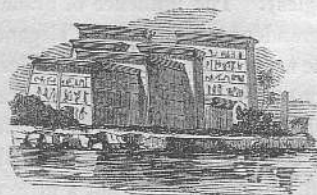


classes of vegetables too, from the cotton tree down to the thorn bush, this principle is nowhere to be found; while in those few plants of the minor and less durable kind, that contain straight and angular forms, it is carried to extreme perfection, as in the grasses, ferns, &c. It seems as if this elegance were given them as a substitute for that of curvature, common to other delicate vegetable forms.

Now neither these plants, nor the graduated campaniles, would ever be regarded in themselves as picturesque objects, while the first-mentioned class of each is reckoned among the most decided examples of this quality in nature and in art. The beauty of gradation therefore, while it is only prejudicial to real sublimity, is *destructive* of this sort of 'parasitical sublimity,' called the picturesque. Divisions, when not equal, must be varied without any connecting law, as in fig. 1 A, never as in c and D. To show how much a prevalence of the lighter (or more graduated) classes of form also militates against the picturesque, we may observe that this quality was perhaps never ascribed to any natural object whose forms are exclusively curvilinear; and that it is rare in (even the ruins of) round-arched building; more frequent in the pointed; and most of all in those styles which are destitute of arches. The Egyptians often clustered buildings irregularly to suit peculiar sites; and the temple thus built on the island of Philæ has been instanced as a very complete case of picturesqueness, and will illustrate the rules given above.



CHAPTER IV.

IMITATION OF NATURE AND OF MODELS—FALSE IMITATION—CONSTRUCTIVE TRUTH—CONSTRUCTIVE UNITY—THREE SYSTEMS THEREOF.

"The natural appetite or taste of the human mind is for truth—whether that truth results from the real agreement or equality of original ideas among themselves, from the agreement of the representation of any object with the thing represented, or from the correspondence of the several parts of any arrangement with each other. It is the very same taste which relishes a demonstration in geometry; that is pleased with the resemblance of a picture to an original, and touched with the harmony of music."—REYNOLDS, *Discourse VII.*

It is the highest possible aim of architecture, as of all the other fine arts, to *imitate nature*. This has been generally admitted; but the kind of nature to be imitated, and the mode of imitation, seem to be very variously understood; and the notions of some architectural writers on this point are singularly different from each other, and from the plain ordinary sense of the expression.

Milizia considers the *natural model* which this art is to imitate (and by its correspondence with which, its merit is to be judged) to be a particular form of *timber hut*!—a kind of hut, moreover, which was never yet built, but which the fancy of Vitruvius composed in imitation of a Doric temple, in order to serve as a short and specious way of explaining (without the trouble of investigation into principles) that of which common sense required *some* explanation, however inadequate. If this be nature, and the nature which we have to imitate, the

finest specimens of architecture ever produced would be some of the tombs lately discovered by Sir C. Fellowes, in Asia Minor,—petrified huts, in which all the structural minutæ of the carpentry, down to its treenails, are correctly represented in stone. But the idea that an art is imitating nature, by imitating its own rudest productions, can hardly be stated without exciting ridicule.

Very different is the model and kind of imitation set before us by that enlightened critic M. Quatremère de Quincy, who observes,* that architecture should imitate nature itself in the broadest sense, and not any particular natural object,—should imitate, not as a painter does his model, but as a pupil does his master,—not by copying what nature presents, but by doing as nature does. The highest kind of imitation in every art may doubtless be reduced to this principle; but it is the peculiarity, and should be the boast, of architecture, that it consists in this highest and most difficult kind of imitation *alone*, and has not, like painting and sculpture, any low, narrow, matter-of-fact imitation (more properly called copying), in which those who are incapable or unprepared for this only real imitation may take refuge.

The difference between copying natural objects and imitating nature, lies in the introduction, in the latter case, of a principle of *generalization*. To draw the likeness of a particular man, ever so exactly, though you excelled the daguerreotype, is not imitating nature. To discover and draw *all that is common* to a certain class of men, omitting every thing *that is peculiar* to each, this is imitating nature. The same principle must run through every imitation of her, as distinguished

* Il faut dire que l'architecture imite la nature, non dans un objet donné, non dans un modèle positif, mais en transportant dans ses œuvres les lois que la nature suit dans les siens. Cet art ne copie point un objet particulier, il ne répète aucun ouvrage, il imite l'Ouvrier et se règle sur lui. Il imite enfin non comme le peintre fait un modèle, mais comme l'élève qui saisit la manière de son maître, qui fait, non ce qu'il voit, mais comme il voit faire.

from an imitation of a natural object; and it must be remembered, that with this latter imitation, architecture has nothing to do. A man may learn to paint or carve, simply by imitating individual models, and may with the vulgar pass for an artist: but in architecture there is no such thing as this copying of one thing at a time; the architect (I mean the *designer* in architecture) must learn to copy several things *at once*,—to imitate with generalization.

That which is common to the whole of a given class or kind of objects, is called their *nature*; and it is the business of artistic generalization to discover, extract, and exhibit by itself (separated from their peculiarities) this nature, this general idea which pervades the said class of objects; and of which Sir J. Reynolds observes,—“This general idea, therefore, ought to be called nature; and nothing else, correctly speaking, has a right to that name. But we are so far from speaking in common conversation with any such accuracy, that, on the contrary, when we criticise Rembrandt and other Dutch painters who introduced into their historical pictures exact representations of individual objects, with all their imperfections, we say—Though it is not in a good taste, yet it is nature.”—“This misapplication of terms must be very often perplexing to the young student. Is not Art, he may say, an imitation of Nature? Must he not, therefore, who imitates her with the greatest fidelity, be the best artist? By this mode of reasoning, Rembrandt has a higher place than Raffaëlle. But a very little reflection will serve to show us that these particularities cannot be nature; for HOW CAN THAT BE THE NATURE OF MAN, IN WHICH NO TWO INDIVIDUALS ARE THE SAME?”

But the artist has not always (perhaps never) thus to generalize and embody the nature of a whole species. Having commonly to express some particular quality of mind or body, his generalization is confined to those individuals who possess this quality. Thus, as the same philosopher and artist observes, the Apollo, the Hercules, and the Gladiator are each

representations not of an individual but of a class. There was, however, an incompleteness in his theory, owing to its taking no account of a certain kind of *exaggeration* practised by the ancients in their most admired specimens of artistic generalization. The above examples will illustrate this. The Hercules was not, as he supposed, the *central form* of the class represented, or, in other words, the simple embodiment of what was common to the class of strong men: if so, it would merely have represented a man of moderate strength. The object, however, was to represent *super-human* strength; and this required a more refined and extensive generalization: it required an investigation and analysis, not only of whatever was common to all the strong, but also of whatever distinguished them as a class from the rest of the species, or from the class most opposed to them. Perhaps it could not have been effected without as much observation and study of the *weak* as of the strong. It required a distinct knowledge not only of the central form of strength, but also of the central form of weakness, or at least of the whole species, including the weakest. This was necessary, in order that the general differences distinguishing the central form of strength from the central form of humanity might be exaggerated,—might be pushed *further* than in the central form, but yet pushed precisely *in the right direction*, without the slightest deviation to the right or left; for that would have been *caricature*,—it would have been exaggerating, not the general idea of strength, but some peculiar form of strength. This makes the whole difference between the highest and the lowest kind of art. The exaggeration of a general idea is *idealization*; the exaggeration of an individual peculiarity is *caricature*: one consists in exaggerating what has been obtained by generalization from *many* models; the other, in exaggerating what has simply been copied from *one*.

Sir C. Bell, the eminent physiologist, had the merit of first showing that all the antique statues owed a part of their excellence to another very refined species of this exaggeration.

It had been long known that none of them presented what Sir J. Reynolds terms the central form of the species; but that, (besides the deviations from that form, given to express particular qualities,) there was also a general deviation therefrom, *common to them all*, even to those which were not intended to express any peculiar quality; and this general deviation of the antique from the natural, led to no small difficulty, as the deviations from centrality or the mean form were so obvious, as to pass in some cases even beyond the limits of nature, (the facial angle, for instance, being greater than in *any* individual,) and yet these unnatural peculiarities were allowed by every eye to be beautiful, and expressive of singular intelligence. It was even supposed that the species had degenerated, while others attributed these super-human traits to tradition, handed down from the unfallen state of man. But Sir C. Bell showed that they were simply the exaggeration of whatever distinguishes man from the lower animals. These works must therefore have required a truly wonderful knowledge and study of the animal forms as well as the human, so as to elicit, as it were, the central form of *animals*, or of a large portion of them, including several species, in order to discover in what points the general idea of humanity differed from this general idea of animal form, and then, by the exaggeration of these peculiarly *human* traits, (purified from every *individual* trait,) to embody, in the only way possible, the idea at which they aimed, viz. something *super-human*, *i. e.* further removed from the animals than man is, but in the same direction. But we can hardly sufficiently estimate the nicety and the vastness of generalization that must have been requisite so to purify these human traits from every individuality, that even, when exaggerated, no such individuality should be brought out, and constitute caricature.

Now, it is by such methods as these that nature is to be imitated—*has been* imitated by architectural designers. If nature had produced complete buildings, true architecture would consist in a *generalized* imitation of them, or of a por-

tion of them, viz. all such as were destined to the same purpose as the building in hand. Though Nature has not done this, she has produced objects, and parts of objects, agreeing in certain points of their destination or their expression, with buildings, particular classes of buildings, and parts of buildings. Is a building or a member, then, required to have a particular character or expression? There is only one way of giving it, viz. by collectively examining all, or as many as possible, of those works of nature which have this particular character,—all which agree in this point (but the more widely they differ in other points the better)—by analysing them and extracting that which they have in common, carefully rejecting every thing in which they differ; for, in whatever points they *differ*, these are proved by that very difference to be things non-essential to the character required; but in whatever points they *agree*, these constitute nature's mode of expressing that particular character, and it is *the only mode*. When thoroughly eliminated and refined from all things not essential to it, then, and *not till then*, it may be pushed further than in any work of nature, and thus give the required expression more strongly, as well as more perfectly, (with less mixture) than nature ever gives it.

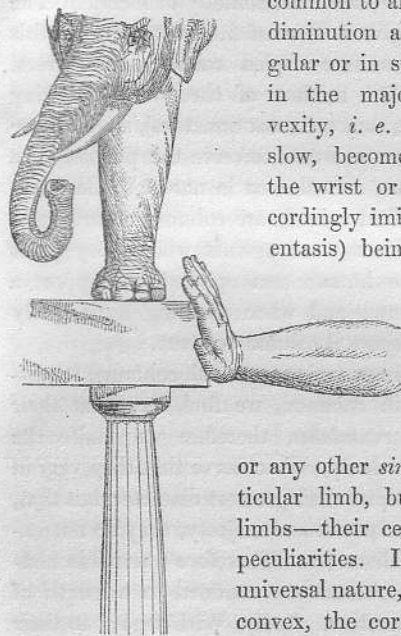
It is by a particular application of this principle that we discover *angularity* to be an important part of Nature's mode of expressing *force*,—and *reflexed curvature* to be part of her mode of expressing *delicacy*. The same method must be applied to every variety of character, even down to the character proper to a particular part or member, having a particular destination. We must bring together, and imitate *in one*, all those natural objects that have this same destination. We must take as many models as possible, resembling each other in this point only, and differing as widely as possible in every thing else; and then, carefully avoiding every thing in which they differ, we must carefully embody every thing in which they agree. Here is an example:

We want a column, that is, a long body, intended for

transmitting pressure to or from a flat surface. It evidently matters not whether the column be pressed against the surface or the surface against it, nor in what position it be placed. A strut is a column, only placed horizontally or inclined. The expression we want to give is that of fitness to receive this pressure. Some nations have copied columns from trees, and some from men, but neither of these are imitating nature; on the contrary, they are most unnatural, since nature has not made either a tree or a man to serve the purpose of a column. Are there, then, no columns in nature? Certainly there are. The limbs of all animals are columns according to the above definition, the surface against which they press being the ground. The human arm uplifted to support a weight is also a column; and when pushing horizontally against a wall, it is a horizontal column or strut.

Now, in comparing these various natural columns, to discover what they have in common, we find, 1st, that their transverse section has *roundness*, therefore we make the artificial column round. 2ndly, We observe that they vary in length from *four* to *ten* times their greatest diameter, but that, in animals remarkable for power and majesty, they do not exceed *six* times the said diameter. Therefore when this character is aimed at, the columns are confined to a length of between four and six diameters. 3rdly, With regard to their longitudinal outline or profile, they have a general diminution from their origin to the ankle or wrist, *i. e.* to a point *near* the surface against which they are applied. Therefore we make the artificial column diminish from its origin (the ground or stylobate) to a point near the surface to be sustained. This diminution is in a contrary direction to that of the legs of animals or furniture, because *they* issue from the object to which they belong, and apply themselves against a surface below; but the legs of a *fixed* structure should issue from the substructure, and apply themselves to the support of that above; otherwise they would appear to belong to the superstructure and form with it one mass, distinct from that below,

and made to be moved about like a table.* The *position*, therefore, of the column, is not that of the leg, but that of the uplifted



arm. 4thly, Another circumstance common to all the models, is that the diminution above noticed, is not regular or in straight lines, but tends, in the majority of cases, to convexity, *i. e.* the diminution, at first slow, becomes more rapid towards the wrist or ankle; and this is accordingly imitated, the convexity (or entasis) being, however, much less

than in the human example, because in that example it is peculiarly great; and the object is not to imitate this

or any other *single* model, not any particular limb, but the general idea of limbs—their central form, avoiding all peculiarities. If their outline were, in universal nature, as frequently concave as convex, the correct imitation would be to make it straight; but this is not the

case,—convexity predominates over concavity, and *very slight* convexity predominates over that which is more decided.

5thly, We observe it to be a part of the nature of limbs, that, after passing the smallest part, there is a rapid swelling to form the extremity (hand or paw), which is what, in the

* An eminent architect has attempted to explain this, by asserting as a rule, that bodies must diminish as they *recede from the eye*, as a column upwards, or the leg of a table downwards. He does not give any reason or foundation in nature for this rule; but it would be very desirable to do so, as it would overturn many long-established prejudices in architecture, and lead to some curious novelties, such as the downward diminution of balusters, pedestals, &c.

column, we call its *capital*. This protuberance is, in nature, commonly eccentric with regard to the axis of the limb, projecting most on the side towards which the animal looks, and least (or often not at all) on the opposite side. But this eccentricity is least in the most powerful animals, and is properly omitted in the column for two reasons; either as an exaggeration of that which distinguishes the most powerful models, *i. e.* those most displaying a quality intended here to be expressed; or else it is omitted as having an obvious relation to a property *not* intended to be expressed, *viz.* locomotion: for the foot always projects most on the side towards which it is to move; and as the capital is not to move, there is no natural example for its projecting on one side more than another. 6thly, With regard to the outline of the extremity, we find it to be at first concave for a very short distance, then becoming very slightly convex, and as it spreads, the convexity slowly increases, till, at the greatest protuberance from the axis, it rapidly curves round and returns inward to a small distance. Such are the points common to the outline of *every* animal extremity, when applied against a flat surface; and such are those which constitute the profile of the capital, in that wonderful specimen of generalized imitation, the original Doric column; that form on which no subsequent efforts have been able to effect any improvement in fitness of expression to its particular purpose; that form which when first seen, so throws into the shade every thing else that we have ever seen applied to the same purpose, that it seems too perfect for a human invention, and we attribute it to some power peculiar to the inventors, and now lost, just as the Arabs attribute Palmyra to the work of genii. That this pile of cut stones, which any mason could exactly reproduce, and which resembles no natural form, should yet express its destination as perfectly as the most finished statue, and appear as incomplete without its entablature, as Atlas without his globe;—that this effect should be produced alike and instantly on every spectator, may well appear, to the untaught, a sort of magic. But such effects

are never the result, as commonly supposed, of a happy idea, an instant stroke of genius: they thus touch in an instant, because they contain the work of years; they spring from, and are proportional to, the *amount of thought* which the object embodies, and this is independent altogether of the amount of manual labour bestowed. A work of elaborate sculpture, and one of mere masonry, may be exactly equal in this respect; and when either of them strikes us with this instant conviction of excellence, it is because they contain, as it were, concentrated in them, the thought perhaps of a life, perhaps of many lives, the observation and analysis and intense patient study of *many*, directed all in one direction, and with a common object,—the extraction and purification of some general idea in nature, as a metal is extracted by the chemist.

In the study of nature (without which the architect as well as every other artist can do nothing—absolutely nothing) he must also study the commentaries on her, *i. e.* all previous productions of his art. All these are so many annotations on Nature's great and most difficult book; and he who attempts to read her without their assistance, simply sets up his own wisdom against that of all mankind; and however satisfactory his discoveries may be to himself, he may be assured that they are as old as Adam; and that, should he have at once the greatest genius and the longest life ever granted, he will still have advanced no further than the first efforts of the art, which, pursued on this principle, would (unlike all other human pursuits) be never beyond its beginning.

It is impossible for the designer to produce any thing *true* but by the study of nature, and it is impossible to produce any thing *new* but by a knowledge of what has been done already by his predecessors. The most *original* artists of every kind are always the most extensive imitators.

On this point, Sir Joshua Reynolds observes (and the observations are equally applicable to every art),—"The greatest natural genius cannot subsist on its own stock. He who resolves never to ransack any mind but his own, will be

soon reduced from mere barrenness to the poorest of all imitation; he will be obliged to imitate himself, and to repeat what he has before often repeated. When we know the subject designed by such men, it will never be difficult to guess what kind of work is to be produced."—*Discourse VI.*

"Those who either from their own engagements and hurry of business, or from indolence, or from conceit and vanity, have neglected looking out of themselves, as far as my experience and observation reaches, have from that time not only ceased to advance and improve in their performances, but have gone backward. They may be compared to men who have lived upon their principal till they are reduced to beggary and left without resources."—*Discourse VII.*

"It is indisputably evident that a great part of every man's life must be employed in collecting materials for the exercise of genius. Invention, strictly speaking, is little more than a new combination of those images which have been previously gathered and deposited in the memory:—nothing can come of nothing; he who has laid up no materials can produce no combinations."—*Discourse II.*

"The more extensive, therefore, your acquaintance is with the works of those who have excelled, the more extensive will be your powers of invention, and, what may appear still more like a paradox, the more original will be your conceptions."—*Discourse II.*

As in the imitation of nature, however, so in that of nature's imitators,—nothing can come of the imitation of only *one* model. There must still be the same method of *generalization*, the collection from many, of that in which they agree, and the rejection of that in which they differ. The copying of one model, or one master, or one manner, will simply be caricature. On this head, the same author observes—

"When I speak of the habitual imitation and continued study of masters, it is not to be understood that I advise any endeavour to copy the exact peculiar colour and complexion of another man's mind; the success of such an attempt must

always be like his who imitates exactly the air, manner, and gestures of him whom he admires. His model may be excellent, but the copy will be ridiculous. This ridicule does not arise from his having imitated, but from his not having chosen the right mode of imitation."—*Discourse VI.*

"Peculiar marks I hold to be generally, if not always, defects, however difficult it may be wholly to escape them.

"Peculiarities in the works of art are like those in the human figure; it is by them that we are cognizable and distinguished one from another; but they are always so many blemishes, which, however, both in real life and in painting, cease to appear deformities to those who have them continually before their eyes. In the works of art, even the most enlightened mind, when warmed by beauties of the highest kind, will by degrees find a repugnance within him to acknowledge any defects; nay, his enthusiasm will carry him so far as to transform them into beauties and objects of imitation."—*Discourse VI.*

Much of the imitation of particular past styles of architecture consists wholly in the imitation of their *peculiarities*,—of those things by which we know them at first sight, and which any mason may copy. The real excellences, those things in them which are not Roman or Gothic or Italian, but *natural* and *universal*, (though better developed in one style than another,)—these lie too deep below the surface of the old buildings to be transferred without study and generalization, and so they are left there. Many an inessential peculiarity too is mistaken for a beauty, even when copied and caricatured,—and this is especially liable to be the case in that style which we have most continually before our eyes. The same author observes—

"However, to imitate peculiarities, or mistake defects for beauties, that man will be most liable who confines his imitation to one favourite master; and even though he chooses the best, and is capable of distinguishing the real excellences of

his model, it is not by such narrow practice that a genius or mastery in the art is acquired."

And after remarking how Raffaele imitated all the styles then known, *at once*, and without their peculiarities, (which was also the case, as will be seen, with Dorus, with the inventors of the early Pointed style, with Palladio, and indeed with all the most original architects, more or less, as they were more or less original,) he adds,—“And it is from his having taken so many models, that he became himself a model for all succeeding painters—always imitating, and always original. If your ambition, therefore, be to equal Raffaele, you must do as Raffaele did,—take many models, and not even *him* for your guide alone, to the exclusion of others. And yet the number is infinite of those who seem, if one may judge by their style, to have seen no other works but those of their master, or of some favourite whose *manner* is their first wish and their last.”

In architecture the number of such is indeed infinite: and while one appears to have seen no building besides the Temple of Ilyssus; another, nothing but the Erechtheum, or Salisbury Cathedral, or Henry the Seventh's Chapel, or the Alhambra; all unite in condemning that architect in the last century who drew from no source but Diocletian's palace, without perceiving that they are committing the very same capital error; for the fundamental fault was not the drawing from a *corrupt* source, but the drawing from *only one* source.

The reader must not suppose I am advising any thing so utterly wrong and contemptible as the *mixture of the peculiarities* of different styles. On the contrary, I am insisting on the imitation of what is common to them, rather than that of what distinguishes each. If you say ‘there is nothing common to them but walls and a roof,’ you betray that you have not commenced the real study of the art, which, like that of nature or of science, can be carried on only by generalization.

As in all other arts, so in architecture, the value and

correctness of imitation, whether of Nature directly, or of Nature through the medium of her interpreters,—previous artists, depends entirely on the breadth of generalization accompanying it; and that which simply imitates without generalizing,—that which imitates only one model, though even a natural one, and ever so excellent, is not art at all.

Connected with the error that imitative art consists in the imitation of what is commonly called nature, *i. e.* of particular or individual nature, is also the most destructive notion that its perfection is to “deceive the eye,” which is, in fact, the basest purpose to which any art, or rather any skill and science originally amassed for the purposes of art, can be prostituted: for it must be observed, that no manual dexterity can be called art; it is only the material collected for its use, or the language in which it speaks. Now, when this is used in order to deceive in any way, it is as if a man, who had learnt writing in order to write sermons, should employ his skill in committing forgery.

“For want of this distinction,” says Sir Joshua, (*i. e.* the distinction between the art and the mechanical skill,) “the world is filled with false criticism. Raffaele is praised for naturalness and deception, which he certainly has not accomplished, and as certainly never intended.” It is the same error which leads the vulgar to think it a beauty when the figures of a picture stand out “as if you could walk round them,” or when painted decorations, or papering, or carpets are shaded to appear (in a particular light) as if carved; or when a building, or a front of a building, or any the smallest part or member thereof, appears like any thing which it is not;—a new building like an old one built in a different age; several little houses like one palace; or one property like several; an essential part like an ornament, or an ornament like an essential part; a buttress like a column, an attic like a pediment, an arch like a lintel;—to say nothing of such gross frauds as making stucco look like stone, or paint like wood.

The object of all real art, as of all science, is to elicit TRUTH; but any one who, fresh from nature, or from the works of other ages or nations, should arrive among the works of modern English architecture, would suppose its whole aim, and that of every detail in it, to be DECEPTION. One enters a building, perhaps a place of worship, that is praised for *unpretending plainness*, and the eye seeks in vain for a single object on which it can rest as something real,—for a single feature that is what it appears to be. The plastered walls pretend to be built of huge granite or marble blocks; the flimsy surface that conceals the roof, to be composed of lacunariæ, or stone coffer-work, on a more colossal scale than any Egyptian ever dreamt of. A stove must represent an useless pedestal, or, perhaps, the model of a building; and the deal fittings, not content with one deception, must with singular ingenuity contrive to perpetrate two at once,—to appear in *substance* like oak, and in *form* like the marble walls and antæ of a Greek temple. Such is an *unpretending* building. The evil so infests every thing that meets us on whatever side we turn, that it is hardly possible to realize the fact, till we turn to the works of other ages or distant nations, that *all this is unnecessary*, that there may be, and over most of the world *is*, and every where *has been*, architecture WITHOUT DECEPTION,—not without this or that kind of it, but absolutely without ANY. Such is the atmosphere of it in which we are plunged, that we can hardly fancy such a thing as its absence; and we actually, on mentioning it, are met by such questions from intelligent and otherwise well-informed persons, as ‘What is the use of paint, if not to imitate other things?’ Grown-up men actually require to be told that paint is a durable and smooth coating for perishable or rough surfaces, either to preserve them, or by its smoothness repel dirt, or to replace their natural colour by one more pleasing or fitter for their situation, or lastly, to adorn their surface by varied colour or beautiful forms. These are the uses of paint, and they give

vast scope for design and taste, but have no more to do with imitation or deception than the skin of an animal or plant has. Does the skin or bark imitate flesh or wood? What possible reason then can there be for stucco or paint to represent any thing but stucco or paint? They never represent any thing else in the works of the Greeks, Romans, Gothicists, or Arabs; and when we want *more* ornament than is found in their works, it will be time enough to look for a method not practised by them.

Ruskin, who, though falling into many dangerous fallacies, has truly treated on this subject, says—"It is very necessary in the outset to mark clearly wherein consists the essence of fallacy as distinguished from supposition: for it might be at first thought that the whole kingdom of imagination was one of deception also. Not so: the action of imagination is a voluntary summoning of the conceptions of things absent or impossible; and the pleasure and nobility of the imagination partly consist in its knowledge and contemplation of them as such, *i. e.* in the knowledge of their actual absence or impossibility at the moment of their apparent presence or reality. When the imagination deceives, it becomes madness. It is a noble faculty so long as it confesses its own ideality; when it ceases to confess this, it is insanity. All the difference lies in the fact of the confession, in there being *no* deception. It is necessary to our rank as spiritual creatures that we should be able to invent and to behold what is not; and to our rank as moral creatures, that we should know and confess at the same time that it is not.

"Again, it might be thought, and has been thought, that the whole art of painting is nothing else than an endeavour to deceive. Not so: it is, on the contrary, a statement of certain facts in the clearest possible way. I desire to give an account of a mountain or of a rock: I begin by telling its shape; but words will not do this distinctly, and I draw its shape, and say, 'This was its shape.' Next, I would fain represent its colour; but words will not do this either, and I dye the paper

and say, 'This was its colour.' Such a process may be carried on until the scene appears to exist, and a high pleasure may be taken in its apparent existence. This is a communicated act of imagination, but no lie: the lie can consist only in an *assertion* of its existence, (which is never for one instant made, implied, or believed,) or else in false statements of forms or colours (which are indeed made and believed to our great loss continually). And observe also, that so degrading a thing is deception, in even the approach and appearance of it, that all painting which even reaches the mark of apparent realization, is degraded in so doing. * * *

"The violations of truth which dishonour poetry and painting are thus, for the most part, confined to the treatment of their subjects: but in architecture another and a less subtle, more contemptible violation of truth, is possible; a direct falsity of assertion respecting the nature of material, &c.; * * * and this is, in the fullest sense of the word, wrong; it is as truly deserving of reprobation as any other moral delinquency; it is unworthy alike of architects and of nations; and it has been a sign, wherever it has widely and with toleration existed, of a singular debasement of the arts: that it is not a sign of worse than this, of a general want of severe probity, can be accounted for only by our knowledge of the strange separation which has for some centuries existed between the arts and all other subjects of human intellect, as matters of conscience. This withdrawal of conscientiousness from among the faculties concerned with art, while it has *destroyed the arts themselves*, has also rendered nugatory the evidence which otherwise they might have presented respecting the character of the respective nations among whom they have been cultivated; otherwise it might appear strange that a nation so distinguished for its general uprightness and faith as the English, should admit in their architecture more of pretence, concealment, and deceit, than any other of this or past time."—*Seven Lamps of Architecture.* II. 'Truth.'

It will be asked, perhaps, 'Must we not turn the best side

outwards then?' Certainly, this is an important part of the courtesy of building. It is a mark of respect due to all who see your work, to turn them its best side; but it is still more important to do so honestly,—to proclaim at the same time 'This is my best side.' Herein consists the whole difference between the incrustations of mean materials with richer ones, practised in times and places of good taste, and in those of bad. The covering of a poor or unsightly material with a better, does not necessarily lead to deception, or any thing of the sort. Many churches in Italy are said to be *veneered* with marble; that is, thin slabs of marble are let in and confined by surrounding bands of stone, as the metopes of a Doric temple by the triglyphs, or as panels are confined in joinery. There is no deception, the whole shows plainly what it is,—a sound piece of construction held together not by cement, but by obvious mechanical arrangement; and the marble slabs pretend to be nothing more than slabs,—beautiful natural objects placed there for ornament or cleanliness, and not for deception. But if this practice were introduced in England, we should immediately have all sorts of deceptive contrivances, as in a veneered table, to hide every part of the real work, and by flimsy invisible construction (or rather cementation) to make it appear built of marble,—to make it one huge lie; in which, as soon as we are undeceived, we perceive clearly that the richer material was never introduced either for convenience, durability, or beauty, but only for *deception*, to appear more costly; every other object being sacrificed for this, since it would be both more durable if constructed instead of stuck together, and more beautiful with two materials properly arranged, than with only one. If you cannot beautify without deceiving, do not beautify at all. Rudeness is better than a lie.

When an external film is of a totally different nature from the substance beneath, the form will often inform us that this external substance cannot be that of which the whole is composed, and thus there will be no deception. This is the reason that *gilding is no deception* when not applied to

metals. We can no more mistake a gilded stone or plaster ornament for one of gold, than a stone-coloured metallic object for one of stone, because the peculiar mechanical properties of a malleable metal would prevent its ever being made into the same form as stone or plaster (unless for deception). Metals, woods, and brittle materials are known from each other, independently of colour, by the three characters of form to which their respective properties lead. Hence gilding can never deceive *except upon metals*; and upon these we shall accordingly never find it applied in times of good taste,—at least, never as a *total* covering.*

In coloured *decoration* on flat surfaces, all shadowing (*i.e.* representation of the effect of solidity and relief) is a direct falsehood, whether it deceive or not. But observe the difference between *decoration* and *picture*. A picture (whether with or without background) is *one thing*, an independent whole, distinct from all surrounding things, and therefore requiring to be separated from them by a frame or border (either painted or in relief): but *whatever has no frame is no picture*; it is *decoration*, and comes under a different principle of design altogether, being not a *whole* but a *part*. Now, decoration is of two kinds, consisting either of forms in relief, or of colours on the flat; but the latter is given up, and loses its separate exist-

* Having been by a friend referred, as an example of decorative deception, to the *overlaying of gold* on various parts of the Mosaic tabernacle, I offered to renounce the principle now insisted on, if there should be found in that description any instance of gilding *upon metals*. Upon reference, I find *no such instance*, and have hence been more confirmed in this opinion. It may further be observed, that none of that overlaying, even on wood, could have been a *total* covering, even in the later and more splendid works of Solomon; for though it is recorded of the cedar covering on the walls (as if a remarkable fact) that "there was no stone seen," it is not said of the subsequent overlaying of gold, that there was no cedar seen. We may conclude it to have been something of the nature of the brass inlaying or overlaying common on furniture of the seventeenth century. Indeed, we are told of a frieze of cherubs and palm-trees, that these figures [and not the ground] were gilded.

ence if it attempt to ape the former; we have no longer two kinds of decoration, but only one, viz. carving and sham-carving.* But you say, the flowers are ugly without shading, and that if they are imitated at all, why may not their shades be imitated? Here we come to the root of the whole fallacy. *You have no business with imitated flowers*, in the vulgar acceptance of *imitated*, i. e. *copied* ones. Their place is in picture, not decoration. No natural flower is fit or beautiful in decoration; if it were, it would not be fit or beautiful in nature. The notion, at present very common, that natural (*i. e.* particular) flowers should be imitated in decoration, is most false and *unnatural*. No one thing in nature is natural enough for decorative use. This art, like architecture, must generalize,—must copy not a natural form, but a natural idea. Its flowers are as false, when copied from single natural models, as columns would be if copied from a single natural limb. In the whole of the works of those who used the *most* ornament, and (by universal consent) the *best*, viz. the Greeks, Romans, Gothicists, and Arabs,† we may challenge the production of

* That the inimitable painter employed shadowing in the decorations of the Vatican, is only a striking proof that no man can do right out of his own kind of art. A good painter cannot be a good decorator, but an architect *may*, because his art is of the same kind; for, of the four arts of design,—sculpture, painting, architecture, decoration,—the two former are of a different kind from the two latter. All have to generalize, but the former require less extensive generalization of *forms*, and are confined always to one natural species. They are *languages*, and special natural forms are their *words*. The writers have no business to coin new words. But architecture and decoration, I must repeat, are *not* phonetic. The distinction is so great, that though many great artists have united the two former arts, not one of them has succeeded in architecture. Even the great Buonarrotti failed here, though his *failure* was more noble than the *success* of most architects; for though he produced no work altogether fine, he advanced the art, and taught it new (or previously forgotten) truths, which render his faulty works invaluable to us.

† It is no easy problem for the *naturalist* decorators, to explain how their art came to such unrivalled perfection among a nation whose religion forbade all copies of natural objects.

one example (except in times of acknowledged debasement) of what are called natural flowers, that is, *sham* flowers.*

If you say shadowings produce boldness and (if properly treated) *breadth* of effect, so do masses of dark colours, without deception, equally well; for proof of which, you are referred to ALL the designs of the above schools† without exception. Decorative designers seem to produce few *forms* not drawn from those exhaustless sources: it is to be wished they would copy some of their *principles*.

Much stir has been made, of late, about our inferiority, in all matters of taste, to neighbouring nations, who however are rapidly descending to our level;‡ but this stir is utterly vain among a people with whom *art* means *deceit*. Until we can be taught that nothing is beautiful which is not *TRUE*, we shall find taste a jewel beyond the reach of all England's wealth to buy, and of all her power to win.

The falsehoods hitherto noticed are only chosen as instances of the grossest kind, and without the correction of which, there can be no hope of correcting others of a more refined nature. But, in fact, the whole progress of the art (when in a progressive state) consists in the discovery and correction of falsehoods, continually of a more and more refined (*i. e.* more general) character,—the elimination of more general truths, and the sacrifice to them of narrow or partial truths, when

* Whatever has been said of flowers applies, of course, to leaves and every vegetable form; but not to animate forms, as those at Pompeii and the Vatican. I do not say they are right, but we must not overlook this important difference. An animal is a *whole*,—a vegetable form is only a *part*. Each animate form is, in some sort, an independent *picture*, its own outline being its frame: but we never see the whole of a plant, nor would any decorator think of representing its root, which is the only way of making it a whole.

† At least for *boldness*; but *breadth* is not so common with the Gothicists and Arabs, though universal with the ancients.

‡ Tasteful decorative design will soon have to be sought further than France, as the lately excellent school of that country is now quickly sinking under the corruption of English influence.

necessary.. Sometimes the truth of particular members must be sacrificed to that of the whole, as in Gothic architecture of the purest kind; in which the smallest coverings or heads to openings, though not constructed on the arch principle, are nevertheless made to resemble arches, in order to carry out the chief *general truth* of that style, which is *arcuation*, or the exclusive use of this mode of covering openings and spaces.

CONSTRUCTIVE TRUTH and CONSTRUCTIVE UNITY are the two most important principles to be borne in mind, in tracing the history of architecture, and are indispensable in any attempt to rival, or even understand, the productions of the two standard or perfected systems which the world has hitherto seen,—the Greek, and that commonly called the Gothic.

CONSTRUCTIVE TRUTH requires that a building shall never appear to be constructed on different statical principles from those really employed in its construction. *The whole of modern Gothic architecture is a constructive falsehood*, because it will presently be shown that all the peculiarities of this style grew from the practice of constructing, within buildings, a vaulted ceiling of stone, and were solely adapted to a building with such a ceiling. Consequently, when applied to a building not so ceiled, the style must either be made useless and meaningless, by copying only its forms without a motive; or else, if correctly copied (*i. e.* preserving the apparent motive, either externally or internally, or both), it must then appear (either externally or internally, or both) to have a vaulted ceiling, which it has not; and, in either case, the whole must be a lie from the foundation to the finials.

It is no answer to this to say there are old Gothic buildings without vaulted ceilings: so was there a Grecian example of a sham colonnade, and an architrave built up of little stones.* It is impossible that the taste of a whole nation can ever be so pure as to allow no lies to be perpetrated by false artists.

* At Agrigentum, in Sicily.

CONSTRUCTIVE UNITY is a principle no less important than any other unity, and bears an especial analogy to *unity of style*, being in fact the same thing in construction as the latter in decoration. I assume that no one disputes the necessity of an uniform style of ornament throughout the same building. Now, construction is a more important thing than ornament, and has more relation to the higher excellences of the art. Architectural beauty is not mere beauty of *form*, mere eumorphy; if it were so, a beautiful form would be beautiful wherever exhibited, in a pepper-box or a tower, a baluster or a column. In all the more important features (indeed all but the merest ornaments), the beauty of abstract form is to be sacrificed to that of statical fitness; but in order that this may be seen or appreciated, it is necessary that the various *pressures* be perceived, or a part of them, to which part the members may be seen to be fitted. Consequently, if it be necessary that the treatment of geometrical *forms* be consistent throughout, it is far more necessary that the treatment of these *pressures*, or of the displayed portions of them, be consistent throughout.

Now, there are three distinct modes of treating the pressures of a building, or, in other words, three *styles of construction*. They are all mixed indiscriminately in every modern building; but it is the peculiar merit of the two hitherto perfected architectural systems, the Greek and the Gothic, that in the pure examples of each, only *one* of these modes of construction was seen. This is what distinguishes those two styles from all others, and the pure period of each from preceding and following periods,—*constructive unity*.

Perhaps I should rather call it *unity of statical design*; for the actual construction has never, except in Egypt, been absolutely pure throughout: but a portion of the construction is unavoidably hidden in every artificial structure, as it is even in every natural one. Now, the artists of the two pure periods (those of Pericles and of Edward I.) made this unseen portion the only discordant portion of the construction; so that all the

visible construction—all the *statical design*—was uniform, as well as the geometrical design.

The three styles of statical design were well pointed out in the very useful work of the late A. Bartholomew.* They depend on the three modes of applying force to solids, by *cross-strain*, by *compression*, by *tension*. These are, of course, familiar to the reader who has looked into the rudiments of constructive science, to be found in several of the volumes of this series.

The first and simplest mode of construction, that employed by all barbarous and infant nations, is the only one which subjects materials to *cross-strain*, the most wasteful mode of employing their strength. The method, however, may perhaps be described in the most general terms as that of *vertical pressure*, because all the pressures throughout the building act wholly in their natural direction, vertically downwards; and for this purpose all the continuous joints, or beds, throughout the structure are made *horizontal*, and all the interrupted joints *vertical*. All openings are covered without any deviation from this rule, by laying a beam, lintel, or architrave across from pillar to pillar, resting on the flat tops of both; and all ceilings, whether in stone or wood, are formed by an extension of the same method: the roof framing, being concealed both from the exterior and interior, forms no part of the design, and by the Greeks it was probably constructed on the third method, that of tension.

During the prevalence of this first constructive style in its purity, *every oblique pressure* was excluded, as contrary to the principles of sound architecture. The introduction into architecture, however, by the Etruscans and Romans, of the new constructions called the *dome*, *arch*, and *vault*, all depending on oblique pressure, gradually destroyed the consistency of this first architectural system, the forms of which, owing to the intrinsic beauty imparted to them by the Greek genius,

* 'Specifications for Practical Architecture,' &c.

were not readily abandoned, but continued to linger on, though more and more debased in geometric beauty, and forming harsher and harsher incongruities with the new constructions; till, in the eleventh and twelfth centuries, the great extent of church building, and the desire to render these structures fire-proof, led to the extension of the arch principle to the covering of ALL openings, and the ceiling of ALL areas, and from that moment architecture took a new turn. From the *invention of the arch* till the *rejection of the beam* (a period of about fifteen centuries), every change had been for the worse; the whole history of the art was *debasement*, from the progressive loss of constructive consistency. *The beam was rejected*, (at least in north-western Europe,) and immediately all was *purification* and rapid return to unity.

The forms derived from Greece, but by this time so decrepit as to retain little vestige of their original beauty, were now gradually abandoned, and every thing old (except first principles) sacrificed to the new idea; and so rapid was the progress, that by the year 1250 in Germany, and by 1300 in England, the unity of the new system was established: and now let us see in what consisted this unity.

The second system of statical design consisted in the complete avoidance of *cross-strain*, and in the subjecting of the materials throughout the whole of the visible construction to forces of *compression alone*. It may therefore perhaps be best termed the *Compressible System*. In order to effect this, the pressures can no longer be every where vertical; and as it is a most important point in construction that the continuous joints, or beds, should be as nearly as possible perpendicular to the pressures acting on them, these joints are no longer universally horizontal, but inclined in various directions, and should have been so to a greater extent than the Gothicists practised. Indeed, there would be much room for the improvement of that system by the introduction both of modern science and of a larger portion of Greek taste (of which it nevertheless re-

tained a good deal in its best productions).* But imperfectly as the Gothic aim was carried out in construction, and often also in decoration, it was completely accomplished in statal design, *i. e.* throughout the *visible* construction there was no portion of matter subjected, as far as the eye could judge, to any other force than simple compression. When this is the case (and not otherwise) a building may be termed completely Gothic; being complete in its statal design. The geometrical design is another point, quite independent of this, and is reducible mainly to the correct positing and subordination of the five classes of forms mentioned in our last chapter; a principle *equally necessary in every style*. A building may be perfect in its statal design, while it is extremely faulty in the geometrical, as was the case with nearly all the buildings of Egypt.

The Gothicists, like the Greeks, employed a tensile construction in the roof framing, that being in both systems invisible either from the exterior or interior. Nor was this concealment any defect; for, as Ruskin has observed, "the architect is not *bound* to exhibit construction:" still less can he be bound to exhibit the *whole* of it, to do what nature has never done. He may conceal as much as he likes, but may not *disguise* any. None need appear, but that which *does* appear must be *true*.

After its culmination, the Gothic system gradually declined, from the progress of a variety of falsehoods, of which some were general to the whole of the countries in which it flourished; others confined to France or Germany, or England or the Netherlands. It is not the place to enumerate them here, but to observe that one of the chief causes, especially in England, was the superseding of stone by timber in many parts, particularly ceilings, and the consequent extension of the style of construction best adapted to this

* Of course I do not mean Greek *forms*, the emancipation from which had been an essential part of the formation of the new system.

material, which is the third style already twice alluded to, *viz.* the *tensile*.

In the compressile system all apertures and spaces were covered on the arch principle, and the oblique pressures thus occasioned were transmitted down to the ground by masses of material called *buttresses* or *abutments*. But this is not the most economical mode of treating the said pressures when we have materials of great length and strong *in tension*, as timber and iron. The more obvious and less wasteful mode is tying the two feet of the arch together by a bar of one of these materials, thereby counteracting the horizontal portion of the oblique pressures, and leaving only their vertical portion to press on the two supports, as the original beam or lintel of the first style did, and render all buttressing from without unnecessary. Instead of the arch, an arrangement of two or more bars or timbers may be substituted, and thus arise the various kinds of *truss*, whose perfection consists in having no part subjected to cross-strain, but every part either to direct compression or direct tension.

This third constructive system combines, in a certain degree, the advantages, and avoids the defects, of both the others: for all its *active* pressures are vertical, as in the *first* style; and yet it avoids all cross-strain, like the *second*. It saves all the waste of material (not conducive to strength) in the *lintels* of the former style, and, also, *all* the material of the *buttresses* in the latter.

But, though there are three styles of construction, there have been only two systems of architecture,—only two styles possessing *constructive unity*, the Greek and the Gothic. The third constructive principle has yet to be elaborated into a system. The two systems are past and dead; we may admire the fading vestiges of their loveliness, but can *never* revive them. The third is the destined architecture of the future.