penciling shade gradating upon it, and spreading all around from the middle, but which will not have the power of giving the idea of recession any way, as when it opens, and the lines run in perspective to a point; because the square figure or parallel lines of the door, do not correspond with such shade; but let a door be circular in the same situation, and all without side, or round about it, painted of any other colour, to make its figure more distinctly seen, and it will immediately appear concave like a basin, the shade continually retiring; because this circular species of shade would then
then be accompanied by its corresponding form, a circle.

But to return; we observ'd that all the degrees of obliquity in the moving of planes or flat surfaces, have the appearances of their recession perfected to the eye by the first species of retiring shade. For example, then; when the door opens, and goes from its parallel situation with the eye, the shade last spoken of, may be observed to alter and change its round gradating appearance, into that of gradating one way only; as when a standing water takes a current upon the least power given it to descend.

Note, if the light should come in at the door-way, instead of the window, the gradation then would be reversed, but still the effect of recession would be just the same, as this shade ever complies with the perspective lines.

In the next place, let us observe the ovolo, or quarter-round in a cornice, fronting the eye in like manner, by which may be seen an example of the second species; where, on its most projecting part, a line of light is seen, from whence these shades retire contrary ways, by which the curvature is understood.

And, perhaps, in the very same cornice may be seen an example of the third species, in that ornamental member called

1 Note, if the light were to come in at a very little hole not far from the door, so as to make the gradation sudden and strong, like what may be made with a small candle held near a wall or a wainscot, the bason would appear the deeper for it.
called by the architects cyma recta, or talon, which indeed is no more than a larger sort of waving or ogee moulding; wherein, by the convex parts gently gliding into the concave, you may see four contrasted gradating shades, shewing so many varied recessions from the eye; by which we are made as sensible of its waving form as if we saw the profile out-line of some corner of it, where it is miter'd, as the joiners term it. Note, when these objects have a little gloss on them these appearances are most distinct.

Lastly, the serpentine shade may be seen (light and situation as before) by the help of the following figure, as thus; imagine the horn, figure 57, plate 2, to be of so soft a nature, that with the fingers only, it might be pressed into any shape; then beginning gently from the middle of the dotted line, but pressing harder and harder all the way up the lesser end, by such pressure there would be as much concave above, as would remain convex below, which would bring it equal in variety or beauty to the ogee moulding; but after this, by giving the whole a twist, like figure 58, these shades must unavoidably change their appearances, and in some measure, twist about as the concave and convex parts are twisted, and consequently thereby add that variety, which

Note also, that when planes are seen parallel to the eye in open daylight, they have scarce any round gradating or penciling shade at all, but appear merely as uniform prime tints, because the rays of light are equally diffused upon them. Nevertheless, give them but obliquity, they will more or less exhibit the retiring shade.
which of course will give this species of shade, as much
the preference to the foregoing, as forms composed of
serpentine lines have, to those composed only of the
waving. See chap. 9. and chap. 10.

I should not have given my reader the trouble of
compleating, by the help of his imagination, the forego-
ing figure, but as it may contribute to the more ready
and particular conception of that intricate variety which
twisted figures give to this species of shade, and to faci-
litate his understanding the cause of its beauty, wherever
it may be seen on surfaces of ornament, when it will be
found no where more conspicuous than in a fine face,
as will be seen upon further enquiry.

The dotted line †, which begins from the concave
part, under the arch of the brow, near the nose, and from
thence winding down by the corner of the eye, and there
turning obliquely with the round of the cheek, shews
the course of that twist of shades in a face, which was
before described by the horn; and which may be most
perfectly seen in the life, or in a marble busto, together
with the following additional circumstances still remain-
ing to be described.

As a face is for the most part round, it is therefore
apt to receive reflected light on its shadowy side ¹, which

¹ Note, though I have advised the observing objects by a front light,
for the sake of the better distinguishing our four fundamental species of
shades, yet objects in general are more advantageously, and agreeably seen
by light coming side-ways upon them, and therefore generally chose
in paintings; as it gives an additional reflected softness, not unlike the
gentle tone of an echo in music.
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not only adds more beauty by another pleasing tender gradation, but also serves to distinguish the roundness of the cheeks, &c. from such parts as sink and fall in: because concavities do not admit of reflections, as convex forms do 2.

I have now only to add, that as before observed, chap. 4, page 23, that the oval hath a noble simplicity in it, more equal to its variety than any other object in nature; and of which the general form of a face is composed; therefore, from what has been now shewn, the general gradation-shade belonging to it, must consequently be adequate thereto, and which evidently gives a delicate softness to the whole composition of a face; insomuch that every little dent, crack, or scratch, the form receives, its shadows also suffer with it, and help to shew the blemish. Even the least roughness interrupts and damages that soft gradating play of shades which fall upon it. Mr. Dryden, describing the light and shades of a face, in his epistle to Sir Godfrey Kneller the portrait painter, seems, by the penetration of his incomparable genius, to have understood that language in the works of nature, which the latter, by means of an exact eye and a strict obeying hand, could only faithfully transcribe; when he says,

2 As an instance that convex and concave would appear the same, if the former were to have no reflection thrown upon, observe the ovolo and cavetto, or channel, in a cornice, placed near together, and seen by a front light, when they will each of them, by turns, appear either concave, or convex, as fancy shall direct.

P Where
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Where light to shades descending, plays, not strives,
Dies by degrees, and by degrees revives.

CHAP. XIII.

Of Composition with regard to Light, Shade and Colours.

UNDER this head I shall attempt shewing what it is that gives the appearance of that hollow or vacant space in which all things move so freely; and in what manner light, shade and colours, mark or point out the distances of one object from another, and occasion an agreeable play upon the eye, called by the painters a fine keeping, and pleasing composition of light and shade. Herein my design is to consider this matter as a performance of nature without, or before the eye; I mean, as if the objects with their shades, &c. were in fact circumstanced as they appear, and as the unskill'd in optics take them to be. And let it be remarked throughout this chapter, that the pleasure arising from composition, as in a fine landscape, &c. is chiefly owing to the dispositions and assemblages of light and shades, which are so order'd by the principles called opposition, breadth and simplicity, as to produce a just and distinct perception of the objects before us.

Experience teaches us that the eye may be subdued and forced into forming and disposing of objects even quite contrary to what it would naturally see them, by the
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the prejudgment of the mind from the better authority of feeling, or some other persuasive motive. But surely this extraordinary perversion of the sight would not have been suffer'd, did it not tend to great and necessary purposes, in rectifying some deficiencies which it would otherwise be subject to (tho' we must own at the same time, that the mind itself may be imposed upon as to make the eye see falsely as well as truly) for example, were it not for this controll over the sight, it is well known, that we should not only see things double, but upside down, as they are painted upon the retina, and as each eye has a distinct sight. And then as to distances; a fly upon a pane of glass is sometimes imagined a crow, or larger bird afar off, till some circumstance hath rectified the mistake, and convinced us of its real size and place.

Hence I would infer, that the eye generally gives its assent to such space and distances as have been first measured by the feeling, or otherwise calculated in the mind: which measurements and calculations are equally, if not more, in the power of a blind man, as was fully experienced by that incomparable mathematician and wonder of his age, the late professor Sanderson.

By pursu'ing this observation on the faculties of the mind, an idea may be formed of the means by which we attain to the perception or appearance of an immense space surrounding us; which cavity, being subject to divisions and subdivisions in the mind, is afterwards fashioned
fashioned by the limited power of the eye, first into a
hemisphere, and then into the appearance of different
distances, which are pictured to it by means of such dis-
positions of light and shade as shall next be described.
And these I now desire may be looked upon, but as so
many marks or types set upon these distances, and
which are remember'd and learnt by degrees, and when
learnt, are recurred to upon all occasions.

If permitted then to consider light and shades as
types of distinction, they become, as it were, our mate-
rials, of which prime tints are the principal; by these,
I mean the fixed and permanent colours of each object,
as the green of trees, &c. which serve the purposes of
separating and relieving the several objects by the diffe-
rent strengths or shades of them being opposed to each
other *

* Fig. 86.
*T. p. 2.

The other shades that have been before spoken of,
serve and help to the like purposes when properly op-
posed; but as in nature they are continually fleeting and
changing their appearances, either by our or their situa-
tions, they sometimes oppose and relieve, and sometimes
not, as for instance; I once observed the tower-part of
a steeple so exactly the colour of a light cloud behind
it, that, at the distance I stood, there was not the least
distinction to be made, so that the spire (of a lead-
colour) seemed suspended in the air; but had a cloud of
the like tint with the steeple, supplied the place of the
white one, the tower would then have been relieved
and
and distinct, when the spire would have been lost to the view.

Nor is it sufficient that objects are of different colours or shades, to shew their distances from the eye, if one does not in part hide or lay over the other, as in fig. 86.

For as fig. * the two equal balls, tho' one were black and the other white, placed on the separate walls, supposed distant from each other twenty or thirty feet, nevertheless, may seem both to rest upon one, if the tops of the walls are level with the eye; but when one ball hides part of the other, as in the same figure, we begin to apprehend they are upon different walls, which is determin'd by the perspective 1: hence you will see the reason, why the steeple of Bloomsbury-church, in coming from Hampstead, seems to stand upon Montague-house, tho' it is several hundred yards distant from it.

Since then the opposition of one prime tint or shade to another, hath so great a share in marking out the recessions, or distances in a prospect, by which the eye is led onward step by step, it becomes a principle of consequence enough to be further discussed, with regard to the management of it in compositions of nature, as well as art. As to the management of it, when seen only

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1 The knowledge of perspective is no small help to the seeing objects truly, for which purpose Dr. Brook Taylor's Linear perspective made easy to those who are unacquainted with geometry, proposed to be publish'd soon by Mr. Kirby of Ipswich, may be of most service.
from one point, the artist hath the advantage over nature, because such fix'd dispositions of shades as he hath artfully put together, cannot be displaced by the alteration of light, for which reason, designs done in two prime tints only, will sufficiently represent all those recessions, and give a just keeping to the representation of a prospect, in a print; whereas, the oppositions in nature, depending, as has been before hinted, on accidental situations and uncertain incidents, do not always make such pleasing composition, and would therefore have been very often deficient, had nature worked in two colours only; for which reason she hath provided an infinite number of materials, not only by way of prevention, but to add lustre and beauty to her works.

By an infinite number of materials, I mean colours and shades of all kinds and degrees; some notion of which variety may be formed by supposing a piece of white silk by several dippings gradually dyed to a black; and carrying it in like manner through the prime tints of yellow, red, and blue; and then again, by making the like progress through all the mixtures that are to be made of these three original colours. So that when we survey this infinite and immense variety, it is no wonder, that, let the light or objects be situated or changed how they will, oppositions seldom miss: nor that even every incident of shade should sometimes be so completely disposed as to admit of no further beauty, as to composition; and from whence the artist hath

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by observation taken his principles of imitation, as in the following respect.

Those objects which are intended most to affect the eye, and come forwardest to the view, must have large, strong, and smart oppositions, like the fore-ground in fig. *, and what are designed to be thrown further off, must be made still weaker and weaker, as expressed in figure 86, which receding in order make a kind of gradation of oppositions; to which, and all the other circumstances already described, both for reception, and beauty, nature hath added what is known by the name of aerial perspective; being that interposition of air, which throws a general soft retiring tint over the whole prospect; to be seen in excess at the rising of a fog. All which again receives still more distinctness, as well as a greater degree of variety, when the sun shines bright, and casts broad shadows of one object upon another; which gives the skilful designer such hints for shewing broad and fine oppositions of shades, as give life and spirit to his performances.

Breadth of shade is a principle that assists in making distinction more conspicuous; thus fig. †, is better distinguish’d by its breadth or quantity of shade, and view’d with more ease and pleasure at any distance, than fig. ‡, which hath many, and these but narrow shades between the folds. And for one of the noblest instances of this, let Windsor-castle be viewed at the rising or setting of the sun.

Let
Let breadth be introduced how it will, it always gives great repose to the eye; as on the contrary, when lights and shades in a composition are scattered about in little spots, the eye is constantly disturbed, and the mind is uneasy, especially if you are eager to understand every object in the composition, as it is painful to the ear when any one is anxious to know what is said in company, where many are talking at the same time.

Simplicity (which I am last to speak of) in the disposition of a great variety, is best accomplished by following nature's constant rule, of dividing composition into three or five parts, or parcels, see chap. 4. on simplicity: the painters accordingly divide theirs into foreground, middle-ground, and distance or back-ground; which simple and distinct quantities mass together that variety which entertains the eye; as the different parts of base, tenor, and treble, in a composition in music, entertain the ear.

Let these principles be reversed, or neglected, the object will appear as disagreeable as fig. *, whereas, was this to be a composition of lights and shades only, properly disposed, tho' ranged under no particular figures, it might still have the pleasing effect of a picture. And here, as it would be endless to enter upon the different effects of lights and shades on lucid and transparent bodies, we shall leave them to the reader's observation, and so conclude this chapter.

CHAP.
By the beauty of colouring, the painters mean that disposition of colours on objects, together with their proper shades, which appear at the same time both distinctly varied and artfully united, in compositions of any kind; but, by way of pre-eminence, it is generally understood of flesh-colour, when no other composition is named.

To avoid confusion, and having already said enough of retiring shades, I shall now only describe the nature and effect of the prime tint of flesh; for the composition of this, when rightly understood, comprehends every thing that can be said of the colouring of all other objects whatever.

And herein (as has been shown in chap. 8, of the manner of composing pleasing forms) the whole process will depend upon the art of varying; i.e. upon an artful manner of varying every colour belonging to flesh, under the direction of the six fundamental principles there spoken of.

But before we proceed to show in what manner these principles conduce to this design, we shall take a view of nature's curious ways of producing all sorts of complexions, which may help to further our conception of the principles of varying colours, so as to see why they cause the effect of beauty.
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1. It is well known, the fair young girl, the brown old man, and the negro; nay, all mankind, have the same appearance, and are alike disagreeable to the eye, when the upper skin is taken away: now to conceal so disagreeable an object, and to produce that variety of complexions seen in the world, nature hath contrived a transparent skin, called the cuticula, with a lining to it of a very extraordinary kind, called the cutis; both which are so thin any little scald will make them blister and peel off. These adhering skins are more or less transparent in some parts of the body than in others, and likewise different in different persons. The cuticula alone is like gold-beaters‘skin, a little wet, but somewhat thinner, especially in fair young people, which would shew the fat, lean, and all the blood-vessels, just as they lie under it, as through Isisglafs, were it not for its lining the cutis, which is so curiously constructed, as to exhibit those things beneath it which are necessary to life and motion, in pleasing arangements and dispositions of beauty.

The cutis is composed of tender threads like network, fill’d with different colour’d juices. The white juice serves to make the very fair complexion;—yellow, makes the brunnet;—brownish yellow, the ruddy brown;—green yellow, the olive;—dark brown, the mulatto;—black, the negro;—These different colour’d juices, together with the different masbes of the network, and the size of its threads in this or that part, causes the variety of complexions.
A description of this manner of its shewing the rosy colour of the cheek, and, in like manner, the bluish tints about the temple, &c. see in the profile *, where you are to suppose the black strokes of the print to be the white threads of the network, and where the strokes are thickest, and the part blackest, you are to suppose the flesh would be whitest; so that the lighter part of it stands for the vermilion-colour of the cheek, grading every way.

Some persons have the network so equally wove over the whole body, face and all, that the greatest heat or cold will hardly make them change their colour; and these are seldom seen to blush, tho' ever so bashful, whilst the texture is so fine in some young women, that they redden, or turn pale, on the least occasion.

I am apt to think the texture of this network is of a very tender kind, subject to damage many ways, but able to recover itself again, especially in youth. The fair fat healthy child of 3 or 4 years old hath it in great perfection; most visible when it is moderately warm, but till that age somewhat imperfect.

It is in this manner, then, that nature seems to do her work.----And now let us see how by art the like appearance may be made and penciled on the surface of an uniform coloured statue of wax or marble; by describing which operation we shall still more particularly point out what is to our present purpose: I mean the reason why the order nature hath thus made use of

* Fig. 95.
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should strike us with the idea of beauty; which by the way, perhaps may be of more use to some painters than they will care to own.

There are but three original colours in painting besides black and white, viz. red, yellow and blue. Green, and purple, are compounded; the first of blue and yellow, the latter of red and blue; however these compounds being so distinctly different from the original colours, we will rank them as such. Fig. *, represents mixt up, as on a painter's pallet, scales of these five original colours divided into seven classes, 1, 2, 3, 4, 5, 6, 7.—4, is the medium, and most brilliant class, being that which will appear a firm red, when those of 5, 6, 7, would deviate into white, and those of 1, 2, 3, would sink into black, either by twilight or at a moderate distance from the eye, which shews 4 to be brightest, and a more permanent colour than the rest. But as white is nearest to light it may be said to be equal if not superior in value as to beauty, with class 4. Therefore the classes 5, 6, 7, have also, almost equal beauty with it too, because what they lose of their brillancy and permanency of colour, they gain from the white or light; whereas 3, 2, 1, absolutely lose their beauty by degrees as they approach nearer to black, the representative of darkness.

Let us then, for distinction and pre-eminence sake, call class 4 of each colour, bloom tints, or if you please, virgin tints, as the painters call them; and once more recollect

* Fig. 94. T. p. 2.
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recollected, that in the disposition of colours as well as of forms, variety, simplicity, distinctness, intricacy, uniformity and quantity, direct in giving beauty to the colouring of the human frame, especially if we include the face, where uniformity and strong opposition of tints are required, as in the eyes and mouth, which call most for our attention. But for the general hue of flesh now to be described, variety, intricacy and simplicity, are chiefly required.

The value of the degrees of colour being thus considered and ranged in order upon the pallet, figure 94, let us next apply them to a busto, fig. * of white marble, which may be supposed to let every tint sink into it, like as a drop of ink sinks in and spreads itself upon coarse paper, whereby each tint will gradate all around.

If you would have the neck of the busto tinged of a very florid and lively complexion, the pencil must be dipt in the bloom tints of each colour as they stand one above another at No. 4.—if for a less florid, in those of No. 5— if for a very fair, from No. 6—and so on till the marble would scarce be ting’d at all: let therefore No. 6, be our present choice, and begin with penciling on the red, as at r, the yellow tint at y, the blue tint at b, and the purple or lake tint at p.

These four tints thus laid on, proceed to covering the whole neck and breast, but still changing and varying the situations of the tints with one another, also causing their
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their shapes and sizes to differ as much as possible; red must be ofteneft repeated, yellow next often, purple red next, and blue but seldom, except in particular parts as the temples, backs of the hands, &c. where the larger veins shew their branching shapes (sometimes too distinctly) still varying those appearances. But there are no doubt infinite variations in nature from what may be called the most beautiful order and disposition of the colours in flesh, not only in different persons, but in different parts of the same, all subject to the same principles in some degree or other.

Now if we imagine this whole process to be made with the tender tints of class 7, as they are supposed to stand, red, yellow, blue, green and purple, underneath each other; the general hue of the performance will be a seeming uniform prime tint, at any little distance, that is a very fair, transparent and pearl-like complexion;

Notwithstanding the deep-rooted notion, even amongst the majority of painters themselves, that time is a great improver of good pictures, I will undertake to shew, that nothing can be more absurd. Having mention'd above the whole effect of the oil, let us now see in what manner time operates on the colours themselves; in order to discover if any changes in them can give a picture more union and harmony than has been in the power of a skilful master, with all his rules of art, to do. When colours change at all it must be somewhat in the manner following, for as they are made some of metal, some of earth, some of stone, and others of more perishable materials, time cannot operate on them otherwise than as by daily experience we find it doth, which is, that one changes darker, another lighter, one quite to a different colour, whilst another, as ultramarine, will keep its natural brightness even in the fire.
but never quite uniform as snow, ivory, marble or wax, like a poet's mistress, for either of these in living-flesh, would in truth be hideous.

As in nature, by the general yellowish hue of the cuticula, the gradating of one colour into another appears to be more delicately soften'd and united together; so will the colours we are supposed to have been laying upon the busto, appear to be more united and mellowed by the oils they are ground in, which takes a yellowish cast after a little time, but is apt to do more mischief hereby than good; for which reason care is taken to procure such oil as is clearest and will best keep its colour in oil-painting.

Upon the whole of this account we find, that the utmost beauty of colouring depends on the great principle of varying by all the means of varying, and on the proper and artful union of that variety; which may be farther proved

Therefore how is it possible that such different materials, ever variously changing (visibly after a certain time) should accidentally coincide with the artist's intention, and bring about the greater harmony of the piece, when it is manifestly contrary to their nature, for do we not see in most collections that much time disunites, untunes, blackens, and by degrees destroys even the best preserved pictures.

But if for argument sake we suppose, that the colours were to fall equally together, let us see what advantage this would give to any sort of composition. We will begin with a flower-piece: when a master hath painted a rose, a lily, an african, a gentianella, or violet, with his best art, and brightest colours, how far short do they fall of the freshness and rich brillancy of nature; and shall we wish to see them fall still lower, more faint, fullied, and dirtied by the hand of time, and then admire them
proved by supposing the rules here laid down, all or any part of them reversed.

I am apt to believe, that the not knowing nature's artful, and intricate method of uniting colours for the production of the variegated composition, or prime tint of flesh, hath made colouring, in the art of painting, a kind of mystery in all ages; insomuch, that it may fairly be said, out of the many thousands who have labour'd to

them as having gained an additional beauty, and call them mended and heightened, rather than fouled, and in a manner destroy'd; how absurd! instead of mellow and fastened therefore, always read yellow and fullied, for this is doing time the destroyer, but common justice. Or shall we desire to see complexions, which in life are often, literally, as brilliant as the flowers above-mention'd, served in the like ungrateful manner. In a landskip, will the water be more transparent, or the sky shine with a greater lustré when embrown'd and darken'd by decay? surely no. I own it would be a pity that Mr. Addison's beautiful description of time at work in the gallery of pictures, and the following lines of Mr. Dryden, should want a sufficient foundation;—

For time shall with his ready pencil stand,
Retouch your figures with his ripening hand;
Mellow your colours, and imbrow the tint;
Add every grace which time alone can grant;
To future ages shall your fame convey,

And give more beauties than he takes away. Dryden to Kneller.

were it not that the error they are built upon, hath been a continual blight to the growth of the art, by misguiding both the proficient, and the encourager; and often compelling the former, contrary to his judgment, to imitate the damaged hue of decayed pictures; so that when his works undergo the like injuries, they must have a double remove from nature; which puts it in the power of the meanest observer to see his deficiencies. Whence another absurd notion hath taken rise, viz. that the colours now-a-days do not stand so well as formerly; whereas colours well prepared,
attain it, not above ten or twelve painters have happily succeeded therein, Corregio (who lived in a country-village, and had nothing but the life to study after) is said almost to have stood alone for this particular excellence. Guido, who made beauty his chief aim, was always at a loss about it. Poussin scarce ever obtained a glimpse of it, as is manifest by his many different attempts: indeed France hath not produced one remarkable good colourist 2.

In proof of this, let any one take a view of the ceiling at Greenwich-hospital, painted by Sir James Thornhil, forty years ago, which still remains fresh, strong and clear as if it had been finished but yesterday: and altho' several French writers have so learnedly, and philosophically proved, that the air of this island is too thick, or—too something, for the genius of a painter; yet France in all her palaces can hardly boast of a nobler, more judicious, or richer performance of its kind. Note, the upper end of the hall where the royal family is painted, was left chiefly to the pencil of Mr. Andrea a foreigner, after the payment originally agreed upon for the work was so much reduced, as made it not worth Sir James's while to finish the whole with his own more masterly hand.

2 The lame excuse writers on painting have made for the many great masters that have fail'd in this particular, is, that they purposely deaden'd their colours, and kept them, what they affectedly call'd ebaie, that the correctness of their outlines might be seen to greater advantage. Whereas colours cannot be too brilliant if properly disposed, because the distinction of the parts are thereby made more perfect; as may be seen by comparing a marble busto with the variegated colours of the face either in the life, or one well painted: it is true, uncomposed variety, either in the features or the limbs, as being daubed with many, or one colour, will so confound the parts as to render them unintelligible.

R Rubens
Rubens boldly, and in a masterly manner, kept his bloom tints bright, separate and distinct, but sometimes too much so for easel or cabinet pictures; however, his manner was admirably well calculated for great works, to be seen at a considerable distance, such as his celebrated cieling at Whitehall-chapel: which upon a nearer view, will illustrate what I have advanc'd with regard to the separate brightness of the tints; and shew, what indeed is known to every painter, that had the colours there seen so bright and separate, been all smooth'd and absolutely blended together, they would have produced a dirty grey instead of flesh-colour. The difficulty then lies in bringing blue the third original colour, into flesh, on account of the vast variety introduced thereby; and this omitted, all the difficulty ceases; and a common sign-painter that lays his colours smooth, instantly becomes, in point of colouring, a Rubens, a Titian, or a Corregio.

CHAP. XV.

Of the FACE.

HAVING thus spoken briefly of light, shade and colour, we now return to our lineal account of form, as proposed (page 91) with regard to the face.

1 The front of this building by Inigo Jones, is an additional exemplification of the principles for varying the parts in building; (explained by the candlesticks, &c. chap. 8.) which would appear to be a stronger proof still, were a building formed of squares, on squares; with squares uniformly cut in each square to be opposed to it, to shew the reverse.

It
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It is an observation, that, out of the great number of faces that have been form'd since the creation of the world, no two have been so exactly alike, but that the usual and common discernment of the eye would discover a difference between them: therefore it is not unreasonable to suppose, that this discernment is still capable of further improvements by instructions from a methodical enquiry; which the ingenious Mr. Richardson, in his treatise on painting, terms the art of seeing.

1. I shall begin with a description of such lines as compose the features of a face of the highest taste, and the reverse. See fig. *, taken from an antique head, which stands in the first rank of estimation: in proof of this, Raphael Urbin, and other great painters and sculptors, have imitated it for the characters of their heroes and other great men; and the old man's head, fig. †, was model'd in clay, by Fiamingo (and not inferior in its taste of lines, to the best antique) for the use of Andrea Sacchi, after which model he painted all the heads in his famous picture of St. Romoaldo's dream; and this picture hath the reputation of being one of the best pictures in the world. 2

These examples are here chosen to exemplify and confirm the force of serpentine lines in a face; and let

2 Note, I must refer the reader to the casts of both these pieces of sculpture, which are to be found in the hands of the curious; because it is impossible to express all that I intend, with sufficient accuracy, in a print of this size, whatever pains might have been taken with it; or indeed in any print were it ever so large.
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it also be observed, that in these master-pieces of art, all the parts are otherwise consistent with the rules here-tofore laid down: I shall therefore only shew the effects and use of the line of beauty. One way of proving in what manner the serpentine line appears to operate in this respect, may be by pressing several pieces of wire close up and down the different parts of the face and features of those casts; which wires will all come off so many serpentine lines, as is partly marked in figure 97, by the dotted lines. The beard and hair of the head, fig. 98, being a set of loose lines naturally, and therefore disposable at the painter's or sculptor's pleasure, are remarkably compos'd in this head of nothing else but a varied play of serpentine lines, twisting together in a flame-like manner.

But as imperfections are easier to be imitated than perfections, we shall now have it in our power to explain the latter more fully; by shewing the reverse in several degrees, down to the most contemptible meanness that lines can be form'd into.

Figure 99, is the first degree of deviation from figure 97; where the lines are made straighter, and reduced in quantity; deviating still more in figure 100, more yet in figure 101, and yet more visibly in 102; figure 103, still more so, figure 104 is totally divested of all lines of elegance, like a barber's block; and 105 is compos'd merely of such plain lines as children make, when of themselves they begin to imitate in drawing a human
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It is evident, the inimitable Butler was sensible of the mean and ridiculous effect of such kind of lines, by the description he gives of the shape of Hudibras's beard, fig. *

In cut and dye so like a tile,
A sudden view it would beguile.

2. With regard to character and expression; we have daily many instances which confirm the common received opinion, that the face is the index of the mind; and this maxim is so rooted in us, we can scarce help (if our attention is a little raised) forming some particular conception of the person's mind whose face we are observing, even before we receive information by any other means. How often is it said, on the slightest view, that such a one looks like a good-natur'd man, that he hath an honest open countenance, or looks like a cunning rogue; a man of sense, or a fool, &c. And how are our eyes riveted to the aspects of kings and heroes, murderers and saints; and as we contemplate their deeds, seldom fail making application to their looks. It is reasonable to believe that aspect to be a true and legible representation of the mind, which gives every one the same idea at first sight; and is afterwards confirm'd in fact: for instance, all concur in the same opinion, at first sight, of a down-right idiot.

There is but little to be seen by children's faces, more than that they are heavy or lively; and scarcely that unless they are in motion. Very handsom faces of al-
most any age, will hide a foolish or a wicked mind till they betray themselves by their actions or their words: yet the frequent awkward movements of the muscles of the fool’s face, tho’ ever so handsom, is apt in time to leave such traces up and down it, as will distinguish a defect of mind upon examination: but the bad man, if he be an hypocrite, may so manage his muscles, by teaching them to contradict his heart, that little of his mind can be gather’d from his countenance, so that the character of an hypocrite is entirely out of the power of the pencil, without some adjoining circumstance to discover him, as smiling and stabbing at the same time, or the like.

It is by the natural and unaffected movements of the muscles, caused by the passions of the mind, that every man’s character would in some measure be written in his face, by that time he arrives at forty years of age, were it not for certain accidents which often, tho’ not always prevent it. For the ill-natur’d man, by frequently frowning, and pouting out the muscles of his mouth, doth in time bring those parts to a constant state of the appearance of ill-nature, which might have been prevented by the constant affectation of a smile; and so of the other passions: tho’ there are some that do not affect the muscles at all simply of themselves, as love and hope.

But lest I should be thought to lay too great a stress on outward shew, like a physiognomist, take this with you,
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you, that it is acknowledg'd there are so many different causes which produce the same kind of movements and appearances of the features, and so many thwartings by accidental shapes in the make of faces, that the old adage, fronti nulla fides, will ever stand its ground upon the whole; and for very wise reasons nature hath thought fit it should. But, on the other hand, as in many particular cases, we receive information from the expressions of the countenance, what follows is meant to give a lineal description of the language written therein.

It may not be amiss just to look over the passions of the mind, from tranquillity to extreme despair; as they are in order described in the common drawing-book, called, Le Brun's passions of the mind; selected from that great master's works for the use of learners; where you may have a compendious view of all the common expressions at once. And altho' these are but imperfect copies, they will answer our purpose in this place better than any other thing I can refer you to; because the passions are there ranged in succession, and distinctly marked with lines only, the shadows being omitted.

Some features are formed so as to make this or that expression of a passion more or less legible; for example, the little narrow chinese eye suits a loving or laughing expression best, as a large full eye doth those of fierceness and astonishment; and round-rising muscles will appear with some degree of cheerfulness even in sorrow: the features thus suiting with the expressions that have been
been often repeated in the face, at length mark it with such lines as sufficiently distinguish the character of the mind.

The ancients in their lowest characters have shewn as much judgment, and as great a degree of taste in the management and twisting of the lines of them, as in their statues of a sublimer kind; in the former varying only from the precise line of grace in some parts where the character or action required it. The dying gladiator and the dancing fawn, the former a slave, the latter a wild clown, are sculptured in as high a taste of lines as the Antinous or the Apollo; with this difference, that the precise line of grace abounds more in the two last: notwithstanding which it is generally allow'd there is equal merit in the former, as there is near as much judgment required for the execution of them. Human nature can hardly be represented more debased than in the character of the Silenus, fig. *, where the bulging-line figure 49, No. 7, runs through all the features of the face, as well as the other parts of his swinish body: whereas in the satyr of the wood, tho' the ancients have joined the brute with the man, we still see preserved an elegant display of serpentine lines, that make it a graceful figure.

Indeed the works of art have need of the whole advantage of this line to make up for its other deficiencies: for tho' in nature's works the line of beauty is often neglected, or mixt with plain lines, yet so far are they from being defective on this account, that by this means there
there is exhibited that infinite variety of human forms which always distinguishes the hand of nature from the limited and insufficient one of art; and as thus she for the sake of variety upon the whole, deviates sometimes into plain and inelegant lines, if the poor artist is but able now and then to correct and give a better taste to some particular part of what he imitates, by having learnt so to do from her more perfect works, or copying from those that have, ten to one he grows vain upon it, and fancies himself a nature-mender; not considering, that even in these, the meanest of her works, she is never wholly deftitute of such lines of beauty and other delicacies, as are not only beyond his narrow reach, but are seen wanting even in the most celebrated attempts to rival her. But to return,

As to what we call plain lines, there is this remarkable effect constantly produced by them, that being more or less conspicuous in any kind of character or expression of the face, they bring along with them certain degrees of a foolish or ridiculous aspect.

It is the inelegance of these lines which more properly belonging to inanimate bodies, and being seen where lines of more beauty and taste are expected, that renders the face silly and ridiculous. See chap. 6, p. 31.

Children in infancy have movements in the muscles of their faces peculiar to their age, as an uninformed and unmeaning stare, an open mouth, and simple grin: all which expressions are chiefly formed of plain curves, and
and these movements and expressions ideots are apt to retain; so that in time they mark their faces with these uncouth lines; and when the lines coincide and agree with the natural forms of the features, it becomes a more apparent and confirmed character of an ideot. These plain shapes last mentioned, sometimes happen to people of the best sense, to some when the features are at rest, to others when they are put into motion; which a variety of constant regular movements proceeding from a good understanding, and fashioned by a genteel education, will often by degrees correct into lines of more elegance.

That particular expression likewise of the face, or movement of a feature which becomes one person, shall be disagreeable in another, just as such expressions or turns chance to fall in with lines of beauty, or the reverse; for this reason there are pretty frowns and disagreeable smiles: the lines that form a pleasing smile about the corners of the mouth have gentle windings, as fig. *, but lose their beauty in the full laugh, as fig. †, the expression of excessive laughter, oftener than any other, gives a sensible face a sily or disagreeable look, as it is apt to form regular plain lines about the mouth, like a parenthesis, which sometimes appears like crying; as, on the contrary, I remember to have seen a beggar who had clouted up his head very artfully, and whose visage was thin and pale enough to excite pity, but his features were otherwise so unfortunately form'd

* Fig. 108
L. p. 2.
† Fig. 109
L. p. 2.
form’d for his purpose, that what he intended for a grin of pain and misery, was rather a joyous laugh.

It is strange that nature hath afforded us so many lines and shapes to indicate the deficiencies and blemishes of the mind, whilst there are none at all that point out the perfections of it beyond the appearance of common sense and placidity. Deportment, words, and actions, must speak the good, the wife, the witty, the humane, the generous, the merciful, and the brave. Nor are gravity and solemn looks always signs of wisdom: the mind much occupied with trifles will occasion as grave and sagacious an aspect, as if it was charged with matters of the utmost moment; the balance-master’s attention to a single point, in order to preserve his balance, may look as wise at that time as the greatest philosopher in the depth of his studies. All that the ancient sculptors could do, notwithstanding their enthusiastic endeavours to raise the characters of their deities to aspects of sagacity above human, was to give them features of beauty. Their god of wisdom hath no more in his look than a handom manliness; the Jupiter is carried somewhat higher, by giving it a little more severity than the Apollo, by a larger prominence of brow gently bending in seeming thoughtfulness, with an ample beard, which being added to the noble quantity of its other lines, invests that capital piece of sculpture with uncommon dignity, which in the mysterious language of a profound connoisseur, is stiled a divine idea, inconceivably great, and above nature.
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3dly and lastly, I shall shew in what manner the lines of the face alter from infancy upwards, and specify the different ages. We are now to pay most attention to simplicity, as the difference of ages we are about to speak of, turn chiefly upon the use made of this principle in a greater or less degree, in the form of the lines.

From infancy till the body has done growing, the contents both of the body and the face, and every part of their surface, are daily changing into more variety, till they obtain a certain medium (see page 78 on proportion) from which medium, as fig. *, if we return back to infancy, we shall see the variety decreasing, till by degrees that simplicity in the form, which gave variety its due limits, deviates into sameness; so that all the parts of the face may be circumscribed in several circles, as fig. †.

But there is another very extraordinary circumstance, (perhaps never taken notice of before in this light) which nature hath given us to distinguish one age from another by; which is, that tho' every feature grows larger and longer, till the whole person has done growing, the sight of the eye still keeps its original size; I mean the pupil, with its iris or ring; for the diameter of this circle continues still the same, and so becomes a fixt measure by which we, as it were, insensibly compare the daily perceiv'd growings of the other parts of the face, and thereby determine a young person's age. You may sometimes find this part of the eye in a new-born
born infant, full as large as in a man of six foot; nay, sometimes larger, see fig. *, and †.

In infancy the faces of boys and girls have no visible difference, but as they grow up the features of the boy get the start, and grow faster in proportion to the ring of the eye, than those of the girl, which shews the distinction of the sex in the face. Boys who have larger features than ordinary, in proportion to the rings of their eyes, are what we call manly-featured children; as those who have the contrary, look more childish and younger than they really are. It is this proportion of the features with the eyes, that makes women, when they are dressed in mens-cloaths, look so young and boyish: but as nature doth not always stick close to these particulars, we may be mistaken both in sexes and ages.

By these obvious appearances, and the differences of the whole size, we easily judge of ages till twenty, but not with such certainty afterwards; for the alterations from that age are of a different kind, subject to other changes by growing fatter or leaner, which it is well known, often give a different turn to the look of the person, with regard to his age.

The hair of the head, which encompasseth a face as a frame doth a picture, and contrasts with its uniform colour, the variegated inclosed composition, adding more or less beauty thereto, according as it is disposed by the rules of art, is another indication of advanced age.
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What remains to be said on the different appearances of ages, being less pleasing than what has gone before, shall be described with more brevity. In the age from twenty to thirty, barring accidents, there appears but little change, either in the colours or the lines of the face; for tho' the bloom tints may go off a little, yet on the other hand, the make of the features often attain a sort of settled firmness in them, aided by an air of acquired sensibility; which makes ample amends for that loss, and keeps beauty till thirty pretty much upon a par; after this time, as the alterations grow more and more visible, we perceive the sweet simplicity of many rounding parts of the face, begin to break into dented shapes, with more sudden turns about the muscles, occasioned by their many repeated movements; as also by dividing the broad parts, and thereby taking off the large sweeps of the serpentine lines; the shades of beauty also consequently suffering in their softnesses. Something of what is here meant between the two ages of thirty and fifty, see in figures *, and what further havoc time continues to make after the age of fifty, is too remarkable to need describing: the strokes and cuts he then lays on are plain enough; however; in spite of all his malice, those lineaments that have once been elegant, retain their flowing turns in venerable age, leaving to the last a comely piece of ruins.

* Fig. 117 and Fig. 118. B. P. 2.
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CHAP. XVI.

Of ATTITUDE.

Such dispositions of the body and limbs as appear most graceful when seen at rest, depend upon gentle winding contrasts, mostly govern'd by the precise serpentine line, which in attitudes of authority, are more extended and spreading than ordinary, but reduced somewhat below the medium of grace, in those of negligence and ease: and as much exaggerated in insolent and proud carriage, or in distortions of pain (see figure 9, plate 1.) as lessen'd and contracted into plain and parallel lines, to express meanness, awkwardness, and submission.

The general idea of an action, as well as of an attitude, may be given with a pencil in very few lines. It is easy to conceive that the attitude of a person upon the cross, may be fully signified by the two straight lines of the cross; so the extended manner of St. Andrew's crucifixion is wholly understood by the X-like cross.

Thus, as two or three lines at first are sufficient to shew the intention of an attitude, I will take this opportunity of presenting my reader (who may have been at the trouble of following me thus far) with the sketch of a country-dance, in the manner I began to set out the design; in order to shew how few lines are necessary
fary to express the first thoughts, as to different attitudes; see fig. *, which describe in some measure, the several figures and actions, mostly of the ridiculous kind, that are represented in the chief part of plate 2.

The most amiable person may deform his general appearance by throwing his body and limbs into plain lines, but such lines appear still in a more disagreeable light in people of a particular make, I have therefore chose such figures as I thought would agree best with my first score of lines, fig. 71.

The two parts of curves next to 71, served for the figures of the old woman and her partner at the farther end of the room. The curve and two straight lines at right angles, gave the hint for the fat man's sprawling posture. I next resolved to keep a figure within the bounds of a circle, which produced the upper part of the fat woman, between the fat man and the awkward one in the bag wig, for whom I had made a sort of an X. The prim lady, his partner, in the riding-habit, by pecking back her elbows, as they call it, from the waiste upwards, made a tolerable D, with a straight line under it, to signify the scanty stiffness of her peticoat; and a Z stood for the angular position the body makes with the legs and thighs of the affected fellow in the tye-wig; the upper parts of his plump partner was confin'd to an O, and this chang'd into a P, served as a hint for the straight lines behind. The uniform diamond of a card, was filled up by the flying drees, &c. of the little capering
ing figure in the Spencer-wig; whilst a double L mark'd the parallel position of his poking partner's hands and arms: and lastly, the two waving lines were drawn for the more genteel turns of the two figures at the hither end.

The best representation in a picture, of even the most elegant dancing, as every figure is rather a suspended action in it than an attitude, must be always somewhat unnatural and ridiculous; for were it possible in a real dance to fix every person at one instant of time, as in a picture, not one in twenty would appear to be graceful, tho' each were ever so much so in their movements; nor could the figure of the dance itself be at all understood.

The dancing-room is also ornamented purposely with such statues and pictures as may serve to a farther illustration. Henry VIII. fig. *, makes a perfect X with his legs and arms; and the position of Charles the first, fig. †, is composed of less-varied lines than the statue of Edward the sixth, fig. ‡; and the medal over his head is in the like kind of lines; but that over Q. Elizabeth, as well as her figure, is in the contrary; so are also the two other wooden figures at the end. Likewise the comical posture of astonishment (expressed by following the direction of one plain curve, as the dotted line in a French print of Sancho, where Don Quixote demolishes the puppet shew, fig. ||,) is a good contrast to the effect of the serpentine lines in the fine turn of the Samaritan woman.

* Fig. 72. P. 2.
† Fig. 51. p. 2.
‡ Fig. 73. P. 2.

|| Fig. 79. R. P. 1.
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woman, fig. *, taken from one of the best pictures Annibal Carrache ever painted.

CHAP. XVII.

Of ACTION.

To the amazing variety of forms made still infinitely more various in appearance by light, shade and colour, nature hath added another way of increasing that variety, still more to enhance the value of all her compositions. This is accomplished by means of action; the fullest display of which is put into the power of the human species, and which is equally subject to the same principles with regard to the effects of beauty, or the reverse, as govern all the former compositions; as is partly seen in chapter XI. on proportion. My business here shall be, in as concise a manner as possible, to particularise the application of these principles to the movement of the body, and therewith finish this system of variety in forms and actions.

There is no one but would wish to have it in his power to be genteel and graceful in the carriage of his person, could it be attained with little trouble and expense of time. The usual methods relied on for this purpose among well-bred people, takes up a considerable part of their time: nay even those of the first rank have no other recourse in these matters, than to dancing-masters, and fencing-masters: dancing and fencing are undoubt-
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undoubtedly proper, and very necessary accomplishments; yet are they frequently very imperfect in bringing about the business of graceful deportment. For altho' the muscles of the body may attain a pliancy by these exercises, and the limbs, by the elegant movement in dancing, acquire a facility in moving gracefully, yet for want of knowing the meaning of every grace, and whereon it depends, affectations and misapplications often follow.

Action is a sort of language which perhaps one time or other, may come to be taught by a kind of grammar-rules; but, at present, is only got by rote and imitation: and contrary to most other copyings or imitations, people of rank and fortune generally excel their originals, the dancing-masters, in easy behaviour and unaffected grace; as a sense of superiority makes them act without constraint; especially when their persons are well turn'd. If so, what can be more conducive to that freedom and necessary courage which make acquired grace seem easy and natural, than the being able to demonstrate when we are actually just and proper in the least movement we perform; whereas, for want of such certainty in the mind, if one of the most finish'd gentlemen at court was to appear as an actor on the public stage, he would find himself at a loss how to move properly, and be stiff, narrow, and awkward in representing even his own character: the uncertainty of being right would naturally give him some of that restraint which the
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uneducated common people generally have when they appear before their betters.

It is known that bodies in motion always describe some line or other in the air, as the whirling round of a fire-brand apparently makes a circle, the water-fall part of a curve, the arrow and bullet, by the swiftness of their motions, nearly a straight line; waving lines are formed by the pleasing movement of a ship on the waves. Now in order to obtain a just idea of action at the same time to be judiciously satisfied of being in the right in what we do, let us begin with imagining a line formed in the air by any supposed point at the end of a limb or part that is moved, or made by the whole part, or limb; or by the whole body together. And that thus much of movements may be conceived at once is evident, on the least recollection, for whoever has seen a fine arabian war-horse, unback'd and at liberty, and in a wanton trot, cannot but remember what a large waving line his rising, and at the same time pressing forward, cuts through the air; the equal continuation of which, is varied by his curveting from side to side; whilst his long mane and tail play about in serpentine movements.

After thus having form'd the idea of all movements being as lines, it will not be difficult to conceive, that grace in action depends upon the same principles as have been shewn to produce it in forms.

The next thing that offers itself to our consideration is the force of habit and custom in action; for a great deal depends thereon.
The peculiar movements of each person, as the gate in walking, are particularised in such lines as each part describes by the habits they have contracted. The nature and power of habit may be fully conceived by the following familiar instance, as the motions of one part of the body may serve to explain those of the whole.

Observe that whatever habit the fingers get in the use of the pen, you see exactly delineated to the eye by the shapes of the letters. Were the movements of every writer's fingers to be precisely the same, one hand-writing would not be known from another, but as the fingers naturally fall into, or acquire different habits of moving, every hand-writing is visibly different. Which movements must tally with the letters, tho' they are too quick and too small to be as perfectly traced by the eye; but this shews what nice differences are caused, and constantly retained by habitual movements.

It may be remark'd, that all useful habitual motions, such as are readiest to serve the necessary purposes of life, are those made up of plain lines, i. e. straight and circular lines, which most animals have in common with mankind, tho' not in so extensive a degree: the monkey from his make hath it sufficiently in his power to be graceful, but as reason is required for this purpose, it would be impossible to bring him to move genteely.

Though I have said that the ordinary actions of the body are performed in plain lines, I mean only comparatively so with those of studied movements in the
serpentine line, for as all our muscles are ever ready to act, when one part is moved, (as an hand, or arm, by its proper movers, for raising up or drawing down) the adjacent muscles act in some degree in correspondence with them: therefore our most common movements are but seldom performed in such absolutely mean lines, as those of jointed dolls and puppets. A man must have a good deal of practice to be able to mimic such very straight or round motions, which being incompatible with the human form, are therefore ridiculous.

Let it be observed, that graceful movements in serpentine lines, are used but occasionally, and rather at times of leisure, than constantly applied to every action we make. The whole business of life may be carried on without them, they being properly speaking, only the ornamental part of gesture; and therefore not being naturally familiarised by necessity, must be acquired by precept or imitation, and reduced to habit by frequent repetitions. Precept is the means I should recommend as the most expeditious and effectual way. But before we proceed to the method I have to propose, for the more ready and sure way of accustoming the limbs to a facility in the ornamental way of moving; I should observe, that quick time gives it spirit and vivacity, as flow time, gravity, and solemnity, and further, that the latter of these allows the eye an opportunity of seeing the line of grace to advantage, as in the address of heroes on the stage, or in any solemn act of ceremony; and
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and that although time in movement is reduced to certain rules for dancing, it is left more at large and at discretion for deportment.

We come now to offer an odd, but perhaps efficacious method of acquiring a habit of moving in the lines of grace and beauty.

1. Let any one chalk the line fig. *, on a flat surface, beginning at either end, and he will move his hand and arm in a beautiful direction, but if he chalks the same sort of line on an ogee-moulding of a foot or two in breadth, as the dotted line on figure †, his hand must move in that more beautiful direction, which is distinguished by the name of grace; and according to the quantity given to those lines, greatness will be added to grace, and the movement will be more or less noble.

Gentle movements of this sort thus understood, may be made at any time and any where, which by frequent repetitions will become so familiar to the parts so exercised, that on proper occasion they make them as it were of their own accord.

The pleasing effect of this manner of moving the hand, is seen when a snuff-box, or fan is presented gracefully or genteelly to a lady, both in the hand moving forward and in its return, but care must be taken that the line of movement be but gentle, as No. 3. fig. 49, plate 1, and not too 8-like and twirling, as No. 7 in the same figure: which excess would be affected and ridiculous.
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Daily practising these movements with the hands and arms, as also with such other parts of the body as are capable of them, will in a short time render the whole person graceful and easy at pleasure.

2. As to the motions of the head; the most children are in before strangers, till they come to a certain age, is the cause of their dropping and drawing their chins down into their breasts, and looking under their foreheads, as if conscious of their weakness, or of something wrong about them. To prevent this awkward shyness, parents and tutors are continually teasing them to hold up their heads, which if they get them to do it is with difficulty, and of course in so constrain'd a manner that it gives the children pain, so that they naturally take all opportunities of easing themselves by holding down their heads; which posture would be full as uneasy to them were it not a relief from restraint: and there is another misfortune in holding down the head, that it is apt to make them bend too much in the back; when this happens to be the case, they then have recourse to steel-collars, and other iron-machines; all which shacklings are repugnant to nature, and may make the body grow crooked. This daily fatigue both to the children and the parents may be avoided, and an ugly habit prevented, by only (at a proper age) fastening a ribbon to a quantity of platted hair, or to the cap, so as it may be kept fast in its place, and the other end to the back of the coat, as fig. *, of such a length

*Fig. 121
L. V. 2.
length as may prevent them drawing their chins into their necks; which ribbon will always leave the head at liberty to move in any direction but this awkward one they are so apt to fall into.

But till children arrive at a reasoning age it will be difficult by any means to teach them more grace than what is natural to every well made child at liberty.

The grace of the upper parts of the body is most engaging, and sensible well made people in any station naturally have it in a great degree, therefore rules unless they are simple and easily retain'd and practised, are of little use; nay, rather are of disservice.

Holding the head erect is but occasionally right, a proper recline of it may be as graceful, but true elegance is most often seen in the moving it from one position to another.

And this may be attain'd by a sensibility within yourself, tho' you have not a sight of what you do by looking in the glass, when with your head assisted by a way of the body in order to give it more scope, you endeavour to make that very serpentine line in the air, which the hands have been before taught to do by the help of the ogee-moulding; and I will venture to say, a few careful repetitions at first setting out will make this movement as easy to the head as to the hands and arms.

The most graceful bow is got by the head's moving in this direction, as it goes downward and rises up again. Some awkward imitators of this elegant way of bowing;
for want of knowing what they were about, have seem'd
to bow with wry necks. The low solemn bow to ma-
jefty should have but a very little twist, if any, as more
becoming gravity and submission. The clownish nod
in a sudden straight line is quite the reverse of these
spoken of.

The most elegant and respectful curtesy hath a gentle,
or small degree of the above graceful bowing of the
head as the person sinks, and rises, and retreats. If it
should be said, that a fine curtesy consists in no more
than in being erect in person at the time of sinking and
rising; Madam Catherine in clock-work, or the dancing
bears led about the streets for a shew, must be allow'd
to make as good a curtesy as any body.

N. B. It is necessary in bowing and curtesying to
shun an exact sameness at all times; for however grace-
ful it may be on some occasions, at other times it may
seem formal and improper. Shakespeare seems to have
meant the above spoken of ornamental manner of bow-
ing, in Enobarbus's description of Cleopatra's waiting-
women.

And made their bends adornings.

3. Of Dancing. The minuet is allowed by the
dancing-masters themselves to be the perfection of all
dancing. I once heard an eminent dancing-master say,
that the minuet had been the study of his whole life,
and that he had been indefatigable in the pursuit of its
beauties, yet at last he could only say with Socrates, he
knew
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knew nothing: adding, that I was happy in my profession as a painter, in that some bounds might be set to the study of it. No doubt, as the minuet contains in it a composed variety of as many movements in the serpentine lines as can well be put together in distinct quantities, it is a fine composition of movements.

The ordinary undulating motion of the body in common walking (as may be plainly seen by the waving line, which the shadow a man's head makes against a wall as he is walking between it and the afternoon sun) is augmented in dancing into a larger quantity of waving by means of the minuet-step, which is so contrived as to raise the body by gentle degrees somewhat higher than ordinary, and sink it again in the same manner lower in the going on of the dance. The figure of the minuet-path on the floor is also composed of serpentine lines, as fig. *, varying a little with the fashion: when the parties by means of this step rise and fall most smoothly in time, and free from sudden starting and dropping, they come nearest to Shakespear's idea of the beauty of dancing, in the following lines,

------------- What you do,
Still betters what is done,----
-----When you do dance, I wish you
A wave o'th' sea, that you might ever do
Nothing but that; move still, still so,
And own no other function.-- 'WINTER'S TALE.'
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The other beauties belonging to this dance, are the turns of the head, and twist of the body in passing each other, as also gentle bowing and presenting hands in the manner before described, all which together, displays the greatest variety of movements in serpentine lines imaginable, keeping equal pace with musical time.

There are other dances that entertain merely because they are composed of variety of movements and performed in proper time, but the less they consist of serpentine or waving lines, the lower they are in the estimation of dancing-masters: for, as has been shewn, when the form of the body is divested of its serpentine lines it becomes ridiculous as a human figure, so likewise when all movements in such lines are excluded in a dance, it becomes low, grotesque and comical; but however, being as was said composed of variety, made consistent with some character, and executed with agility, it nevertheless is very entertaining. Such are Italian peasant-dances, &c. But such uncouth contortions of the body as are allowable in a man would disgust in a woman; as the extreme graceful, so very alluring in this sex, is nauseous in the other; even the minuet-grace in a man would hardly be approved, but as the main drift of it represents repeated addresses to the lady.

There is a much greater consistency in the dances of the Italian theatre than of the French, notwithstanding dancing seems to be the genius of that nation; the following distinctly marked characters were originally from Italy;
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Italy; and if we consider them lineally as to their particular movements, we shall see wherein their humour consists.

The attitudes of the harlequin are ingeniously composed of certain little, quick movements of the head, hands and feet, some of which shoot out as it were from the body in straight lines, or are twirled about in little circles.

Scaramouch is gravely absurd as the character is intended, in over-stretch'd tedious movements of unnatural lengths of lines: these two characters seem to have been contrived by conceiving a direct opposition of movements.

Pierrott's movements and attitudes, are chiefly in perpendiculars and parallels, so is his figure and drefs.

Punchinello is droll by being the reverse of all elegance, both as to movement, and figure, the beauty of variety is totally, and comically excluded from this character in every respect; his limbs are raised and let fall almost altogether at one time, in parallel directions, as if his seeming fewer joints than ordinary, were no better than the hinges of a door.

Dances that represent provincial characters, as these above do, or very low people, such as gardeners, sailors, &c. in merriment, are generally most entertaining on the stage: the Italians have lately added great pleafantry and humour to several French dances, particularly the wooden-shoe dance, in which there is a continual shifting
ANALYSIS OF BEAUTY.

ing from one attitude in plain lines to another; both the man and the woman often comically fix themselves in uniform positions, and frequently start in equal time, into angular forms; one of which remarkably represents two W's in a line, as over figure 322, plate 2, these sort of dances a little raised, especially on the woman's side, in expressing elegant wantonness (which is the true spirit of dancing) have of late years been most delightfully done, and seem at present to have got the better of pompous, unmeaning grand ballets; serious dancing being even a contradiction in terms.

4thly, Of Country Dancing. The lines which a number of people together form in country or figure dancing, make a delightful play upon the eye, especially when the whole figure is to be seen at one view, as at the playhouse from the gallery; the beauty of this kind of mystic dancing, as the poets term it, depends upon moving in a composed variety of lines, chiefly serpentine, govern'd by the principles of intricacy, &c. the dances of barbarians are always represented without these movements, being only composed of wild skipping, jumping, and turning round, or running backward and forward, with convulsive shrigs, and distorted gestures.

One of the most pleasing movements in country dancing, and which answer to all the principles of varying at once, is what they call the hay; the figure of it altogether, is a cypher of S's, or a number of serpentine lines interlacing, or intervolving each other, which suppose
pone traced on the floor, the lines would appear as fig. *, Milton in his Paradise loft, describing the angels dancing about the sacred hill, pictures the whole idea in words; Mystical dance!-----

-----Mazes intricate,
Eccentric, intervolv'd, yet regular

Then most, when most irregular they seem.

I shall venture, lastly, to say a word or two of stage-action. From what has been said of habitually moving in waving lines, it may possibly be found that if stage-action, particularly the graceful, was to be studied lineally, it might be more speedily and accurately acquired by the help of the foregoing principles than the methods hitherto taken. It is known that common deportment, such as may pass for elegant and proper off the stage, would no more be thought sufficient upon it than the dialogue of common polite conversation, would be accurate or spirited enough for the language of a play. So that trusting to chance only will not do. The actions of every scene ought to be as much as possible a compleat composition of well varied movements, considered as such abstractly, and apart from what may be merely relative to the sense of the words. Action consider'd with regard to assisting the authors meaning, by enforcing the sentiments or raising the passions, must be left entirely to the judgment of the performer, we only pretend to shew how the limbs may be made to have an equal readiness to move in all such directions as may be required.
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What I would have understood by action, abstractedly and apart from its giving force to the meaning of the words, may be better conceived by supposing a foreigner, who is a thorough master of all the effects of action, at one of our theatres, but quite ignorant of the language of the play; it is evident his sentiments under such limitations, would chiefly arise from what he might distinguish by the lines of the movements belonging to each character; the actions of an old man, if proper, or not, would be visible to him at once, and he would judge of low and odd characters, by the inelegant lines which we have already shewn to belong to the characters of punch, harlequin, pierrott, or the clown; so he would also form his judgment of the graceful acting of a fine gentleman, or hero, by the elegance of their movements in such lines of grace and beauty as have been sufficiently described. See chapters 5, 6, 7, 8, on the composition of forms. Where note, that as the whole of beauty depends upon continually varying the same must be observed with regard to genteel and elegant acting: and as plain space makes a considerable part of beauty in form, so cessation of movement in acting is as absolutely necessary; and in my opinion much wanted on most stages, to relieve the eye from what Shakespear calls, continually sawing the air.

The actress hath sufficient grace with fewer actions, and those in less extended lines than the actor; for as the lines that compose the Venus are simpler and more gently
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gently flowing, than those that compose the Apollo, so must her movements be in like proportion.

And here it may not be improper to take notice of a mischief that attends copied actions on the stage; they are often confin'd to certain sets and numbers, which being repeated, and growing stale to the audience, become at last subject to mimickry and ridicule, which would hardly be the case, if an actor were poss'd of such general principles as include a knowledge of the effects of all the movements that the body is capable of.

The comedian, whose business it is to imitate the actions belonging to particular characters in nature, may also find his account in the knowledge of lines; for whatever he copies from the life, by these principles may be strengthened, altered, and adjusted as his judgment shall direct, and the part the author has given him shall require.

FINIS.
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Figures referred to in the Book.

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